Voices of experience:
opportunities to influence creatively
the designing of school libraries

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Statement of Original Authorship

The work contained in this thesis has not been previously submitted to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

Signature: _____

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Abstract

Voices of experience: opportunities to influence creatively the designing of school libraries

Using a critical ethnographic approach this study investigates the potential for multiple *voices of experience*, of educators, designers/architects, education facility planners and students/learners, to influence creatively the designing of school libraries. School libraries are considered as social and cultural entities within the contexts of school life and of wider society. It is proposed that school library designing is a social interaction of concern to those influenced by its practices and outcomes. School library designing is therefore of significance to educators and students as well as to those with professionally accredited involvement in school library designing, such as designers/architects and education facility planners. The study contends that current approaches to educational space designing, including school libraries, amplify the voices of accredited designers and diminish or silence the voices of the user participants.

The study is conceptualised as *creative processes of discovery*, through which attention is paid to the *voices of experience* of user and designer participants, and is concerned with their understandings and experiences of school libraries and their understandings and experiences of designing. Grounded theory coding (Charmaz) is used for initial categorising of interview data. Critical discourse analysis (CDA, Fairclough) is used as analytical tool for reflection on the literature and for analysis of the *small stories* gathered through semi-structured interviews, field observations and documents. The critical interpretive stance taken through CDA, enables discussions of aspects of power associated with the understandings and experiences of participants, and for recognition of creative possibilities and creative influence within and beyond current conditions. Through an emphasis on prospects for educators and students as makers of the spaces and places of learning, in particular in school libraries, the study has the potential to inform education facility designing practices and design participant relationships, and to contribute more broadly to knowledge in the fields of education, design, architecture, and education facility planning.

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List of Abbreviations

ALIA	Australian Library and Information Association
ASLA	Australian School Library Association
BCE	Brisbane Catholic Education
BER	Building the Education Revolution
BGA	Block Grant Authority
CDA	Critical Discourse Analysis
CEFP	Council of Education Facility Planners International
CELE	Centre for Effective Learning Environments (OECD)
DEA	Department of Education and the Arts (Qld)
DEEWR	Department of Education, Employment and Workplace Relations
DET	Department of Education and Training
DER	Digital Education Revolution
DEST	Department of Education Science and Technology
ESD	Education for Sustainable Development (UNESCO)
IASL	International Association of School Libraries
JISC	Joint Information Systems Committee
MCEETYA	Ministerial Council for Education Employment Training and Youth Affairs
NMC	New Media Consortium
OECD	Organisation for Economic Cooperation and Development
PEB	Programme on Educational Building (OECD)
PPP	Public Private Partnership
QCEC	Queensland Catholic Education Commission
QUT	Queensland University of Technology
VAST	Values, Activities, Site/System, Technology (Heath, 1989, 2010)

List of Interview Transcripts

Transcript data may only be used with permission of the author.

Publications

Elliott Burns, R. (2003a). *Space, place and design conversations.* Eighteenth National Conference proceedings. Hobart, Tasmania Australian School Library Association.

Elliott Burns, R. (2003b). Space, place, design and the school library. *Access, 17*(2), 23-26.

Elliott Burns, R. (2005). Designing spaces for learning: perspectives of a *flaneuse* [Electronic version]. *Blurring the Boundaries-Sharpening the Focus: A Curriculum Conference for Practitioners – Conference proceedings*. Sunshine Coast, Queensland: Australian Curriculum Association conference.

Elliott Burns, R. (2006). *Concepts and practices of designing.* In CLN603 Designing spaces for learning. Unpublished course materials. Brisbane: Queensland University of Technology.

Elliott Burns, R. (2008). Designing learning spaces for (partially) online lives: recombinant architecture. *ASLA Online III Conference 2008 – Conference proceedings.* Australian School Library Association.

Elliott Burns, R. (2009). *School library design: an interview with Raylee Elliott Burns.* Retrieved 10 September, 2009, from http://www.schoollibrarymanagement.com/school_library_design1.html

CHAPTER 1: *voices of experience* and *small stories*

Introduction

> *The culture of the library – its ethos, physical layout of space, the nature of its*
> *contents, its flexibility of timetabling and hours of opening, its physical location in*
> *the school – affects the social, intellectual and emotional aspects of the school*
> *community* (Mallan, Lundin, Elliott Burns, Massey & Russell, 2002: 44).

This doctoral study has its foundations in a research project undertaken at Queensland University of Technology (QUT) between 1999 and 2001. The study was funded by a QUT Scholarship in the Professions Grant led by Dr Kerry Mallan and was conducted in partnership with the Department of Education (Queensland) and Brisbane Catholic Education. I participated in the study as a co-researcher and representative of Brisbane Catholic Education.

The research project report, titled: *Performing Hybridity: impact of new technologies on the role of teacher-librarians* (2002) identified a range of ways in which school libraries influence school communities. Among a range of findings, the study noted the incursions of information and communication technologies into school library operations, services and spaces through information media, information access tools and pedagogical conduits. However, at the time of the *Performing Hybridity* project (1999-2001), the complex interrelationship of these elements and their influence on school library users, on user relationships and on the designing of school library spaces, did not appear to be reflected adequately, either in the research literature and published support materials concerned with school library design, or in existing school library designing processes and practices.

Contextualising the research

This study questions the taken-for-grantedness in the processes and practices of designing the educational spaces of schools, specifically school libraries. The research examines the assumptions and practices related to the designing of school libraries in place at the time of the study, which appeared to accord potential and prominence to *voices of designer experience*, architects, education facility planners, financial and project managers, and to overlook or diminish the *voices of user experience,* educators, students and the

communities of schools, as participants in designing endeavours. For the purposes of the study the term *voices of experience* is selected to represent those for whom school libraries are a key concern, either as users or as designers of the built spaces of schools. The key participants in the study have been identified as educators and students who have long-term interests in school libraries, and designers/architects and education facility planners whose involvement may be short-term, but with long-term effects for school library users.

Questions about school library designing have emerged from my experiences of school libraries, as a teacher-librarian, as a school library consultant with a school-system, and as an academic, teaching in tertiary education programs which prepare educators for their practice in the profession of teacher-librarianship. My questioning has concentrated on who participates, by what authority, and how they influence the processes, practices, and subsequently, the outcomes of designing activity. In my experience, the customary absence, and on occasions active exclusion, of educators and students from designing processes and activities prompts further questions about how it is that the primary, long-term users of school libraries are so often missing from formal participation in projects which are highly influential in their lives and work as learners and teachers.

Within these questions, particular areas of focus relate to the array of understandings about school libraries and about the learners and teachers who use school libraries, which are held by those who have the potential to influence school library designing projects. These potentially influential participants include designer/architects, education facility planners, project managers, policy makers, education commentators, academics and researchers, specialist writers and educators and student learners themselves. I have also been concerned about the influences of societal, cultural, professional, technology and policy dimensions as sources of influence on school library designing endeavours.

As a practitioner-observer, the processes and outcomes of school library designing have sometimes appeared to me to be governed by *the parachute principle*. That is, the school library is most likely to be designed, wholly or partly, by un-named individuals distanced from the community of the school and uninvolved in the final schooling enterprise. The library building is then *parachuted* into the school site, and subsequently the people are *parachuted* into the building. In these cases it is unclear whether, how or what education perspectives have been influential in the processes of designing. The outcomes for educators and students can prove discordant and unsatisfying as they experience such spaces, and mystifying as they contemplate and question the character of, or seeming

absence of educational design rationales at play in the designing of such spaces (Elliott Burns, 2003a).

School library building projects are frequently directed by combinations of education facility planners, project directors and designers/architects. Policies, funding and financial governance conditions figure so prominently in school building projects, that educator influence in the forms of social, cultural, pedagogical or learning technology perspectives may be subsumed under project management and budgetary covenants, rather than feature as key informing elements for the designing of learning spaces to support the achievement of visionary learning opportunities for student learners and for educators.

From my experiences at the outset of the study, the processes of designing a new school library or refurbishing an existing facility in an established school, had only occasionally included systematic, formalised, on-going consultation with resident educators, and even more rarely, with students or parent groups. In some instances, consultative approaches may have included broad, intermittent consultation of varying intensity with specific educators, which required responses to substantially finalised designing decisions, so that participant responses were tokens at best. Pressured schedules influenced by building authority project approvals, project management and construction constraints, and occupancy timelines governed by school commencement dates, have tended to overshadow or supplant ongoing consultation.

In some circumstances the limit of educator focus and engagement in a project has been to respond to versions of schematic and plan-view drawings at the invitation of a school administrator, designer/architect, facility planner or project manager. In more expansive but less common circumstances, consultation among those impacted by the project may have included a specifically constituted Reference Group, meeting periodically throughout the project. In spite of the obvious user audience for school buildings, the involvement of a wider consultative group of students, educators and community members has not been part of policy requirements of school systems in Australia in any systematic way, so that there is little predictability or consistency with respect to wider community involvement in school building projects (Elliott Burns, 2005).

One small story

> *Dear Raylee,*
>
> *We understand that you are involved with library space design and we hope you might have some ideas for us.*
>
> *Our school (has) a Commonwealth Library built in 1972 and we have the opportunity to refurbish as part of our school's program of upgrading facilities to support learning needs particularly for digital learning in 21st century.*
>
> *Unfortunately the timeframe for the refurbishing is very tight. We have been given a day next week to visit some school libraries and resource centres. We plan to visit [school names]. Are there other libraries you could suggest that we visit? We would also be grateful for any suggestions you may have.*
>
> (Observation Notes 2008 3.1 Email, 2008)

The options for this school are thus subject to extraordinary time pressures, and limited to a form of 'window shopping' to gather ideas and suggestions. One day of site visits to gather ideas to refurbish a school library to *support learning needs for digital learning in the 21st century,* indicates the highly inadequate options available to these educators, with potentially token outcomes for their designing endeavours.

I believe that there are richer creative possibilities for the designing of school libraries which include those with a high involvement in the use of school learning spaces, the educators, students and communities of schools, as well as those with professionally accredited influence and responsibilities for designing. In addition, I believe that there are significant resources, to be found and created, in knowledge, time and considered processes to connect these participants in creative designing partnerships. In this respect, I venture through the study to integrate a commitment to 'be hospitable to' a range of critiques, which admits the 'co-existence of diverse perspectives' (Dovey, 1999, p. 6), as I seek opportunities for 'creative influence' (Harvey, 1996, pp. 78–86) through the literature and the project data. Consequently this research focuses on the unrealised potential for multiple *voices of experience* to influence creatively the designing of school libraries as spaces and places for learning**.**

Conceptualising the research

As a project, this research has moved in cycles of *enthusiasm, puzzle and connection.* Aidan Chambers (1985) uses *enthusiasms, puzzles and connections* as axes of thinking to enable the exploration of texts and contexts. I believe these pivots have been useful for considering my points of entry to the project and my position as researcher, for understanding the significance of the research and for identifying and refining the questions for the study (Chambers, 1985). Conceptualising the researcher's position is further informed by Edmund White's (2000) rendition of the contemplative progress of the *flaneur*, as *habitue* and *observateur,* as one who both inhabits and observes. The researcher as *flaneur* is akin to the researcher as reflective participant-observer and encapsulates the spirit of the researcher in this qualitative study.

Prior to and during the study I have been drawn to the *enthusiasms, puzzles and connections* in an increasing ebb and flow of, what I have come to see as *small stories*. Some of these are from my own experience as an educator. Many *small stories* are from outside the mainstream of research, in conference conversations, online forums, email lists and university corridor exchanges. Some *small stories* have emerged in more formal designing conversations, some in professional association forums, and increasingly in the stories from research literature, particularly in the field of education and in the progressively growing conversations from architecture and design fields. Across the scope of these *small stories*, diverse *voices of experience* have raised matters of allied concern and puzzlement related to the processes of, and participants in, the designing of school learning spaces, including libraries. In consequence, the gathering and analysis of the *small stories* of the study participants is a cornerstone of the data for this research (Geogakopoulu, 2007).

'Small stories' can be understood to include an array of under-represented narrative activities: 'tellings of ongoing events, future or hypothetical events, allusions to tellings, deferrals of tellings and refusals to tell' (Geogakopulu, 2007, p. vii). As renditions of self and identity construction, these 'small stories' of enthusiasm, puzzle and connection, told by *voices of experience* are sites of interaction and ways of telling which relate closely to the social spaces in which they are produced and reworked. Thus 'small stories' have formed worthwhile entry points for the project in order to clarify who speaks, or doesn't speak, what and how it is spoken about in relation to school libraries and their designing, and to

seek opportunities and   possibilities for transformative approaches to school library designing (Geogakopoulu, 2007, p. viii; Sen, 2004).

Conceptualising the study as *creative processes of discovery*

A key conceptualising source for the study emerges from the work of Tom Heath (1989; 2010) who understands designing as creative processes of discovery. Designing in these terms is conceived as a learning process which requires a mix of excitement and discipline. As a specialised kind of problem solving, designing is constituted in a discovery-focused, cyclic, interconnected and integrated set of processes with possibilities for multiple entry points and opportunities for the creative influence of designers (Heath, 1989; 2101).

Figure 1A represents my overall approach to the study using the conceptual potential of *designing as processes of discovery* (Heath, 1989; 2010).

Figure 1A Designing as *creative processes of discovery*

unravelling complexity

unfolding

focusing

imagining

backtracking

venturing

working our way gradually

feeling our way
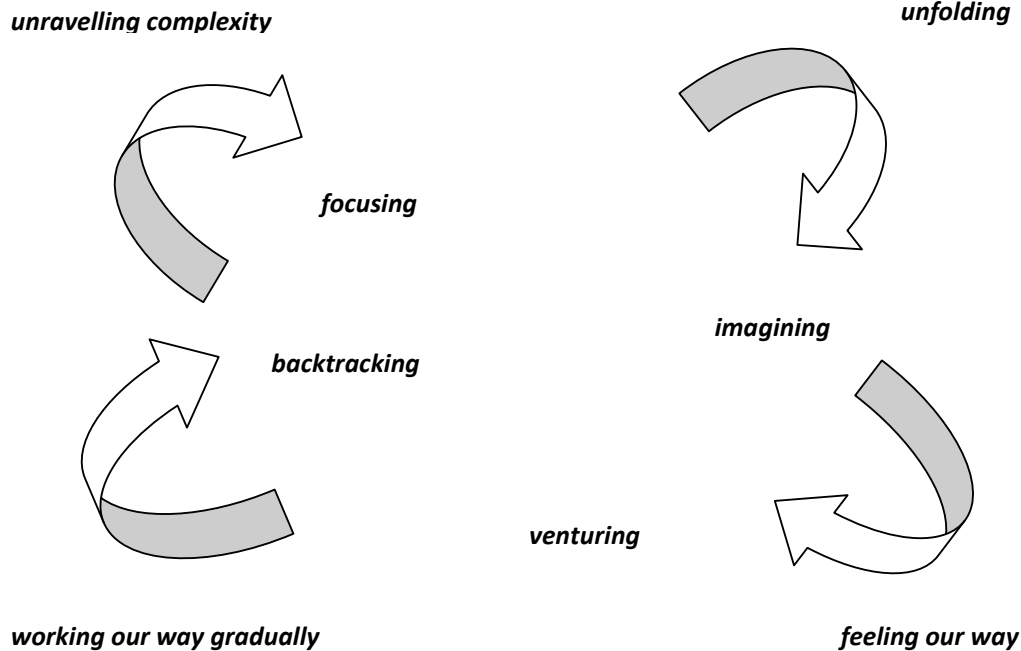
Adapted from Heath, 1989; 2010

Heath (1989; 2010) sees our attempts to understand and engage with the circumstances we confront with a designer's eye, and he represents these as working to *unravel complexity, feel our way,* and *work our way gradually.* This broad contextual process is achieved in creative, strategic and tactical processes of *focusing*, *imagining*, *venturing* and

backtracking. As a thesis to underpin creative processes of designing, Heath (1989; 2010) has used this approach to develop a designing heuristic, VAST (Values, Activities, Sites/Systems, Technologies), which is more closely reviewed in the 'Chapter 3: Story starters' literature discussion.

As a conceptual framework, *creative processes of discovery* enable the social nature of the research and its explorations of human interests and actions, particularly the potential for participant agency in designing processes (Denzin & Lincoln, 2003; Janesick, 2003). Processes of discovery can be seen as open to the unfolding, evolving and emerging which are features of the study background, the exploration of the research literature and the qualitative dimensions of school library designing in the *small stories* of participant understandings, realities and experiences (Geogakopoulu, 2007; Heath, 1989; 2010).

The study is imagined and realised as *creative processes of discovery* in a number of interconnecting and interdependent ways. These are detailed at the end of this chapter in the thesis outline.

Purposes and rationale

The study is concerned with the ways in which educators, student learners, designers/architects and education facility planners might influence creatively the designing of school libraries. From the outset a motivating query has been the critical theorist's question, *who and what is valued here?* Thus particular attention is given in the study to investigating seemingly taken-for-granted understandings about school libraries, and to the impact of these understandings on approaches to designing and on potential designing relationships within the educational, technological and social contexts of school libraries.

Developing the questions

The research question frames school libraries as spaces and places of significance for those who have an investment in their use and in their designing:

How can the voices of user and designer experience, influence creatively the processes of school library designing?

This key question informs a further provocative query which has been used as a point of contemplation throughout the designing and implementation of the research, and has stimulated written reflections for a reflective journal maintained during the study.

How might the researcher 'flaneur' attend to the 'voices of experience' through the 'small stories' of their experiences, to map the pathways and connections among participant understandings, relationships and influences in order to amplify the potential for creative influence on moments of designing?

The key research question is formulated to be both specific and open. The composition of the question is open to possibility and potential in the use of the interrogative *how can* with the verb/action *influence* supplemented by the adverbial scope of *creatively*, expanding the potential of the action.

Reflection on the limited involvement of educators and students in learning space designing endeavours suggests that acting to *transform associated* processes promotes the possibility of radical change. While transformation is an appealing prospect and aim, the idea of *creative influence* as a focus offers wide scope for openness in creative action and suggests multiple entry points for participants, which may include transformation and thus could also involve a range of creative and influential endeavours (Harvey, 1996, pp. 105-109).

The idea of *creative influence* assumes that moments of designing permeate the social processes of lives and work such that the locus of agency for influence is pervasive in situations and circumstances. Across the scope and at the cusps of participant capacities, be they vernacular, accredited, novice or experienced, are opportunities for agency. Leverage for creative influence may be presented in moments of tension and contradiction, in social practices which exclude, in user-designer relationships. The study offers opportunities for creative influence through the participant discussions, field experiences and observations and through the works-in-progress in the tertiary academy and through professional associations (Harvey, 1996, pp. 105-109).

The key research question also draws on the perspective that 'all occupations engaged in converting actual to preferred situations are concerned with design' (Schon, 1983, p. 77). The research question assumes that there are capacities for collaborative action associated with the *voices of user and designer experience* - educators, designer/architects, education facility planners and students. An enabling capacity to act in an ongoing and evolving way is

indicated in the research question through the use of the verb *can … influence* which implies participants' agency as potential *place-makers* as a part of continuing user-oriented school library designing endeavours (Dovey, 1999).

The designing of a school library can be proposed as an act to creatively influence an existing situation in order that it becomes a more desirable situation, through processes which involve those occupations with a key interest in the situation, educators, student learners, designers/architects and education facility planners. Such a perspective implies a commitment to a purpose of making, of re-making, potentially of transforming, which could also be said to produce designing relationships between these occupations and to confirm these *voices of experience* as pertinent participants in this study (Schon, 1983).

Buildings can be understood to position those who live and work in them in particular ways, and building design and designing can produce particular kinds of social and power relationships for and between specific groups (Jamieson et al, 2000). For example, differentiated access to parts of buildings for management and maintenance staff, visitors, professional and executive staff can be said to exert, produce and reproduce social and power relationships among individuals and groups (Markus & Cameron, 2002). In the case of schools, the design of the built space elements of learning spaces has the potential to manipulate and order the ways in which learners and teachers are able to operate in the spaces and the ways in which learning takes place.

There is potential for creative influence on the designing of school library spaces to be further informed by examining how the school library is understood by those with a role in its design/designing and use, and in how student learners and other users are understood by those involved in the processes of designing. There is an opportunity through the study to explore influences on designing and to consider what agendas are fulfilled through designing roles and activities. Critique of these dimensions makes possible a challenge to aspects of power and influence which act to overlook, ignore or to discourage particular kinds of designing engagements and relationships. Beyond this, there is the prospect for school communities and designing participants to problematise their circumstances, purposes and sites in order to act with critique and insight in designing school library spaces for learners, learning and teaching (Markus & Cameron, 2002).

Pursuant to this rationale a series of contributing questions increased the reach of the key question and provided focus for selecting appropriate data gathering methods to explore

participant understandings, actions and reflections. Contemplating the key research question, stimulated further questions about how school libraries are understood by those with an interest in their use and designing, and with the kinds of learners and learning imagined in designing activity. Questions also arise about who exerts influence on school library designing; about what agendas are fulfilled through designing roles and processes, and about how design participants are influenced in their approaches to designing. Beyond these exploratory questions, are those which create prospects for the ways in which the study might identify creative possibilities and propose opportunities for creative influence via the voices of experience in the study. These questions gave rise to the study objectives which are to:

- Investigate understandings of school libraries, learners and learning across participant groups with an interest in school library designing;

- Critically analyse framing contexts, influences on and participation in the designing of school libraries;

- Identify opportunities for, and approaches to, creative influence on school library designing.

The study objectives are pursued initially through a review of the literature on libraries, particularly school libraries and the relationships between school libraries and learning in times of proliferating information and technological media. Of particular interest to the study is the potential for diverse understandings of space, place and designing to influence physical and digital-online manifestations of libraries. The study pays balanced attention to the practices of governments and school systems, through funding conditions and accountability requirements, as contexts which frame most school library built space projects.

The foregoing objectives make reference to aspects in which the study can be significant for educators and accredited designers. These objectives have also informed the selection of participants and sites and the data gathering approaches outlined in the following sections.

Significance, scope and definitions

The study is significant in its intention to focus on school library designing as a particular example of school facility designing and to challenge, in particular, the limitations in existing school library designing approaches as experienced by the researcher and

highlighted by writers in the field (Fisher, 2003; 2004a; Jamieson et al, 2000). The study has employed a critical qualitative approach and ethnographic methods in order to explore the potential for creative influence on school library designing processes through an investigation of the expressed concerns, experiences and understandings of educators, student learners, designers/architects and education facility planners. Investigative processes for the study, including refinement of semi-structured interview protocols were undertaken in a pilot study.

The schools selected for the study were familiar to me through my earlier work as a school library consultant in the independent school sector. At the time I selected the schools, research application and approval procedures in Education Department schools were changing and likely to be protracted so I decided to maintain the timeliness of the study by selecting four (4) independent school sites. Implications of this selection process are further discussed in Chapter 6 *Gathering small stories*.

The four (4) school sites involved in the study are those which undertook school library building projects immediately prior to and during the period of the study. The schools selected for the study offer *in the field* vignettes of school library designing, and provide opportunities to observe the convergence of designing activity across particular sites, contexts and time spans. The designers/architects and education facility planners who volunteered for the study are all involved in designing of educational facilities and in management of built space projects for schools.

Thus the school circumstances have constituted reference points for the activities of the research, enabling me to move to and from the role-specific interviews and observations and to and from the scope of the literature. This is consistent with the reflective, cyclic and concurrent data gathering role of the ethnographer, entering and re-entering the field, moving between the field and the literature, and comfortable with change and emergence as aspects of methodology (Burns, 2000; Denzin & Lincoln, 2003).

Charmaz's, (2006, p. 43) coding practices for grounded theory assisted the 'assigning of analytical handles' as a first data management and analysis phase. The critical discourse analysis (CDA) framework of 'explanatory critique' (Chouliaraki & Fairclough, 1999, pp. 59-68; Fairclough, 2001a, p. 125;) was used as an analytical tool and process to enable the scholarly qualitative analysis and synthesis mentioned by a number of writers as characteristic of a worthwhile ethnographic approach (Denzin & Lincoln, 2003; Janesick,

2003). I have come to CDA as a data analytical approach through my involvement in a Critical Discourse Analysis group at Queensland University of Technology (Australia) which includes academics from a number of disciplines. My approach to the use of CDA has been informed by open and exploratory discussions with group members and by their diverse uses of CDA as an analytical tool in research practice.

The selection and use of CDA enables a critical examination of the project data through a framework of 'explanatory critique' developed by Norman Fairclough using the work of Roy Bhaskar (Fairclough, 2001a). The relevance, capacity and implementation of CDA in the study are discussed in detail in Chapter 6 'Gathering small stories: research design and ways of telling'. The importance of quality dimensions in qualitative research is pursued by Carspecken (1996) and Kvale (2002), and these were early sources I used to develop, examine and reflect on the research design.

The study has the potential to stimulate approaches to school library designing, to inform existing education facility designing practices and designing relationships, and to consider the potential not only of *educators as placemakers* (Fisher, 2003) but also the prospect of students to contribute to designing endeavours. In these respects the research contributes knowledge to the fields of education, design, architecture, and education facility planning.

Definitions

The following terms are discussed to clarify their selection and preferential use in the study:

School libraries

The situational focus for this project is on school libraries in Australia. For the purposes of the study school libraries are considered to be those educational facilities and services which are locales for student, teacher/educator and parental access to the scope of information materials, digital-online curriculum and learning communities, recreational resources, works of fiction and general interest pertinent to the learning and teaching experiences in schools. In some circumstances school libraries are used by the community beyond schools. In contemporary times school libraries incorporate both physical and digital/online spaces in multiple options of balance and proportion. As an example, the *sites* of a school library in a particular school may be multiple and have a quality of dispersal if resources are integrated into a number of learning areas within the school. It is

recognised that in some communities, school and public libraries are combined in a shared facilities sometimes known as school-community libraries, although these models are not addressed in detail in this study.

At the outset of the study I began with the descriptor school library because it has been the predominant term in use. The two-word term specifies the locale of the library in the school and the inclusion of 'library' in the descriptor makes possible a link with manifestations of library types beyond schools both historically and currently. An indicator of complexity in the field is evident in the multiple descriptors for the *things* (Grosz, 2001) which manifest variously as *libraries* and the accompanying multiple meanings within this array of library descriptors which are applied to the diverse embodiments of *school libraries.* Examples from the literature include: resource centre, information resource centre, information commons, and knowledge commons, along with hybrid forms such of physical and virtual sites such as The Digital Union at Ohio State University and the GroupSpaces which append to the research libraries of Stanford University (Oblinger, 2006).

Pedagogies

Pedagogies are understood to mean those theory-inspired practices of teaching for the enabling of learning. The inference is of intentional application of particular strategies which understand learners and learning in particular ways. In education theory and practice related to school libraries, predominant learning 'isms' referred to in current literature and in professional publications include *constructivism* and *connectivism*.

Constructivism

Constructivist theories of learning assume learning to be a personal and social process involving learners in active construction of meaning and knowledge. Constructivist pedagogical practices are active, dialogic and reflective, informed and enabled through multiple material and people resources and higher-order thinking skills. The desired potential of constructivist approaches is the stimulation of deep-learning.

Connectivism

Connectivism assumes learning connections between people, between people and information, and between people and diverse experiences of learning in rapidly altering

information and communication environments. Connectivist pedagogical practices are collaborative, dialogic across learning connections, employing evolving information media, and in Web 2.0 environments the connections can be ephemeral, chaotic and complex.

Practices

Denzin and Lincoln (2003) discuss a number of aspects of practice as they are studied by different intellectual traditions. This study is concerned with participants' subjective understandings about and representations of their practices of school library designing, and also with the within wider, more objective social and policy contexts and discourses within which these practices occur. The study draws on understandings of practices in critical discourse analysis terms (CDA) terms, as 'habitualised ways, tied to particular times and places, in which people apply resources (material and symbolic) to act together in the world' (Chouliaraki & Fairclough, 1999, p. 21). Thus in respect of this study, the practices of school library designing, 'the specific, occasioned, social goings-on' (Chouliaraki & Fairclough, 1999, p. 61), are understood to be constituted at individual levels and also within a complex network of structures, processes and practices, for example, national political, social and economic systems; education and school systems; school community and designing/architecture.

Designing and design

The study is concerned with *designing* as a set of processes. I have preferred to use *designing* as a conjugation of the verb *design* in order to represent processes of designing as ongoing, evolving and reflective. A continuing influence on this preference is the work of Tom Heath (1989; 2010) who understands designing as *creative processes of discovery*. As noted earlier, Heath's (1989) designing is a learning process, a cycle of venturing and refinement that requires a mix of excitement and discipline. My emphasis on designing is further underpinned by a perspective that the designing and building of school library spaces is not a once-and-for-all activity, and that social, pedagogical and technological dimensions are among the quotidian designing and on-going influences on school libraries. This suggests continuing proactive and responsive agency in designing by those who live and work in school library spaces.

To further clarify the selection of *designing* as a preferred term, a contrast can be made with *design*. A design (n) and to design (v) implies a finished product, an outcome, a result or an end. In these terms a design implies a more limited capacity to influence an outcome

in an ongoing way. This contrast is useful in considering ways in which educators, designers/architects and education facility planners might evaluate and challenge completed school library facilities as *models* or *templates* when undertaking site visits as part of data gathering for *designing* endeavours.

Designers/architects

This term has been selected as a result of my experience of the work of architects in school library designing projects. At the outset of the project the nomenclature *architect* did not appear to account for some of the multiple dimensions and significant knowledge base required in the fulfilment of a built space project such as a school precinct or a school library. Australian federal and state level policy conditions, school and school system processes, standards, schedules and timelines along with project management capacities form a backdrop to the expression of creative and designing endeavours. Most particularly the term *architect* alone did not adequately convey the scope of creative activity undertaken in the realisation of designing outcomes for/with schools. The term *architect* alone also appeared to mask parts of Heath's (1989) designing cycle of focusing, imagining and backtracking, in order to unravel complexity and work gradually towards designing responses.

Voices of experience

The term *voices of experience* is selected to represent those for whom school libraries are a key concern. *Voices* captures the capacities of participants for action through dialogues of designing across the diversity of their perspectives (Day, 2003). Voice also refers to the kinds of language linked to groups, professions and identities, for example as a language dimension of professional dispositions (habitus) in fields such as architecture and education (Bourdieu, 2005, p. 47; Chouliaraki & Fairclough, 1999, p. 116-118). In order to act together, people need to engage in dialogue, not in order to suppress difference in false compromise/consensus, but to engage and emerge 'as voices in common on particular issues' (Chouliaraki & Fairclough, 1999, p. 6), on the basis of which people may act to *make and remake their lives* (Calhoun as cited in Fairclough, 1999, p. 4).

The thesis outline: as *creative processes of discovery*

This study investigates the potential for the voices of user and designer experience, to exert creative influence on the designing of school libraries. Recalling that the study is conceptualised as *creative processes of discovery*, the thesis brings this cyclic, multiple-entry-point approach to bear in a number of interconnecting and interdependent ways. Through informing theories, the literature and the *small stories* of participants' understandings and experiences, the study works to *unravel complexities* of understandings about libraries, the impacts of framing contexts, practices and influences on those with interests in the designing of school libraries. The implications and impact of the study are in identifying opportunities for creative possibility and for the voices of experience to exert creative influence.

 In Heath's (1989; 2010) terms, my approach is that the thesis and the chapters of the thesis document might unfold as processes of discovery. The chapters and their relationships are depicted in Figure 1B, 'Thesis outline and chapter relationships', on the following page. This first chapter: 'V*oices of experience* and *small stories'* begins the process of *focusing* on the matters of interest to the study and *backtracking* into my experiences of enthusiasm, puzzle and connection in order to identify some of the contextual complexities. The discussion documents the imagining of possibilities for the study through the research questions, and ventures the methodology and methods, as ways to further *unravel complexities* and *work gradually* towards a potential of the study to stimulate creative opportunities for users and designers.

Figure 1B Thesis outline and chapter relationships
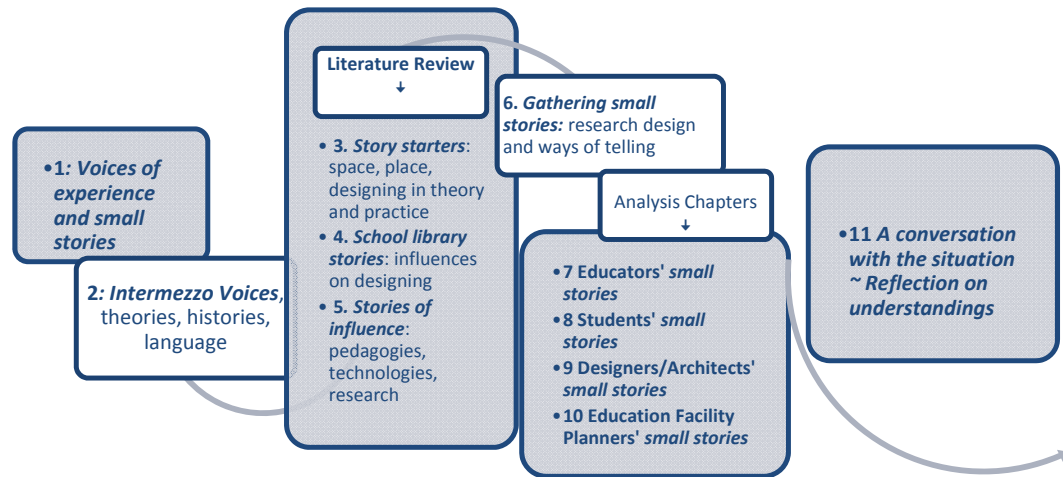
Chapter 2, 'Intermezzo voices: history, theory, language', explores libraries as evolving and influential ideas in the social, cultural and political lives of people. A discussion of these dimensions connects the passage of libraries over time, *backtracking* and *venturing* an examination of the ways libraries have been used to facilitate social and political purposes and projects. The discussion considers theoretical positions related to libraries as evolving ideas and forms of technology, and extends to an examination of the ways figurative language is used to speak about libraries in the literature and commentary.

The three chapters of review and analysis of the literature *focus* on and *unfold* the multiple influences at play in policy, professional commentary and research contexts allied to school library designing. With respect to the research objectives, the chapters of the review work to create a set of *small stories*, to consider how school libraries are spoken about and with what authority the *voices* in the literature speak to assume, define, challenge and construct understandings of contemporary school libraries and the designing implications for their physical and digital-online manifestations.

Chapter 3, 'Story Starters', examines concepts of space, place and designing as ways of coming to terms with an array of understandings and assumptions that have the potential to influence participants in the designing of educational spaces, including school libraries.

Concepts of space, place and designing explored in this chapter are used in the evaluation of the contexts, texts, research foci and applications raised in the continuing review of the literature and in the analytical discussions of study participants' *small stories*.

Chapter 4, 'School Library Stories', examines the contexts and texts of Australian school libraries through pertinent government, school system and professional association texts. Backtracking and re-exploring another of the historical trails is of value in tracing the story through the documents which have marked and mediated school library progress. In addition this approach acknowledges the contexts of study participants as users and/or accredited designers of school libraries in Australia. School library research examples discussed in this chapter address the overall priority concerns, and note the potential for further research opportunities.

Chapter 5, 'Stories of Influence', considers the impacts of the technology-pedagogy nexus with reference to selected sources pertinent to the broader circumstances of education and those which pertain to educational space contexts. The discussion includes balanced connections with libraries in the wider field in order to examine the language of change which pervades the library literature and to consider its impacts. Scoping reviews of the literature and the preoccupations and paradigms of educational space design research are discussed in order to suggest possibilities for richer approaches to research.

The research design discussion in Chapter 6, 'Gathering small stories', links the study purposes with the critical qualitative methodology, ethnographic approach, the data gathering methods, data management processes and data analytical processes, as a bridge into the chapters of analytical discussion. A critical ethnographic approach supports the study purpose to explore the qualitative dimensions of school library designing, through the *small stories* of participants' understandings about libraries, learners and learning and the practices and influences on designing in relation to school libraries (Sen, 2004; Georgakopoulu, 2007).

The four chapters of analytical discussion (Chapters 7, 8, 9, 10), apply the critical discourse analysis framework of *explanatory critique* (Fairclough, 2001a) to the participant data for each participant group, educators, students, designers / architects and education facility planners. These chapters examine participants' understandings and experiences as expressed in their semi-structured interview discussions, as part of *working gradually* towards identifying opportunities and approaches for *creative influence* (Harvey, 1996, pp.

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105-109) on school library designing in response to the experiences of the research and in fulfilment of the research objectives.

Chapter 11, 'A conversation with the situation', reflects on the understandings gained through the research, on the effectiveness and limitations of the processes of the research, and on the implications of the study for opportunities of *creative possibility* (Boyce, 2006) and *creative influence* (Harvey, 1996, pp. 105-109). The chapter focuses on competing discourses, knowledge asymmetries and discursive opportunities for creative influence by designing participants. The discussion addresses the potential of the understandings gained through the research, and considers the study limitations and the potential contributions to knowledge in the fields of education, design and architecture.

From Chapter 1, introducing the *voices of experience* and *small stories*, the discussion now moves to *intermezzo voices* in Chapter 2, to explore *who and what is valued* in the historical circumstances of libraries as 'things', as 'ideas', in the human story. Chapter 2 also examines theory positions and dimensions of language, as backdrops to appreciating the understandings of educators, students and design practitioners whose school library perspectives are imperative to the study.

Chapter 2: INTERMEZZO VOICES: histories, theories, language

Introduction

This chapter begins with *backtracking* to explore libraries as evolving and influential ideas in the social, cultural and political lives of people across millennia. The scope of library embodiments from distant pasts and recent times is a backdrop to understanding *who and what is valued here?* in the perceptions of educators, students and design practitioners whose school library perspectives are imperative to the study (Popkewitz & Fendler, 1999, p. 170). I begin with the terminology *library* as an in-common descriptor for the libraries of Western culture, recognising that one of the features of libraries more recently is the struggle with nomenclature as the library field confronts the challenges of changing purposes, technologies and media.

In keeping with the study objectives – to investigate and critique understandings about school libraries and their designing contexts – this chapter applies theoretical perspectives to consider libraries as 'things', as 'ideas', as evolving social, cultural and political phenomena, as forms of technology, influenced by changing related technologies and imbued with pedagogic expectation (Grosz, 2001). The discussion examines the historical circumstances of libraries, considers theory positions and explores metaphoric and figurative language representations of libraries in the literature to provide ways for a *flaneuse*, and fellow strollers, to navigate a scope of perceptions about libraries (White, 2001).

Theorising

Library: theorising 'the thing'

Elizabeth Grosz explores *the thing* as a 'resource for the subject's being and doing', and attaches her perspectives to Darwinian ideas which work to discount *the thing* as static or torpid and to foreground the evolutionary history and dynamic emergence of *things* which we both discover and create in the world. In these terms libraries in the human story can be considered as 'question … provocation … incitement … enigma … promise … a

consequence or product of life and its practical needs … an intersection of space and time' (Grosz, 2001, pp. 168-169).

The critical theorist's question *who and what is valued here?* enables the examination of the library as an evolving entity (Popkewitz & Fendler, 1999, p. 170), the *'coming into existence of a prior thing, in a new time'* (Grosz, 2001, p. 170). This question provokes examination of the position and the positioning effects of libraries in the social order across diverse times and places, and can be applied to notions of libraries as human inventions, as social and cultural constructions, as designed ideas; of libraries as ideas-over-time, time-spaces and places; libraries as fusions of conceptual and political entities embodied in material, built and more recently digital-online spaces and places.

As a 'cultural construction of a thing that controls and regulates other things' a library can be considered to be an evolving meta-technology produced from acts of transformation, which also acts to transform (Grosz, 2001, p. 177). To illustrate the relationship between libraries and power, a set of historical vignettes echoes dimensions of the school libraries at the heart of the study in that both school libraries and their antecedents can be considered as expressions of particular sets of social and cultural values and aspirations of their times.

The study more broadly, and this chapter in particular, is also indebted to Foucault's ideas that an engagement with history can be used as a tool to question and challenge the way things are, with prospects to realise human freedoms (power) to transform and change things. An *historical a priori* as explained by O'Farrell (2005, p. 63), clarifies Foucault's contention that it is possible only in retrospect, for us to discern the rules by which knowledge and practices are ordered. In these terms an exploration of the traces of the *library* throughout time-spans of the human story serves to draw on pertinent emerging threads and uncover relationships which are of significance to the study. O'Farrell (2005) also points out that Foucault's work lends itself to analogous applications by researchers in order to analyse related matters. In this respect Foucault's concept of *heterotopia* is used in the study to explore multiple and evolving attributes and expressions of *library* across time. Within an array of *heterotopia* phenomena and of direct relevance to this project, Foucault gives particular attention to the libraries and museums of Western culture as sites of human relations, representation, contestation and inversion (Foucault, 1997a).

Library as cultural entity

The library as cultural institution, symbolic, encoded and intellectual is a theme picked up by many commentators (Battles, 2003; Carr, 2006; Kapitzke & Bruce, 2006; Manguel, 1996). Although cultural institutions such as museums and libraries render forms of order to collections of artefacts, ideas, events, memory and story to enable conscious exploration, they can also be understood as politically influenced, as 'revolutionary structures which only appear to be safe' (Carr, 2006, p. 33). In cultural, social and political terms the digital and physical collections of libraries can be construed as being concerned as much with what is included in their scope as they are with what is missing, overlooked or excluded. In library environments the user is challenged to act purposefully in order to create meaning in relation to often complex systems of order and access (Carr, 2006, p. 33).

Library is a faceted and layered descriptor. Libraries can be said to express an array of human priorities and achievements in material forms. *Library* implies collections of selected manifestations of ideas about the world and the experiences of humanity – point-in-time and extended collections of material and latterly digital/online elements. The term *library* also recalls and denotes built spaces of significance in human memory and story. In contemporary times the term impacts on ideas of *library-as-place* and renders physical-material spaces and places as distinctly fluid in the face of evolving digital media and digitally expressed information.

The designation *library* can be said to signify the exercise of power across a range of social motivations. *Library* is a contested term. The collection, creation and dispersal of information-knowledge in diverse media provoke redefinition of ideas of library as both form and function. Across centuries the appellation *library* is applied to successive and evolving versions of itself. Across a range of contemporary contexts the term *library* is morphed or replaced in the emergence of hybrid entities designated as *resource centre*, *cybrary, information commons, Web2.0.* Phenomena of re-imagining, re-invention and re-defining in relation to libraries are discussed in the literature review in Chapter 5 'Stories of influence'.

A room with a *'view'*

It is possible to speculate that the idea of a universal library formed somewhere in the depths of ancient imagination. Such a place might be envisaged as a vantage point, an eyrie

from which to appreciate a panoplied display of human thinking, or an entry point through which to access a gathering of human knowledge - the collected evidence of human achievements and views of the world, recorded, retained and supplemented across time. Human imagination has worked on versions of this idea, associated with temporal power and prospective influence - life beyond extant memory, a form of immortality (Carr, 2006; Kresch, 2007). While the pace of social and technological change, even in millennia before the Common Era, challenged the possibility of a collection of all knowledge, the idea of a universal library regained some momentary currency with the advent of digital forms and the communication boom of the populist Internet (Brown & Duguid, 2002; Mitchell, 2000).

Information and communication technologies (ICTs) shift and extend views and conceptions of 20th and 21st century libraries as static repositories or collections, towards a potential for libraries as dynamic, borderless *sites* promoting multi-modal creation and networking of information. Concepts of *centre* are disrupted, any point in the network offers apparent entry to the information explorer. Proliferation of digital forms exercises a transformation on the library as both idea and space. E-media windows the world, juxtaposing the global, the local and the personal, recasting relationships and interactions in ways unimagined by earlier library dreamers (Burbules, 2006; Kresch, 2007).

E-lobbyists report the demise of traditional libraries disappearing beyond a rear-vision horizon, along with the relegation to history of the traditional, mediating librarian-arts in favour of the emergence of the individual as the self-directed seeker, information generator and online collaborator. No searching question appears to be too difficult for an adept searcher of the everything-is-online-Internet or for an apparently disembodied 24/7 *Ask-a-Librarian/Cybrarian* electronic service or for an army of unfiltered *Twitterers*. In the face of these challenges, the librarianship profession subsumes e-media under its current motivations, ranked alongside other forms of information and communication (Kresch, 2007). However, for some digiphile commentators this has the effect of trivialising the transformative potential of electronic information and communication technologies, diminishing them to just another mode of document delivery (Brown & Duguid, 2002; Mitchell, 2000).

New technologies rarely supplant pre-existing ones completely, so that concurrency of formats – as cultural preservation and archive - is a characteristic of many physical library collections. Online libraries could be said to exercise a new 'reformation' rendering ancient

texts to digital form for more comprehensive access than the original documents could ever have achieved (Ashworth, 2003; Brown & Duguid, 2002).

Libraries can be described as windows affording and constructing particular views of societies, as renditions of cultural evolution, as connections in a web of human information, knowledge and arguably, wisdom. Through at least 5 millennia, waves of libraries emerged around the Mediterranean, in central and eastern Asia and in Western Europe, invariably shaped by and shaping of the social, cultural and political milieu and the technologies of their times. These sites can be envisaged as evidence of the interests of ruling dynasties, the social and cultural upheaval of religious movements and the proclivities of private individuals.

The power vested in the texts of human experience by those who have collected, organised and housed them is evident across time and cultures. Libraries absorbed clay tablet technology and the scrolls in papyrus and parchment so familiar in ancient Rome and China. Libraries have been populated by versions of the codex [book] format since the first century of the Common Era, and libraries accommodated e-media from its earliest forms. The designation of the significance of early information forms as records of human thought and achievement and their purposeful collection preceded the need for designated built spaces, both physical and virtual: the evolving renditions of library-as-place (Ashworth, 2003; Gross & Borgman, 1995).

The portable, compact codex enabled the propagation of the Christian religion which so transformed western civilisation in much the same way as the invention of block printing on paper in ninth century China assisted the earlier spread of Buddhism across Asia. Gutenberg's combination of the codex and mechanically printed text in the 15th century is widely accorded responsibility for a second Western Christian transformation - the Protestant Reformation.

Histories

Libraries: historical vignettes

The following historical account assists aspects of the research which seek to both unravel and build understandings about libraries over time and explores libraries as evolving and influential ideas in the social, cultural and political lives of people across millennia. This sweep of library embodiments from distant and recent pasts draws forward to the

imaginings of educators, students and designing practitioners whose voices and perspectives are intrinsic to the study.

In human experience, it can be argued that the library as an idea might be traced from beyond 50,000 years ago, when human experiences and memories were inscribed on rock walls or symbolised in artefacts kept and passed between generations of people and accompanied by narrative traditions (Manguel, 1996). Cumulations of recorded and retained human experience - the work of the early scribes of Mesopotamia, ancient Rome, Imperial China and mediaeval Europe - found their places in enclaves and palaces of ruling classes, in religious centres and in iconic locations such as the series of libraries at Alexandria (Battles, 2003).

Accounts written by commentators during these earlier times, and by more recent historians, suggest that the idea of the library, its contents and its geographic site is inextricably bound up with relationships of power. Although the libraries of 20th and 21st century experience may give at least partial impressions of the benign and the tranquil, many earlier libraries have their origins and evolutionary passage in the political and social coercion of revisionism and in the overt violence of war, religious proselytising and colonisation. These explicit expressions of power acted to sculpt and transform the changing versions of libraries. Power relations can be seen as evident and exercised in the cultural and symbolic significance and representation of the library in the social order, in the character of its collections, in the organization of and access to its information and in the location, design and relationships of its built space environments (Foucault, 2002).

The libraries of classical antiquity and some in the more immediate past suffered the destructive fates of their rulers and nation-groups. Kern (as cited in Battles, 2003) describes these dramatic disasters as *biblioclasms*. Such episodes litter the human story, their shards and remnants sometimes gathered and added to the artefact collections of descendant libraries. While the deepest intentions of the founders remain open to speculation, the practices associated with the establishment of early libraries and their material traces, serve to illustrate their sometimes visionary foundations along with the fraught and embattled scope of their social, cultural and political contexts. The following vignettes of the libraries of Mesopotamia, China, Islam, Middle Egypt, Meso-America and twentieth century Belgium serve to illustrate.

Mesopotamia-Chaldea

Mesopotamian libraries can be traced via the Babylonians to the third millennium BCE. The Assyrian kings are credited with the sponsorship of an eclectic, multi-lingual collection of clay tablets brought to fulfilment by Assurbanipal II [700BCE] in the library at Nineveh. Cuneiform works written in the languages of antiquity such as Assyrian, Sumerian and Aramaic, are indicative of the disparate cultural groups which formed this vast empire (Lerner, 2009). Records of the social and agricultural life and the rigorous legal system forecast and record the decay of the empire as war and aggression depleted the largely agrarian population. However, even in the face of the destruction of such libraries, the durability of the baked clay format of the records ensures the survival of the thousands of fragments now held in contemporary collections such as those of the British Library (Ashworth, 2003; Battles, 2003).

A Chinese dynastic library

In another example of power attached to libraries and the written word, the Ch'in dynasty reign of the Great Wall builder Huang-Ti [221BCE], is mythologised in stories of *fengshu kengru* - defined as the burning of books and the burying of scholars - in particular those committed to Confucian philosophy and practice. Curiously however, excavations of burial sites have unearthed Confucian scrolls carefully interred with human remains of this era. This may indicate a tolerance for at least some Confucian scholars and their works. Another example is a museum collection of inscribed stone stellae [pillars] on Mount Lang-yeh in which the achievements of Emperor Huang-Ti are celebrated and expressed in the very Confucian tradition he ostensibly attempted to censor. Nevertheless, it seems that the emperor removed/executed those independent scholars whose work challenged his sovereignty, and thus he maintained editorial control of the content of texts and the selection of records for cumulation (Ashworth, 2003; Battles, 2003).

As if borrowing a lesson from such events, the stone stellae of Buddhist sutras in the Fang-shan collection and in the caves at Dung-hua (China) also defy the will of monarchs and the ravages of the elements. Print-rubbings of these sacred texts were made by generations of members of the faithful and those studying for conversion, thus assisting the spread of Buddhist beliefs and practices across central Asia and China (Lerner, 2009).

Bibliotheca Alexandrina

From the archaeological remains of a highly governed, multi-cultural society, it may be fair to speculate that the much-lauded libraries at Alexandria [300BCE - 641CE] were founded in accumulated bureaucratic records even to the extent of household accounts. However, under the patronage of the Ptolemies collections of writing were organised, classified and housed in alphabetical order by the originator of cataloguing, Callimachus, using a system shaped by a distinctly Hellenic view of the world of the time: drama, oratory, lyric poetry, legislation, medicine, history, philosophy and miscellany. The full classified catalogue [*pinakoi*] was titled *Tables of those Who were Outstanding in Every Phase of Culture and Their Writings*. In a superb example of a coercive collection development policy in action, ships visiting the port of ancient Alexandria were searched for scrolls. Any previously unknown editions found aboard, were retained as *harbour dues* to be copied for the library's collections – some never to be returned to their original owners (Manguel, 1996; Lerner, 2009; Schwartz, 2002; Ashworth, 2003).

Arabic Spain

The acquisition of valued texts was also a committed pursuit of Caliph Al-Hakim II [reigned 961-76], who continued his forbears' task of building the library at Córdoba to become, at 500,000 volumes, the largest of the 70 libraries of Andalusia. The caliph out-bid competitors at auctions to acquire rare and ancient texts and often whole libraries. Apparently well respected for his scholarship, Al-Hakim inspired the growth of private libraries so that book collecting by government officials became a political tool, a way of demonstrating support for learning and thus remaining in royal favour. The Hakim library did not survive the rise of the Islamic sects. As the Sunni [orthodox] came to prominence over the Sufi [mystic], those texts concerned with the sciences and philosophy were removed for burning. The later libraries of Arabic Spain could thus be described as examples of a culture which valued quite a narrow range of knowledge and learning. However even these distilled collections and their library storehouses were burned or dispersed by the alternating surges of Turkish and Christian invasion (Battles, 2003; Lerner, 2009).

Mexica – South America

The *glyph* texts of the Mexica people were overcome both by revisionism and by Spanish Christian colonisation. Middle-Aztec empire rulers amended the historical *glyph* texts to recast their Mexica history and to sanitise a brutal past. Subsequently this already revised history was re-created under the tutelage of Spanish missionaries. These re-created Christian influenced histories included retrospective, prophetic and mythic references to the arrival of the conquistadors and provided a kind of reverse and perverse justification for Aztec entry into the religion of their conquerors. Without facility in the ancient Mexica language, the Spanish invaders were unable to distinguish between earlier *glyph* religious-mythology texts and those featuring literature, history and science. Whole libraries of traditional Mexica, painted calendular texts were destroyed before their value as historical and cultural records was appreciated or their role in the Christianisation of the Aztecs was recognised (Battles, 2003).

Leuven

The Flemish university town of Leuven became a centre of learning and culture from the late 17th century. Its scholars included the humanist theologian Erasmus and contemplative writer Thomas á Kempis. By 1914 its university library collection of over 70,000 items comprised rare, religious texts and manuscripts in ancient and modern languages. The collections of some fading European monarchies were bequeathed and preserved in the Leuven university library. The town of Leuven and its library were casualties of both 20th century World Wars. The library's first destruction in 1914 is documented by German historians as a reprisal for the resistance of Belgian citizens, such that, following a fierce bombardment of the town, residents of villages nearby reported that for days after the invasion, 'leaves of books and manuscripts fluttered about, at the mercy of the wind' (Battles, 2003, p. 159). Between the wars the European community was canvassed for replacement collections to re-establish the Leuven library. However, in the international argument over the redesign, rebuilding and dedication of the library and the tensions in recording of its first fate were sown the seeds for the library's second World War II destruction in 1940: reported as a reprisal for the World War I Allied victory.

Reformation and beyond

The more recent heritage of libraries in the West could be said to have evolved from Reformation beliefs that each person should have at least enough education to read the Bible. In the period from the Reformation to the mid 20th century, versions of libraries emerged in response to waves of economic and cultural upheaval, so that some examples acted to interpret and represent aspects of social change. The private collections of royal and ruling families were often the beneficiaries of the monastic collections which were dispersed at the time of the Reformation. Such collections were maintained as sources for the preparation of clergy, or found their way into professorial collections attached to the universities and colleges of Europe and North America. The Reformation stimulated the growth in library collections to include the secular as well as the sacred, further promoting publication in languages other than Latin (Carr; 2006; Gerard, 1978; Manguel, 1996).

Pathways to the free, public library and the library as part of lifelong education varied across Western European countries and those of the New World. In England circulating and subscription libraries were available to those with financial means via entrepreneurial business initiatives such as William Lane's Minerva Press (1780) and Charles Mudie's 'Select Library to the empire' (1842).

Steel magnate and philanthropist Andrew Carnegie was prompted by a belief in the responsibility of a democratic society to provide education for all as the basis for funding the construction of dozens of library buildings in the United States and across the British Empire. The gifting of these buildings was on the proviso that municipalities would establish and maintain the libraries from public funds for access by communities. Even in cities where such philanthropic benefit was not offered, city governors began to appreciate the advantages of library services and increasingly public library collections supported the learning lives of communities and public library buildings became part of the urban landscape (Lerner, 2009).

Writers reflecting on the evolution of libraries describe them as 'key institutions of civilised societies' (Gross & Borgman, 1995, p. 12), as 'cornerstones of intellectual, cultural and social life', devoted to scholarship (James, 2002), and as 'cultural institution(s) sharing common mission and effect with museums, botanical and zoological gardens' (Carr, 2006, p.3). Some commentators attach the emancipatory influence of the library in the public realm to the rise of democratic, egalitarian social principles of freedom, justice and equity.

For example, the libraries of the Mechanics Institutes and the Welsh miner's libraries are described as 'the first 'people's universities' (James, 2002, p.12), providing access to democratising, eclectic collections of ideas in a broad range of published materials, stimulating the development of print literacy and continuing the ideal of universal education (Ashworth, 2003; James, 2002).

In Western Europe ideas of a broad populace having open access rights to records of human knowledge and achievement awaited the social reform agendas of pre-and post-industrial urbanisation and were formalised in the United Kingdom for example, in the Public Library Act of 1850. Subsequently such vision and principles are expressed in the practices of a free public library service and are voiced in national and international statements such as *School Library Manifesto* (International Federation of Library Associations, 1999), and the *Statement on Free Access to Information* (Australian Library and Information Association, 2001). While the free public library is perhaps the single most significant influence on current versions of the school library, it could also be said that more recent digital and electronic forms have blurred information boundaries and drawn the physical and digital-online versions of libraries, including school, public and university libraries, into shared zones.

Discussion about the ideals of continuing rights of free public access to digital and online information persist in and beyond the librarianship field. These are captured in concepts of *creative commons* and *information commons*, conceptualised as free, publicly available digital access rights to information in digital form (Kaptizke & Bruce, 2006). Electronic subscription and 'user pays' approaches via database cartels are seen to place under threat such democratic access (Kranich, 2007).

The historical panoply of libraries is evidence of the human value assigned to those artefacts which are seen to represent humanity over time. Libraries are evidence of the human impetus to collect and represent artefacts of the human story, to preserve the *voices* of the human storytellers and the connections with this human history, beyond the reach of human experience and memory. All material records are fragile and vulnerable to time and to natural or human motivated catastrophe. Much vaunted digital-online materials are among the most fragile being so dependent on electrical and electronic systems, software and hardware versions, connections and storage for their continued creation and access.

Power in the architectural statement

Across centuries the built spaces of many libraries came to be sites of social and cultural significance. A spread of examples includes the ancient Egyptian House of Books at Edfu; the current Bibliotheca Alexandrina, re-established in 2001; the Caliphal Fatimid Islam libraries or Houses of Wisdom in Cairo and Córdoba; the Buddhist caves at Dung-hua; the Benedictine Abbey Library of St Gall; the Papal Library at Avignon; the Royal Library at the time of King George III, and many contemporary national, state, municipal and university libraries (Kubler, 1962). As manifestations of sets of attitudes, values and priorities, such libraries could be described as pieces of time attached to time-influenced social orders trailling their value systems into their futures. In the historical scope of built library spaces which are still available to us, or in their visually recorded or imagined forms, these sites reflect their times in something of the position adopted by the ancient Roman architect Vitruvius in his 'thesis of architectural propriety: appropriateness of form to purpose and status' (Mitchell, 1996, p. 49).

As built spaces, many early libraries can only be imagined. The Italian historian, Luciano Canfora ventures a description of the ancient Bibliotheca Alexandrina with its *bibliothekai* [bookshelves] housing the memory of the ancient world in almost a half million scrolls, niched along wide corridors. Descriptions of the opulence of the libraries of Islam, replete with physical space, light, air and comfortable furnishings, contrast markedly with the austere, cold, cramped depictions of the Carolingian monastic libraries (Lerner, 2009).

The library as a modern monument in the West is particularly evident in the extant versions of Carnegie libraries and in the grand public edifices of national and regional capitals. However the built spaces of an historic span of libraries survive sufficiently in records, archaeological remnants and complete material form to acknowledge the value and informative potential of, a long historical and cultural view with respect to applying the critical theorist reflection on '*who and what is valued here?* in the entities, spaces and places of libraries.

While the foregoing discussion explores manifestations of the library over time and traces the impacts of evolving renditions of the library in time-bound social and cultural milieux it is the task of this research to explore ways of thinking about the school library in current contexts. The following discussion uses the perspectives of Foucault as a way to highlight dimensions of power, relationships, order and design in relation to school libraries.

Library as *heterotopia*

Foucault (1997a) develops the concept of *heterotopia* to explain certain sites of human relations, representation, contestation and inversion. Some of these sites - heterotopias of *crisis* - are concerned with people at 'times of their lives' and are constituted in institutions such as boarding schools or schools for adolescents or in aged care residences for the elderly. Other sites - heterotopias of *deviance* - are concerned with those people whose behaviour deviates from social norms. These are constituted in places such as prisons and psychiatric facilities.

Although Foucault applies the *heterotopia* concept to the museums and libraries of Western culture, the manifestation of the idea of a library is an in-common feature of diverse social-cultural entities across various time periods, as is made clear in the vignettes presented earlier in the chapter. Foucault describes the libraries and museums of Western culture as 'places of simultaneous representation, or heterotopias of indefinitely accumulating time', attached to a history of collection, archiving and preservation. These are real places, sites which reference and provide access to the collected concerns of humanity in a kind of organised, continuous coexistence (Foucault, 1997a; Foucault, 2002).

The characteristics and conditions of *heterotopias* are useful elements in a critical discussion about libraries in changing times with an eye to school libraries as built spaces and to the processes of their designing. The following exploration employs an approach analogous to Foucault's work (O'Farrell, 2005) and is informed by Chaplin (2003) who examines *Las Vegas as heterotopia* in a similar way. The discussion foregrounds the taken-for-grantedness of school libraries as 'crisis' entities, transforming over time, which juxtapose versions of human experience, constitute heterochronies (*slices of time*), and feature accumulations of sources and reference points organised in particular ways (Foucault, 1997a). The characteristics of heterotopias identified by Foucault are in ***bold italics*** (my emphasis) as a tracking device in the following discussion (Chaplin, 2003).

As my first contention, and with reference to Foucault (1997a), school libraries could be described as ***heterotopias of crisis*** in that they are places within places [schools], which are intended for young people during particular times of their lives. Schools can be constructed as both every day places and *other* places, aside from home lives and working lives, where society expects young people to *become* according to prevailing societal norms. School libraries are constituted in material 'collections' framed by particular views of valued

knowledge attached to and embedded in the kinds of learning legitimised in schools. Educational expectation related to the development of particular forms of literacy is a particular example of this. The school library is also a space in which learners, collections and the practices of learning coexist.

As reflections of society, libraries are effects of their times, drawn from their times. Some carry forward to 'new times' the traces of the social orders prevailing throughout their emergence. Libraries [including school libraries] are **transformed over time,** a characteristic emphasised particularly with the rise of electronic information and communication technologies (Foucault, 1997a).

Libraries **juxtapos**e forms and renditions of human experiences. Contemporary museum-libraries layer and enmesh representations of time, using technologies which appear to be, of themselves, incompatible - the scroll, the manuscript, the codex, the lithograph, the photograph, the moving image, digital renditions. In some museum-libraries for example, the moving image creates renditions to assist observer understandings of events and contexts which unfolded centuries before the invention of the camera. In school libraries, teachers and learners engage in similar juxtaposition as they access, represent and generate versions of human experience in multiple forms of print and digital information media (Foucault, 1997a, p 354).

Libraries constitute heterochronies - 'slices of time'. The records and **accumulations** [collections] of these are archived as if immune to concepts of time or its effects. Information and communication technologies further complicate ideas of libraries as concurrently geographic and virtual time-spaces. The emergence of digital electronic forms embedding variations of synchronous and asynchronous communication, echoes in Foucault's notion of the library as a site enabling the 'rediscovery of time, as if the entire history of humanity, reaching back to its origin were accessible in a sort of immediate knowledge' (Foucault, 1997a, p. 355).

Systems of **opening and closing** make libraries simultaneously accessible and impenetrable – physically and intellectually. Entry can be described as open but conditional. The built space entities of libraries have been accessible traditionally to those able to place themselves in physical proximity. Although electronic technologies may have disrupted physical distance constraints in some senses, the lack of access to the material tools of electronic inquiry can constitute barriers even more powerful than physical distance from a

site or geographic placement. As information/knowledge is generated and accessed more exclusively in electronic forms physical distance can amplify rather than diminish for some information seekers. While schools and their libraries may establish open, on-site electronic access for users as a form of equitable access, students without home-personal access experience digital-electronic systems as time-bound, partly closed and explicitly regulated by their physical presence in an access site. Intellectual access to multiple forms of information requires entry via the openings enabled by forms of literacy. In addition such *openings* are constituted in the capacities of individuals to identify and frame their key inquiries, as well as understand and use electronic search tools to negotiate electronic information gateways and digital renditions of information in the creation of their own information/knowledge texts (Foucault, 1997a, p. 355).

Heterotopias of compensation are designated as places which constitute forms of perfection. For example, Puritan colonies of the New World [America] demonstrate a desired dynamic of selected order, symbols and regulation not found at home [England] for such communities. Traditionally, libraries create ordered spaces particularised by categorisation and storage of materials, regulated by conventions of classification, implying rules of behaviour and ordered responses by users. Such order is less likely to be so strictured in user's private collections [home]. Thus for users of library collections there is a juxtaposition of familiar/unfamiliar, old/new categorisation. The rendition of information in digital forms presents other forms of impressive, apparently organised, credible facades, interfaces and entry points for negotiation by users of digital and online materials.

As if making particular reference to libraries and their users in both physical and virtual contexts, Foucault (1997a, p. 356) captures key elements and issues:

'(a) problem of the human site or living space….. is knowing what relations of propinquity, what types of storage, circulation, marking and classification of human elements should be adopted in a given situation to achieve a given end. Our epoch is one in which space takes for us the form of relation among sites'

The foregoing discussion opens ways to recognise the potential for agency in dispersed sites and practices of power, of the rapidly circulating nature of power and of power relations as simultaneously local, unstable and diffuse (Gore, 2001).

Power: mediated in practices and built form

Foucault (2002) conceptualises the most effective forms of power as sets of micro-practices dispersed and enacted throughout the social world, rather than power as primarily externalised oppression. The *capillary action* of micro-power operates through the social and spatial practices of institutions and relationships, constructing subjects and producing and manipulating human agency. The biological image of *capillary* implies sites and actions of interchange across and between systems and individuals at micro level.

The *gaze* of the state and science are invested with power in the production of normalised social practices and the surveillance and control of deviations. Using these perspectives, school libraries could be said to be complicit in practices of power through systems of organisation and access, through the design and interrelationship of spaces and in the incidence and use of elements such as glass, electronic monitoring devices and even the work-learning-space placement of library staff in relation to students/clients. Via their engagement with library spaces, sources and services, subjects are constructed as *researchers* or particular kinds of learners in school library environments (Foucault, 2002).

Considerations of power are key elements in the research question for this project which implies both human agency and social practices. In particular the research question infers a capacity to act on the part of design participants, a capacity to transform in the sense of *influencing creatively* (Harvey, 1996), and a personal investment through the voices and actions of participant individuals - 'a capacity to transform our world' (Dovey, 1999, p.17).

Dispositions and practices of architecture and education can be said to develop as a kind of symbolic capital, inherited through the current *habitus* of the field of practice (Bourdieu cited in Dovey, 2005). Such cultural and social practices and assumptions infuse fields (architecture, education) and operate as a forms power through the agreed and applied *rules and resources* of the *systems* of the field, including language. In the field of education, constraining and enabling *resources* are constituted in the educational vision and perceptions about learners and learning which are evident in national education statements and in the character of learning experiences which are described in school system syllabus documents. For this project, the capacity to investigate the impact of such resources is expressed in a set of allied research foci which reveal the potential for impact on the design and designing of educational spaces. These foci are concerned with understandings about school libraries, about valued characteristics of learners and learning

experiences and with the influences such understandings have on the designing of school library spaces. These aspects inform the project data gathering through the design of the semi-structured interview statements.

Dovey (1999) examines the everyday practices of power which are mediated in built form and evident in place/power dimensions wherein built spaces coerce position, dominate and seduce. In these terms, the segmentation and divisions of the built spaces of libraries establish public and private dimensions, permit and prevent access and create conditions of surveillance. Dovey (1999, p. 15) contends that 'built forms use metaphor and construct mythologies through a politics of representation'. In these terms, the history of libraries and their evolving social and educational roles could be said to construct and naturalise particular views about what constitutes knowledge and culture. Manifestations of these influences are evident in the historical vignettes earlier in the chapter.

Examination of the mediations of power in built form is a key consideration for Elizabeth Grosz in *Architecture from the Outside* (2001). Written from the position of an outsider to architectural endeavours, this text enables a novice, vernacular and *in-expert designer* (this researcher, in architectural terms), to explore the library as an evolving entity. Grosz (2001, pp. 167-170) conceptualises a *thing* – for this project's purposes, a school library- as a condition and resource, as a provocation, 'a thing in the making … with a history of its own, characteristics of its own … [it is] a resource for making things and leaving our trace on things … a resource for both subjects and technology'.

Human capacities to act could be said to be both constrained and enabled by the organised attributes – *rules and resources* - of social systems. In these terms, the designing of school libraries is framed and moderated by the *rules* of who is considered to be a design participant or by structures and practices governing specifications, standards and timeframes for built space projects - such as Federal Government Capital Grants processes. The designer/architect, for example, may be assumed as indispensable to the designing of built learning spaces, however the position of designer or a role in designing may not be so automatically assigned to the educator. This project focuses on traditionally viewed school library users (educators and students) and on the traditionally viewed school library designers (architects and education facility planners) to challenge extant and assumed *rules and resources* in order to bring the *voices* of these participants to bear on the potential for creative influence on the design and designing of school libraries.

Language

Framed understandings: figurative language in the literature

In pursuing a discussion through the literature about the ways in which libraries are and have been experienced and understood, it is noteworthy that figurative language, in particular *metaphor* and *image* are key language features used by writers and commentators and, as will be noted later, also by participants in this study. It is considered that our conceptual system is, in large part metaphorical and that figurative language forms a significant proportion of the everyday language of English speakers (Lakoff & Johnson, 1980; Goatly, 1997; Kovecses, 2010).   Metaphors which gain currency and use across domains of knowledge and practice and within sectors of language communities, may take on constitutive characteristics and effects in the shaping of perceptions and the reproduction of meaning.

The broader over-arching structure and effects of **conceptual metaphor** (representing/understanding one conceptual domain or dimension of experience directly in terms of another) can be distinguished from the potential of **metaphoric linguistic expressions** (multiple linguistic expressions which are used to represent understandings within a conceptual domain). An example of this differentiation is evident in the **conceptual metaphor** of *life is a journey* conveyed in **metaphoric linguistic expressions** such as being *on the wrong road; up the creek; at a crossroads* (Kovecses, 2010, pp. 323-327).

With a long experience in dance and choreography, Janesick (2003) uses the metaphor of *choreographer* to develop the multiple dimensions and levels of activity of the qualitative researcher, reflecting the estimation that 'metaphoric precision is the central vehicle for revealing the qualitative aspects of life' (Eisner, 1991, as cited in Janesick, 2003, p. 45). Metaphors such as *researcher as choreographer* allow particular lived experience in a profession to be related directly, in its many complex expressions, to lived experience as a qualitative researcher (Janesick, 2003). In terms of this research project the figurative image of *flaneur* enables conceptualising of the researcher as participant-observer in school library landscapes, in ways similar to White's (2001) stroller in the landscapes of Paris. The Parisian *flaneur* experiences contemporary Paris as a participant, while observing and commenting on social and historical events through the lens of people, spaces and buildings (White, 2001).

In these terms and as a phenomenon of language, metaphor operates to represent one aspect of experience in terms of another aspect of experience – for example a *landscape painting* represented as *soul food*. In order to make meaning of the metaphor, a viewer of a painting may draw on experiences and memory of physical, cognitive, social, cultural, emotional, aesthetic, sensory and other stimuli to interpret, explain and relate representations in the painting, to experiences of food and to understandings of soul.

In critical discourse analysis terms Fairclough (2001a) emphasises that the significance and weight of meaning conveyed in the use of metaphor transcends the surface representation of one experience in terms of another. Thus the meaning-impact achieved/projected through the use of metaphor attaches to the kinds of metaphor chosen to represent the experience and to the relationship, ideological ties or connections between the experience and its proposed metaphor – as in the case of a *social problem* represented as a *disease* (Fairclough, 2001a, pp. 99-100).

In the literature selected for this discussion, libraries are represented in **metaphor** and associated **metaphoric linguistic expressions** which create meaning in terms of conditions, ideas and abstract qualities, or are characterised and conveyed through **images** which evoke or are evoked by diverse sensory responses. Across the scope of the literature about libraries as they have emerged historically in the West, these writings are replete with metaphor and with images stimulated through the use of figurative language features (Burbules, 2006; Maxwell, 2006; OECD, 2001b). The weight of intellectual, cultural and symbolic meaning conveyed through metaphor and image frames commentators' understandings of libraries and reaches into the diverse understandings and experiences of a wider audience of everyday readers and library users (Carr, 2006; Kresh, 2007; Manguel, 1996).

The following discussion refers to figurative language in selected publications about libraries in order to explore the experiential, relational and expressive values which emerge through the examples as part of understanding what the texts are drawing on to interpret, explain and inform understandings and experiences of libraries (Fairclough, 2001a). In some examples, metaphor and image overlay and coalesce dimensions of meaning through the use of natural world phenomena, organic, aesthetic and functional expressions and human activity dimensions. Other examples operate to restrict, confuse and conceal, and in yet other examples the effects of 'dominant metaphoric expression and casual ways of speaking' result in 'under-theorised description' (Burbules, 2006, p. 4).

Geologic metaphors such as 'deep mines of knowing' 'watershed institutions', and 'radiant force field' represent libraries as entities of strength, substance and durability (Carr, 2006, pp. 30, 19, 129). Expressions of energy and dynamism emerge through images of libraries as 'incendiary 'and 'fire for the living of lives' (Carr, 2006, pp. 35, 36). These latter expressions also imply somewhat provocative and hazardous qualities, as if libraries or the ideas associated with libraries defy control. Discourses of democracy, freedom and identity are referenced in the characterisation of libraries as 'cultural institutions' and in the assertion that, 'in libraries and cultural institutions moments for redefining, reorganising, breaking through, transforming our images of ourselves are immanent in all aspects' (Carr, 2006, p.3). In the wake of the potential for libraries to provoke and energise aspects of cultural life, it is perhaps not surprising that the first proposition in the American Library Association Statement on Freedom to Read draws on democratic social and political values/principles/philosophy: 'It is in the public interest for publishers and librarians to make available the widest diversity of views and expressions including those that are unorthodox, unpopular or considered dangerous by the majority' (ALA, 2004).

Organic, biologic, ecosystem metaphors and images introduce dimensions of libraries as life-systems: 'living organism' (Maxwell, 2006, p. 50) and 'heart' (OECD, 2001b, p. 117) conveying human survival and life-dependency meanings. The image of 'network/s' is used widely in the literature, particularly with reference to digital libraries, again implying ideas of a system of connectedness and sustenance wherein parts are linked for mutual benefit or even for survival (ASLA/ALIA, 1993; 2001; Kresh, 2007; Lonsdale, 2003; Oblinger, 2006).

'Endangered species' (OECD, 2001b, p. 117) and 'communal memory' (Maxwell, 2006, p. 50) signify evaluative meanings and a fragility which suggest that libraries and their continued existence carry elements of risk, danger or the possibility of loss. Social imperative meanings are also conveyed in ideas of libraries as 'communal memory' (Maxwell, 2006, p. 50), as if the significance of libraries is constituted as the remembering capacity of the social-historical being of humanity: 'There is nothing in our cultural armoury more important than the library ... nothing. If every school, every university, every other source of knowledge were destroyed, but the library survived, civilization could be rebuilt' (Salisbury, as cited in Maxwell, 2006, p.125).

These ideas and images sit alongside more opaque and potentially duplicitous metaphors of libraries as *archaeologies of* 'human motive and intention' (Carr, 2006, p.35) prompting questions about aspects of power associated with the historical institution of libraries, their

collections and patronage. Such imputations edge into the dialectic of human structures and practices creating relational meaning in the application of metaphors from the language of architecture and artisan activity. These images reflect and create 'things (libraries) which we make of the world rather than simply what we find in the world' (Grosz, 2001, p.171).

Creative agency of those who engage with libraries is implied by Carr (2006) wherein users are represented in artisanal terms, 'weaving strands of cognitive fabric', 'harvest filaments, spin thread, connect the strands, find the patterns our imaginations will extend' (p. 129). A form of solidarity is proposed with library users who are gathered into a position of *we/us* and who are rendered as capable co-creators, unravelling and making meaning in the complex, layered knowledge-worlds of libraries 'as knowing folds in upon itself like a blanket, our human practice is to act as searchers and explainers to fold it out' (Carr, 2006, p.129).

The figurative language of architecture offers further cues to relational, experiential and expressive values. It could be said that architectural images convey solidity and possibly stasis through images of library as 'warehouse ', and 'repository' (OECD, 2001, p. 116). Alternatively, human engagement, action and agency can be inferred in library representations of 'gateway' (OECD, 2001b, p. 116), 'open inviting door', 'theatre of action' and 'performance space' (Carr 2006, p. 26 and p. 127). These architectural renditions portray libraries as accessible, participative, creative sites of human activity.

Architectural, cultural and historical meanings intersect in references to the *genizah*, a historical, physical space with sacred import in Jewish libraries (Battles, 2003). The *genizah* houses fragile, deteriorating texts to preserve them from active destruction, allowing them to moulder over time in honour of their sacred references 'because it is believed that the contents of books go to heaven as do souls' (Maxwell, 2006, p. 51). In the image of *genizah* there are inferences that ideas and information-knowledge, discovered and created, are cultural and social phenomena influencing humanity in time-space beyond the initial orbit of original creators or of historical markers. In these terms Bruner (1991) reflects that 'a culture itself comprises an ambiguous text that is constantly in need of interpretation by those who participate in it' (as cited in Carr, 2006, p. 16).

Cues to the evolving time-space qualities of libraries which embed ideas of change are evident in geographic, mapping and mobility metaphors and images such as *travel, journey,*

exploration, navigation, connection, and in *medium, pipeline, delivery centre* (Burbules, 2006, pp. 4-5). Assertions that 'the continua of the gallery and the shelf, offer history, clustering and sequence' (Carr, 2006, p. 32), represent the librarian-organiser as creator, coder and curator, and the literate library-landscape user as navigator and code-interpreter. Relationships are created between these participants through the mutual agency of activities such as the categorising and placement of material knowledge-works by the librarian and the accessing of these materials via the setting of investigative courses stimulated by the *enthusiasms, puzzles and connections* of the library user (Chambers, 1985).

These relationships can be seen to be as applicable in digital, online environments as they are in physical ones. Ease of navigation, familiarity and capability on the part of the library user are implied in some of these images. However, such terms may overlook and fail to account for the insider capacities required to negotiate *heterotopia* dimensions of libraries, those *systems of opening and closing* which make libraries both accessible and impenetrable, and which assume greater complexity in digital, online environments (Foucault, 1997a).

Metaphors and images of commerce and commodity are used in some texts such as guidelines, reports and operational publications. The commerce-economy nexus is apparent in the experiential rendition of libraries as 'enterprise', 'brokerage service', 'shopfront' and 'community asset' (OECD, 2001b, p. 118). In these references libraries are represented as traders in commodities (information) and services (librarian-assisted processes). Relational values and cues to social relationships emerge through currency, flow and interaction images: 'user pays', 'delivery', 'provider', and 'open for business', as well as in the use of specific commercial entities to identify versions of libraries: 'marketplace', 'newsagency' and 'bookshop' (OECD, 2001b, p. 118).

Summary

As noted earlier in this chapter, libraries can be understood as evolving and influential ideas in the social, cultural and political lives of people across time. The historical vignettes demonstrate the ways in which libraries across time have been used to facilitate social and political purposes and projects, and the extent to which libraries are evidenced as, **'***the thing and the space it inscribes and produces …. Differentiated perceptually and*

conceptually… distinct, repeatable in principle ... located in space only because time is implicated' (Grosz, 2001, p. 170).

From the standpoint of critical discourse analysis, the selection and use of figurative and other language features, serves to convey particular understandings about the matters of interest to this study, libraries , learners and learning, and designing. Language features and ways of speaking are examined in the study to reveal traces and cues to underlying classification schemes, social relationships, and evaluative schemes of commentators in the literature and also of participants in this study, as will be seen in the analytical discussions (Chouliaraki, & Fairclough, 1999; Fairclough, 2001a).

Theoretical perspectives and figurative language representations frame libraries in particular ways across time, projects and purposes. These dimensions of understanding libraries as *thing*, 'born in time and place' (Grosz, 2001, p. 169), with qualities of mobile reality (Grosz, 2001, p. 172), and the potential to 'leave their trace on things' (Grosz, 2001, p. 172). In the wake of these reflections, the discussion moves to the chapters of literature review beginning with Chapter 3 'Story starters: space,

 place and design in theory and practice'.

CHAPTER 3: STORY STARTERS: space, place, designing, in theory and practice

Introduction

The review of the literature is presented in three chapters. With respect to the research objectives, the chapters of the review work to create a set of *small stories*. This chapter introduces concepts from the literature concerned with space, place and designing as a way of coming to terms with some of the understandings and assumptions of influence for participants in the designing of educational spaces, including school libraries. As noted in the Chapter 1 thesis outline, Chapter 4 'School Library Stories' examines the contexts and texts of Australian school libraries through pertinent government, school system and professional association texts. Chapter 5 'Stories of Influence' considers the impacts of the technology-pedagogy nexus with reference to selected sources pertinent to the broader circumstances of education and those which pertain to educational space contexts.

Concepts of space, place and designing explored in this chapter are used in the evaluation of the contexts, texts, research foci and applications raised in the continuing review of the literature and in the analytical discussions of study participants' *small stories*. Understandings of space, place and designing are also pertinent to the study implications as dimensions of creative possibilities and for opportunities of creative influence in the designing of school libraries by user and designer participants.

Space and place

The human experience and interdependent conceptions of space and place are expressed across the disciplines – in art, philosophy, literature, geography, psychology and anthropology. For the Greek philosophers, Plato, Aristotle and Philoponus, ideas of place featured prominently in their discussions of the cosmos, the void and ontology. For the mathematician Euclides space was the pre-eminent concept, subsuming place, to be conceived as points on a matrix. From the eighteenth century, geographers have been among the longest published contributors to scholarly discourse about space and place.

Understandings and experiences of space and place are often conflated or so closely associated as to be almost inseparable. Using the figurative geographic image of the urban *address,* theorists have distinguished between space as a backdrop to human affairs and

place as an occupied or lived-locale within that space, such that 'space is about having an address and place is about living at that address' (Agnew, 1989, as cited in Buschman & Leckie, 2007, p. 5). The association between Euclidean perspectives of space and place can be seen to influence renditions of places as map-points within a broader expanse of geographic space (Buschman & Leckie, 2007).

Harvey (1973) suggests that through our participation in social processes we make use of different understandings of space. It seems reasonable to suggest that our diverse experiences of space and place, our relationships with and within spaces may enable us to exercise different understandings concurrently, or draw on multiple understandings according to circumstances. These possibilities are signalled in Massey's reflection that 'space is simultaneity of stories-so-far; it has the dimension of multiplicity; it is the dimension of the social: it presents us with the existence of others' (Massey, 2010, p.1).

Understandings and implications of space

Theoretical understandings of space and place are seen by some commentators as clustered into three foci. Theories related to power and social relations are concerned with how spatial matters border, confine, and position people across a wide arc of human activity, including homes, workplaces and geographic locations. Theories related to the production of space are concerned with the reproduction of hegemonic effects through materialist conditions and patterns of life. Humanist or agency-based theories consider the perspectives of people as they experience space and place simultaneously (Agnew, as cited in Bushman & Leckie, 2007, p. 5). With respect to human and anthropological understandings of space and place, theorists such as Relph (1976), Tuan (1977), and Buttimer and Seamon (1980) counter geometric relationship perspectives to remind us that people live in worlds of human relationships and meaning.

Theories of space include understandings of space as static and concrete; space as location for objects, subjects and events; space as defined completely in terms of relationships and space as a socially produced. Socially-produced space (*spatialisation*) is achieved through human practices located in spaces, through representations of spaces such as maps and plans, which regulate and organise space, and through often contested social, cultural, political, and economic meanings (Lefebvre, 1991; Soja, 1989). Tuan (1977, p. 6) proposes that ideas about *space* emerge from constructivist notions that our social experiences are the catalysts which stimulate the construction of our realities.

Commentary from the literature on the human dimensions of built spaces gives form to some of these theories and further prompts an interrogative stance about school library spaces. The human dimensions of built spaces can be explored through the 'patterns of events' which take place in spaces and which are constantly evolving (Alexander, Ishikawa, Silverstein, 1977, p.62). From this viewpoint, the quality of spaces, 'alive, holistic, balanced, self-sustaining, timeless, appropriate', is partnered with the notion that 'the life and soul of a place depends not simply on the physical environment, but on the patterns of events that happen there' (Alexander et al, 1977, p.167). These patterns of events extend beyond human activity to encompass diurnal and seasonal elements, cultural diversity and geometric relationships. These diverse elements considered by Alexander (1979) are not often a predominant feature in texts which offer guidance for educators on the designing of learning spaces.

The inter-relationship of these elements is illustrated in Alexander's (1979) example of a footpath as an anthropological and geometric system, including the field of human actions and events and the field of mathematical relationships which defines its material geometry. Recalling de Certeau's (1984, p. 117) concept of place as practised space, Alexander (1979) notes that Mumbai footpath culture and patterns of events differ from those of New York, Rio de Janeiro or Beijing. Cultures name their patterns of events by naming the spaces which are an accepted part of that culture: theatre, restaurant, market, classroom, library (Alexander, 1979). Because this study is concerned with the implications of such perspectives for activities and processes of designing, a question can be pursued about the ways in which human actions and events, culture and ethos are or might be represented and enacted in the designing of school libraries.

Ecological and biographical dimensions of place are considered by Day and Parnell (2003, p. 31 & p. 51) as part of the development of 'place-consciousness', as we contemplate what is physically there in the place, as we reflect on the flow and effects of time, and as we ponder on our mood and responses. Thus place is understood to have a 'layered biography' experienced in physicality, habitation through time, moods and feelings, leading to the *spirit of the place*, its *identity*, and the identification of people with places. In these terms, identifying with places and spaces involves a mix of affective, sensory and cognitive experiences and responses which comprise propriety feelings (Day & Parnell, 2003, p. 51). Impressions of place in sensory terms may be in nuanced undertones, through the smell of foliage, cooking or chemicals; the noise of animals, voices or equipment; ambient light or

bright paintwork, or the texture of surfaces such as floor coverings underfoot or textiles on the skin. Related to the designing of the spaces of our lives and work, it can be suggested that the varied dimensions of place biography and identification, and of speculation about how people might wish to experience places, 'are best understood through the insights and clarity of those who live and work there, converging in dialogue with those who do not' (Day & Parnell, 2003, p. 11).

Extending these ideas into the places of schools, Rinaldi (2006) recalls the contemplation of 'lunch' by Reggio Emilia educators as part of their work with architects in designing 'places of lunch' for young children. The educators and architects speculated about how children might experience lunch; and what the spaces and places of lunch might say about what is valued about the experience of lunch in broader human, community and educational terms. The educators and architects considered the affective, sensory, cognitive and social dimensions of lunch for children as part of their designing processes (Rinaldi, 2006, p. 78).

Using these reflective frames to examine *lunch* and the *places of lunch* in many schools, we may be confronted with sobering implications of *who and what is valued here.* At the very least, matters of respect and trust can be suggested negatively in the bare concrete surfaces, lack of seating and tubular steel queue managers which are features of many school tuckshop lunch areas (Elliott Burns, 2008, p. 5).

Signals of value and expectation in the milieu of physical spaces can be expressed in our reliance on 'spaces create places appropriate to certain kinds of activity or behaviour and to tell us what these are' (Lawson, 2001, p. 11). For example, many school libraries signal expectations and respond to participant expectations, through aspects such as: the stimulation of displays and electronic access points; familiar or recognisable layouts consistent with public library facilities, homes, retail precincts; seating to cater for a variety of people and activities; identification with familiar aspects of a resource collection, and areas for particular purposes or particular staff activities. Confronted with these features library patrons are faced with a form of *library geography* in some ways as *readable* as international standard signage which can enable travellers to become adept at *reading spaces* as texts to meet their needs for shelter, food and personal comfort or safety. In these terms space has a function in creating settings in which we are able to perform our roles and identities.

'Conceptions' of space: quantitative, qualitative and hybrid dimensions

Franz (2005) proposes that understandings of space can be seen as different kinds of *conceptions*. Space may be understood as void, as continuum and/or as exhibiting perceptual and multi-sensory dimensions. Space can be seen and experienced as psycho/social, as political, and as existential, as spaces of being and becoming. Existential conceptions can be seen to subsume other conceptions. Digital-online spaces can be considered to constitute hybrid conceptions and experiences of space, with both qualitative and quantitative dimensions.

Indicators of quantitative *containerised* conceptions of physical spaces, might thus be evident in participant renditions of libraries as empty spaces, as containers to be filled. Quantitative conceptions might be signalled when we prioritise concerns for building form, for the placement of material objects such as furniture, for the locales of activities within the spaces, and for the *in place* relationships between inside and outside as ways of defining sites for people and their activities. Conceptions of space as continuum or as perceptual and multi sensory can emerge in our experiences of moving through the spaces, and in the sensory stimulation of our sight, hearing, smell and touch. The collision of these stimuli and our responses to them have the potential to influence our overall senses of 'at home-ness' familiarity, ease, welcome and belonging' or to provoke senses of alienation and discomfort (Alexander et al, 1977; Bachelard, 1997).

Qualitative psycho-social conceptions of space include aspects of *proxemics* or the ways we position and move ourselves in and through spaces in relation to others. Our inclinations to preserve personal space and our negotiation of public or social spaces are influenced by the degrees of proximity or distance between ourselves and others, that we are able to establish related to the properties of the spaces (Lawson, 2001). There are senses in which we expect that spaces will in some ways indicate to us what they are to be used for, what behaviour is expected or permitted in particular spaces, and whether and how we might adapt or customise certain spaces for our own purposes (Heath, 2010; Lawson, 2001). Psycho-social factors may influence school library designing and design outcomes as people's needs or desires for privacy, security, identity and control are considered, overlooked or disregarded (Franz, 2005).

Political conceptions of space have relevance for school libraries in matters of student supervision and surveillance and thus can be associated with power and control. It can be

observed that students in schools are *positioned* conceptually, socially and physically. Schools can be construed as both every day places and *other* places, aside from home lives and working lives, where society expects young people to *become* according to prevailing societal norms (Foucault, 1997a). Thus students' status positions in schools can be regarded as in transition, moving between childhood and adulthood. Schooling systems can be seen as custodial, as they act *in loco parentis* with regard to the care and protection of young people, and on behalf of society with regard to students' formal and sometimes extra-curricular education.

Supervisory obligations are interpreted and expressed in requirements that students remain within physical and behavioural boundaries and thus remain *within sight*, creating forms of bodily and social discipline (Foucault, 1997b)*.* Remaining *in view* of people or of systems is achieved through formal processes of curriculum and learning as much as it is by the configuration and relationships of physical spaces. The placement of supervisory adults, and the use of building construction and electronic materials and processes to facilitate surveillance of students and their activities combine to maintain control of students and their activities. In digital online spaces, the boundaries are electronically applied. Increasingly, electronic surveillance methods and tools are used in schools in a double sided program of observation – of both *insiders* and *outsiders.* Limiting access rights to particular spaces or parts of spaces also creates political dimensions through categorising the status of individuals and groups (Foucault, 1997b; Markus & Cameron, 2002).

Political effects of school library spaces may be built into design and structural features in ways which ensure that a particular point of observation, such as the resource circulation area, will function as a vantage point from which all or most people in the spaces are in full or partial view. Conditional or semi-private use of spaces can be regulated by patterns of space connections, the positioning of small-group rooms, the use of half-walls and materials such as glass, to enable half-hidden observation which shapes the ways people negotiate and work in the spaces. The labelling of spaces such as *office* or *workroom* serves to create conditions of entry and to determine the status of those who may or may not enter (Franz, 2005; Markus & Cameron, 2002).

Existential conceptions of space are said to subsume other conceptions. Writers and artists have used the example of a *house* becoming a *home* and a home coming to mean more than its physical components, to illustrate existential conceptions of space in art and

literature (Bachelard, 1997). Ideas of *home* can invoke sensory and emotional responses, stimulate memory and convey those qualities of *at-home-ness* identified by Tuan (1974) as *affective bonds* between people and material environments.   Some writers describe *dwelling* to mean living with intensity in a space/place, with the experiences of dwelling being formed out of an amalgamation of dimensions such as a sense of intimacy, familiar activity rituals, objects of significance, diurnal and nocturnal patterns of light, texture, smell and sound (Franz, 2005; King, 2004).

Existential conceptions are suggested in the potential or prospect for school libraries as spaces of being and becoming and for the expression of learner and educator identities. Designing activity and design outcomes may be influenced in existential terms where dimensions of school libraries are developed to allow for diverse expression, as *third places*, in the manner of the social spaces of the cafe and the piazza or in the current manifestations of library gathering spaces identified as *information or learning commons* in which the activities of learning are expressed both formally and informally (Kranich, 2007; Lippincott, 2006; Oldenburg, 2001).

 Virtual space can be understood as space mediated through computer software and hardware which generates digital codes and signals, enabling screen-based interaction using manipulable devices. In some cases, multi-dimensional *bodily* interaction which mimics physical or geographical placement is achieved through digital prostheses. Elements of qualitative and quantitative conceptions and experiences of space can both be associated with so called *virtual space* (Franz, 2005).

In a digital-online dominated world, humanity could be said to live in a flow, a continuum from the materiality of geographic space to the virtuality of cyberspace (Castells, 1966). The tools and technologies of information and communication constitute types of docking stations in a flow of hybrid, material-virtual life. Some of these tools anchor us to physical localities. Others enable roaming, notionally freed from wired-constraints, still attached to the ephemeral *signal*, and strengthening ideas of space as increasingly fluid (Abram, 2007). Bauman (2005, p. 303) sees these change flows as societal movements to 'liquid modernity' as the pace of change acts to 'melt' earlier social arrangements and practices. As an example, for educators some of these flows are also constituted in the move of focus from institutional to individual, from teaching to learning with consequent impacts on relationships between learners and educators and on the spaces and places of schools.

Burbules (2006) uses the examples of the knowledge spaces of schools and libraries to exemplify both physical and virtual 'spaces becoming places' in transformative processes of mapping and architecture. Mapping creates schematic representations of relations between spaces, transforming flows and trails of activity over time, such that (re)mapping reconstitutes flows of representations rather than static forms. Architecture is seen as a dynamic of the physical, of language, of customs and practices, transforming space into place along polarities of movement/stasis; interaction/isolation; publicity/privacy; visibility/hiddenness; enclosure/exclusion (Burbules, 2006, p. 8).

Connections between architectural materiality and virtuality have also been established by linking the technologies of telepresence with those physical representations of spaces which, we imagine, will continue to accommodate embodied participants in wired worlds. These relationships are demonstrated in Mitchell's (2003, pp. 46-70) couplings of 'Bookstores / Bitstore; Hospitals/Telemedicine; At Home /@ Home; Stacks /Servers'. Such juxtaposed physical/virtual dimensions, constituted by Mitchell (2003) as *recombinant* spaces, are a salutary reminder of the challenges facing educators in designing learning spaces in between digital-online-ness and the material constituents of the learning spaces of schools (Mitchell 1996; 2000; 2003).

Dodge and Kitchen argue that we are 'rendered only partly footloose' by digital-online technologies (2001, p 15). It could also be said that,

we stand on the geographic windowsill of online spaces and experiences, augmented by our telecommunications devices of choice - one foot in a physical, material world, the other raised in anticipation. Digitally transported we may be but we remain *placed* (Elliott Burns, 2008, p 3).

Working with a notion of *recombinant architecture* signals a 'loosening of spatial connections' between physical and digital-online environments (Mitchell, 1996, p.105). This idea also suggests an opportunity for school library designing approaches to be concerned with spaces where *bits meet bodies* to fulfil human needs and desires, while continuing to pursue those attributes of spaces and places which support physical, social and emotional comfort and amenity dimensions of human need (Alexander et al, 1977; Mitchell, 1996).

Educational space implications

The *Performing Hybridity* (2002) study, which is introduced in Chapter 1 and reviewed in Chapter 4, provides an impetus for this research project. That study provoked further investigation into the taken-for-grantedness of the spaces of learning and teaching and an increased awareness of the limited acknowledgement of the potential for educational spaces to influence student learning. The *Performing Hybridity* study did not investigate the participants and processes of designing school libraries, nor did it investigate the capacity for designing dimensions to influence student learning through school libraries. However, the study stimulated the development of the QUT Master of Education unit of study titled: *Designing spaces for learning* (2004) as a 'place' for educators to engage with the impacts of the spaces, places, human dimensions and designing implications of learning spaces. This is a focus not widely considered as a concentrated area of study in under-graduate or post-graduate education courses.

In tandem with this, Newton (2009) notes the mismatch between policy and research priorities and program implementation using the example of the Australian Government Building the Education Revolution (2009-2011) initiative. This initiative injected over $14 billion in funding for Australia-wide school infrastructure, including school libraries. However in the case of the 64 research priorities documented for Victorian (Australia) schools, there was no complimentary mention of learning spaces and their designing (DEECD as cited in Newton, 2009, p.11).

Through a critical ethnographic study, Fisher (2004a) notes 'a deep spatial silence' from students with respect to their understandings of the significance of the physical environment of their schools, and he questions the absence of physical spaces as an influential element in teachers' pedagogical practice. He reasons that teachers' predominant understanding of learning is one of *containerisation*, and that both teachers and students exhibit diminished spatial consciousness as a consequence of the power given to architects and education facility planners in the designing of schools (Fisher, 2004b, p. 37).

The hegemonic effects of this can be seen as cyclic. Educators and students are coerced into school spaces designed by people uninvolved in the understandings and practices of learning and teaching, so that it is unclear if theories of learning or accompanying pedagogical approaches have informed the designing of educational spaces. Consequently,

learning and teaching in such spaces coerces students and teachers into pedagogical practices and relationships of dubious connection to educational theory, and with little prospect of enabling responsiveness or changed approaches. Without opportunities in their own pre-service and post-graduate learning to engage with the effects and potential of educational spaces, educators are further disempowered and students are dislocated (Fisher, 2004b).

As a participant in the Smart Green Schools Research project, Newton (2009, p. 10), an architect steeped in discourses 'to do with space', is alarmed that many educators do not consider that there could be connections between the physical spaces of schools and classrooms and the potential for effective pedagogical practice. It is noteworthy that each semester, numbers of experienced educators undertaking the QUT Master of Education unit of study, *Designing spaces for learning,* have responded to the opportunity to investigate these connections, some with similar amazement. Among the comments made in course evaluations and discussions at the end of semesters, students have remarked that:

I have never thought about it like this before. I did not know I could even think about this.

How long has this been going on? I never knew about any of this.

I am an Advanced Skills Teacher. I am astonished and embarrassed that I have never considered these things before.

It could be observed that Newton (2009, p. 9) has the advantage of long exposure to discourses 'to do with space' through tertiary programs of study, studio designing and field practice experiences which most likely included collaboration, peer and specialist review, followed by many opportunities for practice in the designing of architectural spaces. For educators there has been no such rich, formal background. Pre-service and post-graduate programs for teachers offer almost no opportunities to consider matters of space, place and designing related to the influence of educational spaces on student learning and their own pedagogical practices. A key implication of this 'gap' may be constituted in limited conceptual understandings of space, place and designing and the absence of a discourse of learning and spaces, a language with which to imagine and articulate relationships between learners, learning, pedagogies and spaces.

The foregoing discussion acknowledges an array of understandings about space and place informed by theory, and practice exemplars. Limited spatial understandings and experiences for educators and limited pedagogical understandings for architects has influenced the designing of educational spaces (Fisher, 2004a). In school library designing activity the co-presence of diverse understandings of space and place, assumed in system policies and practices, expressed in professional practices, and held by users and accredited designers with limited opportunities for discursive engagement, signals potential for tension and dissonance. However, raised to a conscious level, diverse perspectives and experiences may also indicate a potential for creative influence. There is a challenge in Massey's (2004, p. 1) proposition:

> If space is a product and a precondition of all our practices and engagements, then it is integral to the construction of the relations between us, to the blossoming, or not, of identities, and to the potential for new futures that we are constantly laying down.

Design, designing

Introduction

This study is concerned with the taken-for-granted processes of designing the educational spaces of schools, specifically school libraries. Pervasive across the matters considered are the competing discourses which meet in activities of designing. The review introduces understandings of design and designing from the literature, as a way of considering the assumptions which may overtly or inferentially inform approaches taken in designing the built spaces of schools and school libraries. The discussion recalls aspects of the sometimes at-odds paradigms, the professional predispositions, and the languages of architecture and education which create and perpetuate some of the communication dilemmas in designing relationships. Questions of educator and student participation in designing activities are addressed in terms of access to participatory opportunities and authenticity of experiences.

Four designing approaches are reviewed for their potential as ways of considering the people and contexts of school library designing and of seeking opportunities for creative influence.

Understandings and implications

A review of the design literature reveals a range of understandings about conceptual and process aspects of design and designing. Schon (1995, p. 77) points out that, *'all occupations engaged in converting actual to preferred situations are concerned with design'*. Such a perspective has the potential to draw the educator, the designer/architect, the education facility planner and the student into what could be described as a designing relationship based on matters of common interest. Schon's (1995) perspective also connects with the collaborative potential of multiple voices of experience in the process of school library designing.

Christopher Alexander (1979) and Bryan Lawson (1997) describe the history of designing as being embedded in our vernacular understandings and experiences of space and place. They propose that design thinking as a skill is not the exclusive province of those with design training. Daily we are faced with designing decisions in the clothes we select to wear, the arrangement of our personal spaces, the order of our tasks. A concept of 'vernacular designing' places educators designers/architects/ facility planners and library users within the scope of an extended notion of designing experience and capacity.

With respect to built spaces, Lawson (1997) argues that designing capacity is inherited from a tradition vested in communities as part of the craft-based building of domestic structures and spaces, for example, the highland croft, the palm frond bura or the igloo - without the involvement of the formally accredited designer/architect of our present-day experiences. The literature which considers collaboration between vernacular and specialist designing roles informs this research project, insofar as the designer roles of the research participants - educators, students, facility planners and designer/architects and indeed the researcher - range across these specialist and vernacular design loci (Day & Parnell, 2003; Lawson, 1997; Lawson,2001).

In an analysis of the literature, Franz (1998) identifies three broad understandings of designing - technical, conceptual and philosophical - which indicate underlying understandings about the world and about people's relationships with and within the world. These understandings are also characterised by a technical focus on producing replicable formulae which, when applied to particular circumstances will guarantee consistent and reliable outcomes (Franz, 2005, p.1).

Technical understandings of designing could be said to link with positivist paradigms, as discussed by Schon (1995), in which the world is seen as reducible to small controllable units which might be dealt with, 'fixed' and re-inserted into the scheme of things. Conceptual understandings could be said to engage with ideas that there are difficult problems in the world which need to be confronted, and understandings that there is a diversity and complexity across the dimensions of these problems. Philosophical understandings of designing are connected with human knowing (epistemology) and being (ontology). Philosophical understandings see human interactions and knowledge as readable, explainable and multiple, and open to diverse interpretations (Schon, 1995).

Although these understandings are individually described, relating them to human circumstances serves to clarify dimensions of their limitations and inferences of connectedness. An example might be, at a technical level, the need for refrigerated storage for a malaria serum; which is connected to conceptual understandings of bigger issues of inoculation programs in developing countries; which can be connected to philosophical understanding about world health and human rights. It could be said that philosophical approaches alone cannot extend to accommodate straightforward solutions. While conceptual approaches recognise the complex interplay of human factors, there is potential for designing of solutions to take up multiple technical aspects, tinkering with the edges of big issues (Schon, 1995).

In a phenomenographic study which investigates the design understandings of architects and interior designers, Franz (1998, p. 145) describes practice-based *conceptions* of design which are termed 'commodity, practical-functional, structural-instrumental, and experiential-existential'. These can be discussed as hierarchical in terms of their sophistication and desirability, or the value placed on them by the design practitioners in Franz's (1998) study. Each of these conceptions can also be understood in terms of their *distance* from the client or user. Commodity *conceptions* can be described as being the most distant from the user or participant. A consumerist society thrives on commodity *conceptions* wherein users are assumed in the items or objects produced; the bean peeler, the Prada handbag, the replica Prada handbag.

A commodity focus in relation to learning space designing could involve those spaces, designed at a distance, which assume learners, schools and communities to be largely indistinguishable from one another. In the case of a science laboratory, technical understandings may relate to the standardised rendition of a state-wide or national school

curriculum into school laboratory spaces. In something of a *template design and parachute application process,* technical understandings and approaches to designing school libraries may assume such commonality between learners schools and communities, that a perceived successful school library design built in one school could be transplanted effectively into another (Franz, 2005).

A practical-functional *conception* of design infers a closer relationship between an object or design outcome and a user or client. In the case of an awkward thoroughfare or carriageway causing difficulties for entry and exit of a school science facility, a design solution might to create an expanded doorway or different points of access and egress. The problem is specific and involves a group of users, and in that sense the design solution is customised and closer to the people concerned. In the case of a school library a practical-functional focus may consider organisational aspects of school libraries as standard across sites, but be able to adjust these across primary and secondary schools (Franz, 2005).

Structural-instrumental *conceptions* of design can underpin a designing focus which considers particular operational needs. In a school science laboratory the spaces may facilitate certain kinds of user activity in science, accommodate certain kinds of users (secondary school students), and mediate particular activities, such as passageways for walking but not for science experiment activity. In school libraries structural-instrumental design approaches may create collaborative or semi-private activity zones or build-in opportunities for supervision and surveillance (Franz, 2005).

Franz (2005, p. 2) indicates that experiential-existential *conceptions* involve a close and sometimes interchangeable relationship between the client/user and the designer in ways that invite the user to be a dynamic player in the space to 'enable me to fulfil my own ways of being and doing as a person responsible for my own development'. To this extent experiential-existential approaches invite relationships in which designing grows out of client needs and desires and which subsume and enable more nuanced renditions of the practical-functional and structural-instrumental design responses to enable the participants' realisations of being and becoming (Franz, 2005).

Experiential-existential *conceptions* of design can be acknowledged in the aesthetic, meaning-making qualities of built spaces which link people to each other and to the world. Spatial zones which promote sociability, privacy or sense of belonging may be achieved in the flow and proximity of spaces, in balances of openness and enclosure, in the use of

materials, objects and configurations which create, for example a sense of at-home-ness. 'Expressive detailing of environments through colour', for example, can convey meaning for users in that 'some colours may have more universal meanings while others are culturally defined' (Franz, 2005, p. 2).

The foregoing understandings of designing are helpful in reflecting on the research studies, designing processes and commentary discussed subsequently in the continuing review of the literature and later in the participant data analysis. In addition, an appreciation of these perspectives assists with considerations about the implications of the study through the potential creative influence of the voices of user and designer experience.

Designing: dispositions, discourses and communication

A number of writers have drawn attention to the potential communication discord which can become an issue when discourse participants from the different paradigms and knowledge domains, such as education and architecture, meet to undertake activities of designing. A useful way to come to terms with aspects of designing relationships and the consequences and possibilities in designing collaborations is through Pierre Bourdieu's notion of *habitus*.

Bourdieu (2005, p. 43) explains the notion of *habitus* as a way of understanding human actions, which are shaped through ways of seeing, ways of thinking and ways of acting, and can be considered as acquired characteristics produced out of the social conditions of social groups. When applied to social fields or fields of practice, these acquired characteristics of perception, conception and action form systems of *disposition.* Thus fields of practice such as education and architecture can be considered to have distinctive systems of disposition.

A key matter for Bourdieu (2005, p. 45) in describing a dispositional theory of action is to emphasise the diversity and openness of systems of disposition which, while 'durable and tending to reproduce themselves are not eternal' and are open to change. Calhoun (2000, p. 712) describes this flexibility as 'an embodied sensibility that leads to structured improvisation'. Dispositions and practices in professions can be said to develop as a kind of symbolic capital, inherited through the current *habitus* of fields of practice such as architecture and education. Social practices such as language infuse fields of practice and operate as a forms power through the agreed and applied *rules and resources* of the *systems of disposition* (Bourdieu, 2005, pp. 43-49).

As noted in the Chapter 1 definitions practices are understood in critical discourse analysis (CDA) terms as 'habitualised ways, tied to particular times and places, in which people apply resources (material and symbolic) to act together in the world' (Chouliaraki & Fairclough, 1999, p. 21). Thus in respect of this study, the practices of school library designing, 'the specific, occasioned, social goings-on' (Chouliaraki & Fairclough, 1999, p. 61), are constituted predominantly within a complex network of structures, processes and practices, for example, national political, social and economic systems; education and school systems; school community and designing/architecture.

For the accredited designers and the users of school library spaces, matters of language in their fields of practice can be seen to constrain collaborative designing activity. In the field of education, for example, constraining and enabling *resources* are constituted in the social and semiotic aspects of educational policy, in the tactical language used to express educational vision and perceptions about learners and learning, and in the experiences of learning which are foregrounded in school system syllabus documents. Terminology associated with educational theories, (*constructivism, connectivism*) and pedagogical practices (*problem based learning, inquiry learning*) are cases in point.

On the other hand, in the field of architecture, constraining and enabling resources are constituted in the social and semiotic aspects of visual schema, (*permit drawings, elevations*), the vocabulary of built spaces and construction (*fenestration, building fabric*) the order of architectural processes (*value engineering*), and in the particular creative processes of designing (*schematic*, *passive design*) (Newton & Fisher, 2009, p. 138).

Newton and Fisher's (2009, p. 138) glossary of terms, from which the preceding examples are drawn, selects an array of educational and architectural terms for definition as a way to clarify and share 'discipline specific knowledge' between the disciplines. The rationale for the glossary emerges from understandings that the language of disciplines is in many ways 'tribal', familiar to practitioners in a specific field, but causing confusion and limiting understandings in cross disciplinary communication (Newton & Fisher, 2009, p. 138).

Pursuant to matters of communication and language and the dispositions of fields of practice, it can be suggested that design participants' understandings of space, place and designing, as foregrounded in this discussion may construct barriers in designing communication between accredited designers and the users of educational spaces. Other writers note the desirability of an inclusive language of designing (Jamieson, 2007).

However conceptual diversity might not be so easily accommodated through a glossary. A need for deeper attention is signalled in circumstances of asymmetrical knowledge and practices. Mayes (2010, p. 194) points to asymmetries of participation, interaction and (institutional) know-how, knowledge and rights of access to knowledge as pivots for asymmetries of power relations. These unequal relations may be realised in discursive asymmetries of educational space designing, in the omission of particular voices of experience, and in consultative and communicative discord.

In relation to school libraries, an inclusive language of designing may need to acknowledge the fundamental differences in the ways in which places/spaces are experienced by those living and working in a space, and the ways in which those spaces are observed and described by those who do not. For example, educators, students, designers/architects and education facility planners, could be said to represent two quite different sets of encounters with school libraries. Radcliffe, Wilson, Powell and Tibbetts (2008) point out that educators and students are highly involved and familiar users of educational spaces, however, they customarily undertake a low involvement in the foundation designing of built space projects. Conversely, designers/architects and education facility planners are not familiar daily users of educational spaces, but they are highly involved in the foundation designing and construction of school library buildings.

The discord in mismatched understandings and the collision of discourses across disciplines constitute fields of struggle over meaning which, for example, may connect with deep and diverse assumptions about space and place. Buttimer and Seamon (1980) contend that the language of *users of spaces* is most likely to be attached to Newtonian concepts related to people, activities and things contained within spaces, while the language of *designers* is most likely to be attached to Einsteinian concepts of topological space, time and process. *Users* may describe *dwelling*, whereas *designers* may describe *housing*. While these polarised perspectives may not characterise all circumstances, inattention to such divergent understandings and the consequent difference in language between *users* and *designers* may further limit designing conversations and participation (Day & Parnell, 2003).

Questions of participation

In the opening Chapter of this thesis I introduced my concerns about who participates in school library designing, by what authority, and how those who do participate might influence the processes, practices and outcomes of designing activity. I drew on my

experience at the outset of the study to support the contention that educators and students are often absent and sometimes excluded in the designing of educational spaces of Australian schools. These circumstances led me to puzzle about how it was that the primary long-term users of school libraries are so often missing from participation in the built space projects which are so influential in their lives and work as learners and teachers. Might the literature indicate that things have changed in other places?

In the wake of the financial investment in the UK initiative Building Schools for the Future program, Flutter and Rudduck's (2006) UK study brought together the two research areas of student voice and the design of learning environments in order to investigate the ways in which students had been involved in designing activity. While the study found a number of UK and international programs and projects in which students were involved, the researchers noted that the calibre of student participation 'is often quite limited', and that both terminology and practices of *participation* were open to wide interpretation (Flutter & Rudduck, 2006, p. 6). Further research was recommended to consider ways in which student participation might inform the designing of learning spaces through more structured approaches for their involvement.

More recent UK research confirms that collaborative opportunities are not readily sought in school designing endeavours (Parnell, Cave & Torrington, 2008). It seems we are yet to see widespread support for user involvement as part of policy stipulations, or systematically part of school system initiatives. Parnell, et al (2008) note in particular the dimension of capacity building as a key factor in assisting participants to bridge knowledge and experience gaps. For teachers, capacity building would include heightened 'awareness of the built environment', along with a language of evaluation to enable analysis of built spaces, and opportunities for dialogue with accredited designers (Parnell et al, 2008, p. 218).

For Sanoff (2005, p. 12) designing in dialogue begins with visioning, involving students, teachers, school administrators and wider communities of schools in processes to create 'living guides for action'. Visioning is regarded as an opportunity to 'reinvigorate citizenship' in conversation and debate, to be undertaken prior to project commencement in order to establish foundations for designing. Charette processes offer ways to focus on the process rather than the projected outcomes, and to involve participants in the 'evolving modification and reformulation of ideas', developing trust and consensus (Sanoff, 2005, p. 16).

Several case studies of school designing involving teacher groups are documented by Day and Parnell (2003), using the *biography of place* consensus-designing process (see also the following section in this chapter). These projects involved days of engagement between the architect/consultant and the school staff, in conversation with each other and with the situation. Place-studies of the sites and the existing buildings and documenting through dialogue, photographs, sketching and modelling produced versions of the ways the places, buildings and landscapes might be.

Disadvantages of consensus designing, which relies on more thorough engagement between users and accredited designers, are seen to relate to the time and energy needed for such processes (Sanoff, 2005). An Australian example of a lengthy lead-in time involving wide consultation is exemplified in the complex amalgamation of school campuses at Dandenong High School (Victoria), a project which is widely regarded as successful in a number of ways. The project established a comprehensive collaboration between architects, urban designers, education theorists, interior and furniture designers, school administrators, students and teachers. Richard Leonard, one of the architects, describes an eighteen (18) month period of working with the ideas for the school, in specialist consultations, committee consultations and the formulation of an education brief, 'we can't put the project out to tender, we can't design, we are still resolving what it is' (Newton & Fisher, 2009, p.110).

Even this deliberative and lengthy set of consultative opportunities caused one teacher to contemplate the authenticity of some aspects of teacher participation in the project (Skoutas, 2009, p. 96). Out of his experiences, this teacher reflected that dialogue and the consultative process which was conducted without genuine prospects for participant contributions became 'instrumental', as if going through the motions of consultation. Where processes were made explicit and purposes were clarified, participants in the project felt involved in 'democratic and creative ways' and the overall experience could be regarded as transformative. Where processes and rationale were unexplained, participants felt excluded. Thus the example of being asked to contribute to designing decisions which had, in effect, already been finalised, was deemed a 'hollow exercise' and evoked a sense of being 'used' (Skoutas, 2009, p. 99). For this educator, a focus on 'content and outcome without the process, form and meaning' (Skoutas, 2009, p. 99) became a lost opportunity to stimulate a transformative shift in culture and practices of learning and teaching through responsive educational spaces.

With respect to authenticity, Thomas and Newman (2008) highlight some of the side-effects of student participation in designing projects through their documenting of the Park Wood 'design a school' process. In this project students invested considerable creative endeavour across some days, discussing and creating models of the school environment, and in activities to make decisions about the learning spaces of their school. While the overall process was regarded as a success in involving students, the researchers point out that such a process may 'promise more that it can yield' (Thomas & Newman, 2008, p. 245). For the students the *rhetoric meets reality* circumstances can be dispiriting. Having been asked for their creative input, students in this project then became aware that budgetary and other constraints meant that most of their suggestions could not be used.

More realistic and sensitive approaches, tuned to the realities of project circumstances, might be developed using the interrogative openings, opportunities and obligations explored by Shier (2001). His five-level approach to children's participation in decision-making is based on the United Nations Convention on the Rights of the Child, and is referenced to Hart's *ladder of children's participation* (Hart, 1997, also cited in Flutter & Rudduck, 2006), and Arnstein's (1969) earlier *ladder of citizen participation*. Shier (2001) develops a question-focused framework to consider the ways in which children might be involved, the procedures to enable their involvement and the obligations under the Convention requiring that children's views be incorporated in decision-making at increasing levels of responsibility, taking into account the balance of benefit and risk.

In pursuit of designing approaches as entry points for the *voices of experience*, the following segment reviews four (4) options for their potential as opportunities to support user participation in designing activity; as ways of considering the people and contexts of school library designing and of seeking opportunities for creative influence.

Designing: review of four approaches

Four (4) designing approaches are included in this review as examples of focused processes to address the designing of spaces for life and work. The first two (2) of these have been specifically concerned with the designing of university learning spaces including libraries. The remaining designing approaches have a wider application which also includes learning environments.

The *Pedagogy-Space-Technology (PST) Framework* was developed as an interrogative approach to consider the 'interdependence of pedagogy, space and technology' in relation to learning and teaching spaces in higher education settings (Radcliffe, Wilson, Powell & Tibbetts, 2008, p. 3). The second approach relates to the *2007 Universitas 21 Network Forum,* which generated a series of broad agreed 'principles' for learning space designing. These have been addressed, adapted and supplemented in subsequent annual international forums. The 2007 forum was instigated and led by Dr Peter Jamieson, University of Melbourne (Jamieson, 2007).

The *Biography of Place* matrix was developed by the UK architect and designer Christopher Day, and is premised on an exploratory, participative, socially inclusive approach to designing which he has called consensus design (Day & Parnell, 2003). The final approach is the *VAST Heuristic* which was developed in Australia by architect and architecture educator Professor Tom Heath as an interrogative, participative, exploratory approach premised on understandings of designing as processes of discovery (Heath, 1989; 2010).

The *PST Framework* formed part of the Next Generation Learning Spaces (NGLS) project, a time-bound study funded through the Australian Learning and Teaching Council (ALTC). The project responded to a perceived dearth of published research to support the designing of learning spaces using constructivist pedagogical practices in conjunction with multiple information and communications technologies. The project aimed to develop, test, evaluate and disseminate a 'new' framework for design and evaluation of 'new' learning spaces (Radcliffe, Wilson, Powell & Tibbetts, 2008, p. 6).

Pedagogical and technological aspects are incorporated into the framework, beginning with pedagogies as the entry-point to a life-cycle process of *conception and design*, followed by the evaluative cycle of *implementation and operation*, which further seeds a continuing cycle of conception and design (Radcliffe, Wilson, Powell & Tibbetts, 2008, p. 6). The framework was developed, consulted and tested in participative processes and built-space projects at University of Queensland, and through two (2) colloquia, involving some hundreds of participants. Over half of the projects presented at the 2008 colloquium were concerned with libraries.

Figure 3A: Pedagogy-Space-Technology Framework (Radcliffe et al, 2008, p. 6)

PST Framework

	Life-Cycle Stage	
Focus	**Conception and Design**	**Implementation and Operation**
Overall	*What is the motivation for the initiative?*	*What does success look like?*
Pedagogy	*What type(s) of learning and teaching are we trying to foster? Why?*	*What types of learning and teaching are observed to take place? What is the evidence?*
Space *(including environs, furniture and fittings)*	*What aspects of the design of the space and provisioning of furniture and fittings will foster these modes of learning (and teaching)? How?*	*What aspects of the space design and equipment worked and which did not? Why?*
Technology *(ICT, lab and specialist equipment)*	*How will technology be deployed to complement the space design in fostering the desired learning and teaching patterns?*	*What technologies were most effective at enhancing learning and teaching? Why?*

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Focus questions in the PST Framework are framed and related in a tiered exploration of: motivations for the space initiative, the specification of pedagogical practices, stipulation of particular space design responses and the deployment of technologies to achieve learning outcomes.   The PST evaluative cycle is again a relational process which keeps success/effectiveness in view as learning is observed in action and space responses and technology applications are assessed.

The impetus for the *PST Framework* suggests an underpinning structural-instrumental *conception* of designing (Franz, 1998) in which the process was developed in relation to specific operational needs. In this respect the specific users of the spaces (university students and educators) can be seen to be part of a wide group (across many universities) who were understood to have a range of generic needs in relation to spaces, through the particular demands of pedagogies and technologies. Applied to individual circumstances variations across learning sites might be customised.

Users of spaces in the PST Framework process are named variously as *stakeholders, teachers, students, staff, academics,* and *librarians.* Although the PST research report indicates that user consultation formed part of the UQ projects and as did some projects addressed by colloquia participants, the users and the consultative processes undertaken

as part of designing the spaces are largely invisible in the PST framework and are not detailed in the report.

The report makes it clear that the PST Framework is not intended to be specific about matters such as evaluation of improved learning outcomes as a direct consequence of the designing of spaces. However, guidelines for effective participative processes could be seen as a valuable dimension of the framework implementation. Guidelines for effective participative processes would also support the report's critique of evaluative processes which rely on headcounts and user satisfaction surveys and which do not invite the evaluative rigour of empirical research through open ended questioning and focus groups.

The *2007 Universitas 21 Network* Forum: *Creating new generation learning environments on the university campus (2007),* involved architects, educators, librarians and facility planners concerned with the designing of education facilities in higher education settings. The record of the forum illustrated a 'scrapbook' of forum activity in which processes of designing are described as 'simultaneously creative, playful, demanding and necessarily uncertain' (Jamieson, 2007, p. 8). The 2007 forum was concerned with 're-thinking the design and purpose of the university classroom' through a research-driven approach. To this extent the process of designing involved the examination of university classroom spaces through a series of questions focused on learning, spatial and resource responses to learning needs, design attributes and designing participation. The forum addressed these matters as a 'live' project in progress to re-create teaching and learning spaces in a 'found site' on the University of Melbourne campus.

The forum adopted 'an educational focus in the design process to create improved learning environments' and articulated constructivist understandings about learning as active, personal and social processes of knowledge construction (Jamieson, 2007, p. 14). Learners are thus understood to be involved in changing their understandings about the world through the experiences of their learning, rather than being on the receiving end of transferred knowledge conveyed by others. The rationale expressed for the principles which emerged from this forum 'to jointly develop expertise and knowledge', included understandings of universities as learning organisations which should develop their own design knowledge and experience (Jamieson, 2007). For example the foundations of designing learning spaces in higher education settings were considered as multi disciplinary processes involving educators and accredited design professionals in developing design briefs. The forum report emphasises the importance of research as part of the

development of design-knowledge. Through the 'live' project example and the speaker presentations, the forum report demonstrates several understandings of designing. Practical-functional conceptions of designing (Franz, 1998), are evident in the specificity of the university classroom design problem and its proximity to the users of the spaces, some of whom were forum participants, as were the potential accredited project designers and architects. Thus there is potential in these relationships for design proposals and resolutions to be customised for the people concerned.

The practical-functional aspects with technical dimensions were most closely addressed from the university project management perspective (Peacock, 2007, p. 24). Structural-instrumental conceptions of designing (Franz, 1998), can be seen in the discussion of particular operational needs which relate learners, learning pedagogies and spaces and introduce the presage of technologies into the assembling detailed design briefs for educational space projects (Jamieson, 2007, p. 14).

Surprisingly, participation of users, students and educators in the designing of university learning spaces is expressed as 'valuable but not essential', the rationale being that these participants are 'not often able to contribute', because they do not always have 'progressive ideas about education' (Jamieson, 2007, p. 15). The report proposes that student and educator participants often come with preconceived notions about what constitutes learning at a university. It is also suggested that design participants need a 'common language to bridge the gaps created by difference world views and differences in professional language' (Jamieson, 2007, p. 14). The forum recommends that shared understandings of purpose, vision and theoretical underpinnings are necessary starting points, as are shared understandings of concepts and terminology. Metaphor is exemplified as a way to transcend and convey how spaces might be for students; spaces as *cabaret*, *cafe, sandpit, empty space*. It could be observed that the perceived naivety of users is a key opportunity for research and inclusion rather than a point for optional exclusion (valuable but not essential). There appears to be a contradiction in the idea that universities might usefully develop their own design knowledge, and the claimed naivety and justification for exclusion of a significant body of people who constitute 'the university'. The aim for universities to develop their own design knowledge might be significantly advanced through the spatial learnings and increasing spatial consciousness of students and teachers so that they are ideal participants to be included in collaborative designing activity. The metaphor example of *bridge* to create understandings, which is

suggested in the report, amplifies this point, since the power of figurative language can be to create shared conceptual *places* for understanding and imagining, and to serve the very purposes of developing a shared language of designing suggested through the forum.

Biography of Place as an approach to designing human-centred spaces, is premised on understandings that 'meaningful design depends on synthesised outlooks and inputs from professionals and community' (Day & Parnell, 2003, p. 18). Ecological dimensions of place are proposed as part of place consciousness, enhanced through contemplation and reflection on *what is already there*, on the *effects of time flowing through places* and on evoked *moods and feelings* (Day & Parnell, 2003, p. 31).

Figure 3B (see following) represents the flow of contemplative and reflective orientation to allow us to explore with new eyes, the potential for how we might experience spaces. The matrix proposes two kinds of designing journeys through the spaces; one of orientation, reflection and inspiration, and another of reflection, inspiration and action (Day & Parnell, 2003, pp. 219-220).

Figure 3B: Assessment matrix: biography of space adaptation

What is physically there	*Biography: past to future*	*Mood*	*Ideals, core, spirit-values*
What is the material/physical situation? *Existing or new site?*	*Experience-based understandings* *How did it come to be like this?* *Where is this leading?*	*How do people feel about things?* *Attitudes, feelings*	*What does this place mean to us?* *Values? Uniqueness?*

What is its individual spirit	*How do people feel about it*	*Time continuum*	*What is its physical context?*
What values, spirit should things convey? *What's unique about this?*	*What qualities does this imply?*	*How can these qualities grow out of the developmental currents already at work?*	*What material changes does this require?*
Decision-making matrix: turning inspiration into action (Day & Parnell, 2003, p. 220)			

This figure is adapted from Day, C., & Parnell, R. (2003). Consensus designing: socially inclusive process. London: Architectural Press.

In this approach to designing spaces are considered to have a 'layered biography' expressed in dimensions of physicality, habitation through time, evocative of moods and feelings and with 'spirit of place identity' (Day & Parnell, 2003, p. 51). Identity with place emerges through a mix of affective, sensory and cognitive experiences and responses which comprise proprietary feelings (Day & Parnell, 2003). Thus aspects of place identity are best understood through the insights and clarity of 'the people who live there', converging in dialogue with 'the people who don't' (Day & Parnell, 2003, p. 11).

Participative or mediated consensus approaches to designing work towards agreement, relying on respect, the building of trust and the moderation of entrenched personal positions, involving both vernacular and specialist knowledge (Day & Parnell, 2003). As noted in the discussions on space and place earlier in this chapter, Christopher Day undertakes a values-focused designing approach in which people foster and evolve social cohesion through their practices of living and working in spaces and places. Designing and redesigning involves continuing processes of negotiation and construction to unfold, for example, *what could this place say?* and *what values does this imply?*

As a process of designing, a *biography of place* approach begins with the synergy of people and places and with qualities of being and becoming. In these terms it could be said to begin from experiential-existential conceptions of designing and to incorporate practical-functional and structural-instrumental conceptions to facilitate the expression of the built spaces on the values foundations of those who will live and work in the spaces (Franz, 1998).

A *biography of place* approach can be seen to rely heavily on dialogue and negotiation, on the voices of dwellers, and on users as designers in collaboration with accredited designers. In the developing of shared understandings attention needs to be paid to diversity of perspectives and variations of needs and desires. As a *continuing process* of designing*,* a *biography of place* approach has potential to inform the daily, ongoing adaptations, flows of people, interactions and information which have become characteristic of many school library environments.

Tom Heath's VAST heuristic is founded on his understandings of the cyclic processes of designing and draws on John Zeisel's work *Inquiry by design* (1984). Heath (1989; 2010) describes design as a learning process requiring a mix of excitement and discipline, and designing as a specialised kind of problem solving involving strategic and tactical

approaches. Thus designing can be imagined as a cyclic process of unfolding (*focusing, imagining*), feeling our way (*imagining, venturing*), working our way gradually (*venturing, backtracking*), unravelling complexity (*backtracking, focusing*), so that proposals we make are plausible and provisional but open to multiple options within the scope of our constraints. Such an approach constructs designing as an ongoing process over time. In these terms designing can be defined as *creative processes of discovery*.

In order to understand as much possible about a designing circumstance or *problem,* Heath proposes that data about the situation be gathered using a systematic set of foci which form a reflective framework, constituting a designing heuristic or self-questioning device. The underpinning thesis of Heath's **VAST** heuristic is: '*people have Values, in relation to aspects [Activities] of buildings [Site/System] which must be expressed in built form [Technology]*'. The reflective framework establishes the values foundation in the *systems of human relationships* particular to the designing circumstance. Using this values foundation, the heuristic then explores the desired *systems of human activity* and the required *systems to support the human activity.* On these underpinnings, the *built space systems* are created to meet foundational values, and desired activities. See Figure 3C.

The VAST heuristic considers the identities of the users of spaces by inviting them to enter the designing process via the expression of the human relationships of concern to them, such that designer and user relationships become interchangeable. The heuristic explores the human activities of significance to users in relation to the spaces of their lives and work. In these respects the VAST heuristic exhibits a foundation in experiential-existential conceptions of designing (Franz, 1989), which moves to practical-functional and structural-instrumental possibilities in the considerations given to the systems to support users activities and in the applications of material technologies to produce the built spaces.

The **VAST** heuristic provides a reflective framework for designing conversations, and has the potential to bridge and overlap the scope of the built space concerns of educator and student users and those of accredited designers.

As examples, Figures 3C and 3D, (see following page) expand the *system of human relationships* to illustrate the particular focus of each *values* element, to explain their significance and to suggest ways in which these might be explored and documented as platforms for designing (See full VAST expansions in Appendices).

Figure 3C: VAST heuristic (Heath, 1989; 2010)

Designers/Architects & Ed Facility Planners

Educators, students, communities

Values	Activities	Site/System	Technology
People have values	in relation to aspects (activities),	of buildings	which must be expressed in built form
Systems of human relationships	**Systems of human activity**	**Systems to support human activity**	**Production of the built space systems**
Feelings	Participants/actors	Environment, surface, subsoil, property	Structure
Attitudes	Characteristics	Location: in context	Skin
Beliefs	Relationships	Context: relationships	Climate control
Customs/Conventions	Materials	Access: main & limitations	Sub-division: internal
Laws	Actions	Aspect: compass orient	Services
	Action effects	Prospect: outlook	Finishes
	Conditions	Climate: diurnal, seasonal	Economics, budget
	Relative dimensions	Micro-climate: local, site	Aesthetic & amenity
	Support services	Character: site, context	
	Information support	Services	
	Risks		

This figure is adapted from Heath, T. (1989).What designers do. Unpublished manuscript. Brisbane: Queensland University of Technology.

This heuristic affords reference points to evaluate designing approaches which are promoted in school library design texts and offers an interrogative lens to consider learning space design implications related to the learners and learning experiences exemplified in syllabus/curriculum documentation.

Figure 3D: VAST- discovering values (Heath, 1989; 2010)

Discovering values…	*values find expression in a range of ways … discovering the system of human relationships*
Feelings	***personal-subjective responses*** - may be difficult to articulate - may relate to the 'sense' or 'feel' of a place, or to ideas of comfort, belonging, excitement or stimulation.
Attitudes	***observable responses*** - may be consistent across groups or characteristic of individuals - may be evident in cohesion around a feature or aspect of a place - associated with affective or emotional response 'aesthetics'
Beliefs	***organised, systematic, verbalised attitudes*** - may be evident in strongly held views proactively expressed or further systematised into creed/policy.
Customs/Conventions	***habitual and accepted ways of doing things*** - may not be so clearly expressed as beliefs - may be taken-for-granted, unexamined and unconscious – related to ideas of culture '*the way things are done around here*' – lack of compliance may invite disapproval.
Laws	those values which are so accepted that they have become ***enforceable*** – such that disregard or lack of compliance brings punitive responses. Behavioural expectations.
Representing values	*in the processes of designing, an investigation of values can be researched, recorded and represented in a range of ways*
Literary descriptions	Stories' or 'narratives' introduce and summarise the value systems of the people and place/s, the social groups, the 'dwellers' who share concerns about the designing of the spaces in which they will live and work. Such stories draw on and give prominence to the imagination of 'vernacular designers' to be shared with 'accredited designers'. There is value in historical accounts, metaphor and recording the human dimensions of the life and work of the group.
Sociological analysis	Records of systematic observation to balance imaginative description – qualitative/descriptive or quantitative - demographic data – relationships data.
Speech protocols	Records of direct responses – what people actually say, recorded as exactly as possible without interpretation – via interviews, town hall meetings, roundtable discussions which include both vernacular and accredited designers. These are opportunities for deep listening by both vernacular and accredited designers.
Exemplars	The aspects that individuals or groups identify as having the characteristics of the spaces they desire – akin to 'shopping' - for ideas, elements, attributes, features which are close to perceived requirements – may be stimulated by visits to sites which express the approximate needs of the group or of individuals.

This figure is adapted from Heath, T. (1989).What designers do. Unpublished manuscript. Brisbane: Queensland University of Technology.

Each of these designing approaches integrates an interrogative scaffold which has the potential to stimulate conversation between designers, users and designing situations or circumstances, and in this respect each could be described as a discursive opportunity. The PST Framework and the Universitas 21 principles can be seen to enter the designing process from practical-functional and structural-instrumental discursive stimuli wherein matters of learning and pedagogy (doing) are a key focus, but the users of the spaces are less visible. The Biography of Place and VAST approaches can be seen to enter the designing process from a discursive stimulus of users' experiential-existential values. This entry point is an opportunity to understand and involve users as designers in terms of their being and becoming, and as a foundation for subsequent practical-functional and structural-instrumental matters of designing.

Summary

This chapter has explored understandings in the literature concerned with space, place and designing as ways of coming to terms with some of the dispositions and assumptions influencing participants in the designing of educational spaces, including school libraries. Understandings of space, place and designing explored in this chapter are used in the evaluation of the contexts, texts, research foci and applications raised in the continuing review of the literature and in the analytical discussions of study participants' *small stories*.

Understandings of space, place and designing are also pertinent for the study implications as dimensions of creative possibilities and opportunities for creative influence in the designing of school libraries by user and designer participants. While each of these approaches presents designing as a process connected to particular circumstances, the approaches which are closest to those connected directly with the use of the spaces, such as participant involvement in the development of Educational Design Briefs, may provide the most customised response to user needs.   On this basis designing approaches which foreground participant's experiential and existential contexts of space, place and learning, offer rich possibilities to invite participants to *come as you are,* and to bring with them the mix of their values, experiences, affective, cognitive and sensory responses to connect with the creative potential of accredited designers.

CHAPTER 4: SCHOOL LIBRARY STORIES: influences on designing

Introduction

This chapter of literature review examines selected texts and sources available to educators and others to support school library designing decisions leading up to and during the period of the study. The discussion considers selected, relevant school system and policy contexts and texts, and research and professional texts published between the late 1960s and the late 1990s. More recent Australian government sources relevant to the independent schooling sector during the period of the study (2005-2010) are reviewed in order to contextualise and trace the influences on school library designing. The professional and academic texts nominated in Chapter 1 are critically reviewed in this chapter. The school library research samples discussed reflect the profession's overall priority concerns with learners, learning, pedagogies and technologies, and the very limited attention given to school library spaces and places and their designing as significant elements in the experiences of students' learning.

In critical discourse analysis (CDA) terms the literature review discussion examines sources of research, policy and professional commentary, and considers how school libraries are spoken about and with what authority the *voices* in the literature speak to assume, define, challenge and construct understandings of contemporary school libraries and the designing implications of their physical and digital-online manifestations (Fairclough, 2001a).

The literature review in this chapter also makes reference to selected works and commentary related to the wider contexts of schools, to libraries other than school libraries, and to a broader scope of educational spaces where these are relevant to the project. The discussion integrates the theoretical perspectives used to conceptualise aspects of the research which is chiefly concerned with the understandings, processes, participants and influences associated with school libraries and school library designing and with the potential for users and designers to exert creative influence on these dimensions. Limitations in the library designing research and publications are regarded as opportunities for *creative possibility* (Boyce, 2006) and *creative influence* (Harvey, 1996) with respect to the outcomes of this project.

This chapter begins with an examination of school library contexts through pertinent government, school system and professional association texts which have marked the passage of school libraries in Australia from the 1960s to 2010. The opening section is informed by the individual sources cited throughout, but is especially indebted to *Resourceful partnerships: Teacher-librarianship in Queensland* (Cooper, Massey & Salisbury, 2010) for its detailed rendition of the forty (40) years since the establishment of the School Library Association of Queensland. Exploring the historical trail is of value in tracing the story of Australian school libraries through the documents which have marked and mediated their progress and as a way of acknowledging that the participants in the study are all users and/or accredited designers of school libraries in Australia [Queensland].

School system and policy contexts and texts

While a library as a dedicated built space is a relatively recent phenomenon in Australian schools, many students and teachers during the first half of the 20th century will remember a *library* of some kind. These memories are likely to reflect a disparate range of manifestations – from a shelf, desk or cupboard-sized collection of books to the more substantial spaces and collections in some large secondary schools or colleges.

Since the 1960s school libraries have been a more strongly evolving element in the learning and physical environments of Australian schools, influenced by a series of Federal and State Government and school system initiatives. At the time of this study, almost all Australian schools would have a *space* most likely known as *the library*. Government funding for school libraries in primary and secondary schools has been allocated for the building of physical facilities, the provision of learning materials and equipment, funding of staff allocations, subsidising of staff qualification courses and ongoing professional development programs.

These initiatives have been accompanied by publications which outlined operational expectations and specified building, space and function standards. Most notably, the publication *Books and Beyond: guidelines for library facilities and resources* (Commonwealth Schools Commission [Australia], 1977; 1979) was, for almost two decades, the handbook for school systems, educators, architects, and education facility planners in the designing of school library facilities. It was also used in the development of school library collections, in the application of staff levels and the allocation of budgets for learning materials (Commonwealth Schools Commission [Australia]), 1971; 1974; 1979).

For government schools in Queensland [Australia] in the period from 1968, policy related to school libraries was promulgated through the Department of Education publication, the *Education Office Gazette.* From the late 1960s into the 1990s specific school library related policies, statements of practice and guidelines to practice were disseminated and implemented through the Queensland Department of Education library support services to schools: *School Library Services* and later *Library and Resource Services* (Cooper, Massey & Salisbury, 2010). Independent school systems such as Brisbane Catholic Education referred to national and state education policies and statements in the development of their own approaches to school library building, staffing and material resourcing (Brisbane Catholic Education, 1985; 1999).

Government and independent school systems and schools in Queensland benefited from federal government school library building and resourcing grants disbursed in the period 1969-1974, although secondary schools received priority over primary schools for built space facilities and for resource materials and equipment. Periodic federal government material resourcing grants continued for the independent school sector until the end of the 1980s. During these funding initiatives, standards for secondary school library operations evolved from a *Preliminary Statement* (1969) to *Standards for Secondary School Libraries* (1971) and *Guidelines for Library Services in Primary Schools* (1974).

The Education Department (Queensland) formulated guidelines and standards separate from the Commonwealth Schools Commission models for both primary and secondary school library facilities, materials and staff resourcing to accompany the Federal Government projects of the period 1969-1974 (Cooper, Massey & Salisbury, 2010). Publication of *Books and Beyond: guidelines for library facilities and resources* (1977; 1979) provided an agreed set of built space and resourcing standards which remained in use by government and independent school systems across Australia until the publication of *Learning for the Future: developing information services in Australian schools* (ASLA/ALIA, 1993; 2001).

Australian Government documentation (Independent schools)

In this discussion, reference to Australian government documentation is confined to that which applies to the independent school sector, since these are the sources most pertinent to the schools involved in this study. Funding for school libraries in independent schools is administered currently under the Schools Assistance Act (2008) and the accompanying

Administrative Guidelines: Commonwealth Programs for Non-Government Schools 2009 - 2012 (DEEWR, 2010).

These policy frameworks are interpreted and administered in each Australian state by separately constituted legal entities, the Block Grant Authorities (BGAs) (Administrative Arrangements for Block Grant Authorities (BGAs) 2009-2012; 2010). The activities of the BGAs are procedural and administrative on behalf of the Commonwealth Government for independent school sectors, with emphasis on application, assessment and approval processes, funds dispersal and financial accountability in support of capital infrastructure related to current Australian Government priorities and objectives for schooling. Detail of the priorities and objectives and their operational requirements are contained in current versions of the Quadrennial Administrative Guidelines 2005-2008 (DEEWR, 2008).

The Quadrennial Administrative Guidelines 2005-2008 offer the most detail in relation to the physical spaces of schools in their references to area standards and nominated functional spaces. These are specifically described in *m^2 per student* with a formula for validating the total permitted area on the completion of projects. Within the 'global area standards' and limitations 'schools are free to plan the types of functional spaces they require'(Administrative Arrangements for Block Grant Authorities (BGAs) 2009-2012, 2010, unpaged).

While the Quadriennial Administrative Guidelines acknowledges that facility types and areas of facilities are changing, it is emphasised that the overall area must remain within the 'global area standards'. Overall functional spaces in primary schools include 'the Library', with an allowance of between $0.30m^2$ per student in primary schools and $0.60m^2$ per student in secondary schools. Functional areas for the Library or alternatively a Resource centre are named and described as:

> *Library* – including a main reading room, seminar rooms, individual study areas, office, workroom store, librarian's office and satellite libraries if any;

> *Resource centre* – similar to library, but including provision for use and storage of computer and audio-visual equipment and possibly for small group work.

The document states that each of the above functional spaces should include an allowance for internal circulation, while area (m^2) standards for movement between discrete functional spaces is included in the guidelines for category area standards, that of Travel/Engineering (DEEWR, 2010b).

The following appears to be the only comment made in the document which relates to educator participation in the designing of educational spaces:

Schools must not be prevented from having direct access to professional advice (consultants), independently of the builder or project manager, about the implications of design, materials and construction choices (DEEWR, 2010b).

The above extracts and discussion demonstrate the technical, administrative, governance and accountability dimensions of the documentation, and the void in philosophical or values foundations about or guidance for the reference of educators, designers/architects or project managers concerned with the designing of libraries as part of the landscape for learners and learning in Australian schools.

The school library is viewed as a *facility* with physical dimensions, technical features, and activity-function spaces which are constrained by elements such as student enrolment number and quantitative standards, and moderated by budget frameworks. The complexity and significance of school libraries as spaces and places closely involved in the learning of students is thus reduced to a formula which might be rendered as $m^2 = \$$. School library users and design practitioners are invisible for the most part as are the processes of designing. Reference to school library users, the students, educators and community members who will live and work in school libraries, is reduced to the descriptor *schools* and the processes of designing are reduced to *delivery* of facilities.

Professional association, academic texts and contexts

In relation to texts concerned with school libraries and published in Australia during the period of this study, it is noteworthy that these have been generated almost solely from the professional practice sector. In large part the texts are attributable to members of the professions of teacher-librarianship and librarianship, to their allied professional associations and communities and to the tertiary academy associated with the formal qualification of educators in university courses or higher degrees in teacher-librarianship. These publications include research reports, research reviews, journal articles, books, conference publications and digital and web-based materials and forums.

Thus, during the period of the study, momentum for school libraries in Australian schools has been maintained and motivated principally by field practitioners. At the point of writing it is also noteworthy that since the publication of *Books and Beyond* in 1977 there has been

no statement or policy formulated and promulgated by an Australian government about the significance, value or place of school libraries in the education of Australian children. The voices of education policy makers at the federal level are thus absent from the discussion about contemporary and future school libraries in Australia. The recent Commonwealth Government Inquiry into School Libraries and Teacher-Librarians (2010) generated substantial interest through more than 300 submissions and a number of energetic Inquiry Panel hearings. However the findings and recommendations of this Inquiry are yet to be debated with regard to policy formulation and funding (Commonwealth of Australia, 2010).

As an aside, an allied matter of significance is that the current void in Australian government policy on school libraries exists in the same context in which the 2009-2011 Australian Federal Government initiative Building the Education Revolution, provided $14 billion to school building construction in order to modernise schools through infrastructure projects. $3.6 billion of this funding was committed to the building of over 3000 school library projects (DEEWR, 2010c).

The Australian School Library Association (ASLA) affiliates the professional membership of state-based associations of teacher-librarians. ASLA has collaborated with the Australian Library and Information Association (ALIA)*,* the peak professional association for librarians, in the publication of two editions of *Learning for the future: developing information services in schools* (ASLA/ ALIA, 1993; 2001), and *Learning in a changing world* series (ASLA/ ALIA, 2010). ALIA also counts teacher-librarians among its member interest groups and is the co-author of the Joint ALIA/ ASLA Statement on Library and Information Services in Schools. ALIA exerts a form of auditing and accreditation influence in the qualification of teacher-librarians through its official approval processes of the tertiary qualification courses for teacher-librarians conducted at universities in Queensland, New South Wales, Tasmania and Western Australia.

The two editions of *Learning for the Future* (ASLA/ ALIA, 1993; 2001) were motivated through the professional associations, independent of Federal or State Government authorities. In the early period of the study and until 2010 the ASLA/ALIA *Learning for the Future* was the key reference source for school library operations and standards. This publication was also likely to be referenced in school library building projects by educators, architects and education facility planners. However, it is worth noting that from my experience, a key matter for architects and education facility planners in the independent

school sector has been the continued reconciliation of the space and function data in *Learning for the future,* with changing Commonwealth Government built space standards. In terms of matching the two standards, designers/architects and education facility planners regarded the Commonwealth standards as the final arbiter to ensure that projects remained within budget and space limitations (DEEWR, 2009).

The *Learning for the Future* guidelines developed five *domains* within a process framework.

Figure 4A: Learning for the future domains and frameworks (adaptation)

Learning outcomes

DOMAINS: Learners & learning
Teachers & teaching
Resourcing curriculum
Providing access to informaiton
Developing the physical environment

PROCESS: analysing need
Developing & implementing policy
Evaluation
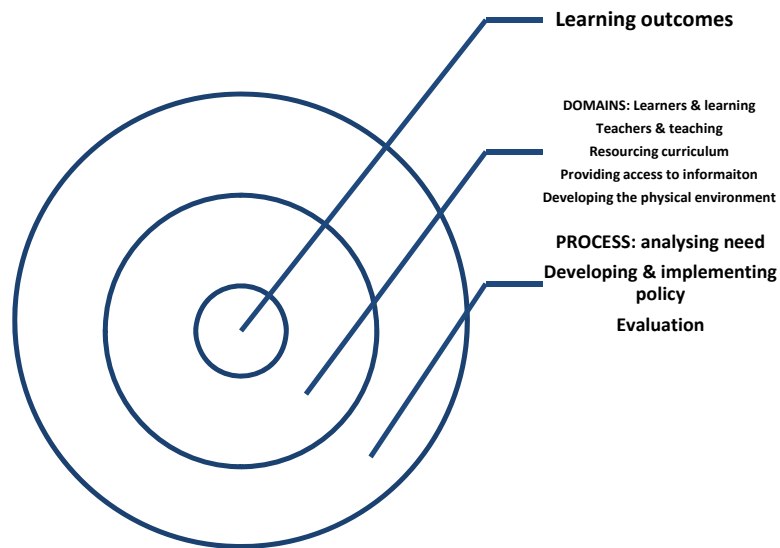
This graphic is an adaptation of the five domains and process frameworks outlined in
ASLA/ALIA (2001). Learning for the future: developing information services in schools, p. 6. Carlton, Victoria: Curriculum Corporation.

The *Learning for the future* domains are represented in a cohesive graphic which locates learning outcomes as the centre-piece, surrounded by a jig-saw of the remaining domains. The graphic implies inter-dimensional relationships between and among the domains. The discussion in the guidelines is organised in a cyclic process framework of analysing need, developing policy, implementing policy and evaluating outcomes. The process framework offers opportunities to maintain the connections among policy planning implementation and evaluation and to legitimise a variety of entry-points for design decision-making.

Through the guidelines and indicators for each domain, the text functions as an organisational and performance monitoring tool. The language and structure of the

document is that of technical and management application, quantitative standards*,* staffing levels, time allocation and composition*,* proportional funding formulae*,* proportional collection size by enrolment and media types, proportional computer allocation (ASLA/ ALIA, 2001, pp. 40-54).

The chapter on 'developing the physical environment' positions the school library as central in relation to learning programs and in a strategic position with respect to its physical site within the landscape of the school (ASLA/ ALIA, 2001, p. 40). Qualitative dimensions are less clear, but include equitable access to the facility and convenience and comfort in the functional areas. The connections among learners, teaching strategies and the spaces of school libraries are hinged on activities of learning and teaching, access to information and consulting and planning (ASLA,/ALIA, 2001, pp. 40-54).

These activities translate into functional areas of specific square metres (m^2) charted according to school enrolment size. Specifications are outlined for temperature ranges, lighting levels, acoustic control, wiring, cabling and information security conditions. Quantitative detail is also included for seating to enrolment ratios, shelving lineal metres and shelf placement and the measurement of study spaces (carrels), table heights and aisle spaces.

Design is interpreted and expressed as 'building siting and access' (p. 43), 'design and layout' (p. 44) with quantitative enrolment-function-m^2 space proportions, and check list renditions of 'environmental controls' (p. 46), furniture, seating and shelving (p. 50). While these data are a guide to the technical aspects, they predominate in the text so that the effect is one of the school library rendered as the sum of its quantitative parts, represented as a mechanical resolution to a facility development problem.

 It appears that the human dimensions of the built spaces of school libraries are reduced to convenience and comfort in functional areas, furnishings and some specialised equipment (p. 33). The participants and processes of designing are largely invisible in the guidelines. While 'Learning for the future' (1993; 2001) constitutes something of a historical piece, it is reviewed in relation to its successor publication as a way of indication the developing approaches of the professional association to the key matters which inform the attributes and qualities of school library spaces and their designing. The most recent ASLA/ALIA publication *Learning in a changing world* (2010) is developed as a five-part series:

- *Connect communicate, collaborate* (O'Connell & Groom, 2010a)

- *Virtual worlds* (O'Connell & Groom, 2010b)
- *Designing the learning environment* (La Marca, 2010)
- *Curriculum integration* (Todd, 2010a)
- *Resourcing for curriculum innovation* (Wall & Ryan, 2010)

The series is published under the auspices of the professional associations with titles authored by individual writers and writing teams who are active in the school library field. Pervasive in the series is the theme of change which is most often connected with digital, online information and media and the impacts on learners, learning and teaching. Overall the series integrates constructivist learning theory and practices and there is occasional cross-referencing among the texts.

Each of the five (5) documents develops its focus more deeply than was possible in the single edition version published in 2001. The expansion to multiple documents offers extended scope for rationale, research referencing and case study exemplars. Two documents in the series are reviewed below in some detail and the remaining documents are reviewed briefly, for their connection with learning space references or where designing dimensions are mentioned.

Discussion of ICT influences and the impacts of digital and online environments are well served across the series and this focus permeates each title to varying degrees. For example the document, *Connect, communicate, collaborate* (O'Connell & Groom, 2010a) examines the scope of digital and online media with specific attention to Web 2.0 technologies – the Read/Write Web – and the potentially transformative implications for learning and teaching. The document is thorough in its coverage of the varieties and applications of current online media tools, and expansive in the discussion of the extent of 'access, collaboration and professional exchange' (p. ix) facilitated through these media. The document cites current and well regarded long-term research on *guided enquiry* (Kuhlthau, Caspari & Maniotes, 2007); exploration of *connectivism* as learning theory (Siemens, 2004; 2008 as cited in O'Connell & Groom, 2010a, pp. 16-17); and selected PEW Research Centre, Internet in American Life Project research. Student *voices* presented in the document offer windows of student experience to the reader through quotes related to student participation in examples of online education forums.

As a text, the language conveys a rapid pace of change, energy and positive value associated with Web 2.0 tools and learning possibilities while also acknowledging some of

the barriers for educators and schools in the 'deep thinking' (p. 28) use of digital online media tools in traditional/current subject-oriented curriculum programs, along with the challenges of online manifestations such as social media. The writing style is expressive, assertive and uncompromising: 'educators must' (p. 2)' 'without question' (p. 6), 'there is no question' (p. 12), 'teachers should' (p. 28). A status of normalisation is conveyed in relation to digital and online media, which conveys a categorical, non-negotiable value in the ideas and processes being advanced (Fairclough, 2009). With a similar unconditional urging, the Foreword by an independent author encourages 'teacher-librarians and educators to adopt the same view (as the text authors) about their library collections and services, classroom spaces and learning and teaching opportunities' (O'Connell & Groom, 2010a, p. v).

Seemingly as a way to emphasise the imperatives and influences of Web2.0 media, the text relies on versions of the contrast between *digital natives* and *digital immigrants* identified by Prensky (2001). These descriptors juxtapose the implied *native* of students *born into* the digital online technologised world, and the *digital immigrant,* or implied foreigner status of educators, who have met Web 2.0 learning tools and spaces as adults and who have become educators without benefit of the accompanying 'new learning paradigm' of connectivism (O'Connell & Groom, 2010a, p.13).

In CDA terms (Fairclough, 2001a), both students and educators are categorised and typified. Educators are positioned as *behind the game* in the exhortation that 'without question, educators owe it to their students to 'keep up' (O'Connell & Groom, 2010a, p.6) implying that this applies to all or most educators. There is a question about the value of over-reliance in the text on the polarising effects of such dichotomies. There are also questions about the accuracy of such descriptors and their excluding effects particularly for those educators who are active in the navigation, use and critique of Web 2.0 possibilities or for those educators who will come increasingly from the ranks of the so called *digital natives* (Todd, 2008). If 'who's online?' is an indicator of participation, 2010 PEW Institute research supports a challenge to the sustainability of the natives vs novices dichotomy in that 85% of the 30-64 year old demographic are using the internet (PEW, 2010).

For school library educators and design professionals using the text to approach Web 2.0 worlds of learning in relation to the designing of school libraries, the writers indicate that 'an understanding of *connectivism* will influence how learning spaces are designed, how curriculum is created and delivered, and how beneficial library and information services are

provided' (O'Connell & Groom, 2010a, p. 18). The statement appears to be the only reference to a relationship with learning space designing. This approach would carry more weight if the *connectivism-digital/physical spaces* link was expanded with illustrative exemplars or details of designing processes and participants, or if cross-references were made to exemplars in the companion text in the series – *Designing the learning environment* (La Marca, 2010). In addition, while *curriculum delivery* is a well-worn coupling in educational commentary, there is some discord in a concept of *delivery* in a discussion which advances the implied borderless and dynamic potential of Web 2.0 mediated learning.

The purpose and scope of *Designing the learning environment* (La Marca, 2010) is established by the writer as a 'general discussion, that ranges across a wide range of issues' to provide 'research evidence, possible directions, ideas and inspiration'(p. x). Overall these aims are fulfilled, albeit that the 'general' purpose may work to limit the drawing of stronger relationships among learners, learning pedagogies and spaces particularly with respect to the human dimensions of user participation in purposeful designing. The text outlines an array of pertinent reference sources, exemplars and online site visit options, however La Marca indicates that while matters raised in the text are applicable to both primary and secondary school libraries, the specific audience is secondary schools.

As with other texts in the *Learning in a changing world* series, a pivotal theme is *change* which is connected in this text to a pedagogical turn from content-driven and teacher-centred education to a learner and learning centred education focus (La Marca, 2010, pp. 1-4). On this basis the text promotes changed approaches to and criteria for the design of learning spaces, with the dimension of flexibility as a key to enabling multiple learning modes and accommodating learner diversity.

Designing is conveyed as a 'mission, policy and planning' process (La Marca, 2010, p. 8) which references current research, particularly on constructivist learning theory, pedagogy and pedagogical practices. Design and designing dimensions are referenced to qualitative and quantitative standards drawn from previous editions of 'Learning for the future' (ASLA/ALIA, 2001) and from more recent educational space designing commentary, for example, Nair and Fielding (2005; 2010), Chism (2006) and Bolan (2009). Research references and commentary on lighting, acoustics, air quality and temperature, colour, texture and furnishings touch on the sometimes contested discussions in the literature

about the relationships among these elements and student performance (La Marca, 2010, pp. 32-40).

In keeping with the general discussion purpose of the text, a broad scope of activity-function spaces which ensure 'universal access' (La Marca, 2010, p. 14) are identified for inclusion in school library designing considerations: spaces for individuals and groups, spaces for reflection and collaboration, spaces for resources and resource management and spaces the writer describes as 'beyond the bare essentials' (La Marca, 2010, p. 40). However, in relation to the aforementioned pedagogical turn, it is worth noting that these extra or enhanced space options: performance spaces, interactive display, indoor-outdoor spaces, cafe spaces, could be regarded as the very spaces which are more likely to enable and influence constructivist learning modes and accommodate the diversity of learners discussed across the 'Learning in a changing world' series.

Commentary on participative processes related to school library designing commends consultation and ownership activities with users, through interview, observation and surveys to maximise inclusive design decision-making. The contribution of the teacher-librarian to designing activity is valued for the capacity to 'provide insights into what is needed to create a responsive, human-centred school library' (La Marca, 2010, p. 9). However the commentary related to the teacher-librarian's engagement with 'school administration and any of the professionals involved in the project such as architects, project managers etc.' conveys revealing dimensions of a perceived status quo in relationships between educators, school administrators and design professionals (La Marca, 2010, p. 9).

> When working with these professionals, teacher-librarians should construct
> checklists of issues to be addressed, keep accurate, detailed records of
> conversations and decisions and calmly and clearly add their own expertise to the
> mix (p. 9).

 The language and tone of the statement is cautionary with respect to the actions recommended to teacher-librarians, as if difficulties are to be expected. In critical discourse analysis (CDA) terms the expressive values in 'should construct checklists', (should) 'keep accurate detailed records' could be said to veil the complexities and 'messy circumstances' (Fairclough, 2001a, p. 107) of the relationships of those involved in activities of designing. Refining of the wording through emphasis on 'accurate, detailed records', offers a cue to

the way in which this aspect of the social world of designing, and relationships with accredited design professionals may be experienced by teacher-librarians. The experiential and relational values underlying these classifications, suggests that agency in designing is contested and has emerged from the experiences of the participant(s) by whom and for whom this text is prepared. This is restated and further emphasised in the recommendation to 'calmly and clearly add their own expertise to the mix' (La Marca, 2010, p. 9) as a moderator in apparently unequal power relationships (Fairclough, 2001a).

The human dimensions of the spaces and places of school libraries are discussed more expansively in this text than in its *Learning for the future* (ASLA/ALIA, 2001) predecessor. However the discussion of participants and processes could address usefully pursue approaches to bringing together users and designers as co-participants in designing.

Curriculum integration (Todd, 2010a) is a comprehensive guide to the long-term *guided enquiry* research and implementation which has been closely associated with school libraries (Kuhlthau, 2004; Kuhlthau, Maniotes & Caspari, 2007). Guided inquiry is defined as a strategic pedagogical process, 'a planned, supervised and targeted intervention' (p. 5), wherein students are supported and mentored by educators through curriculum-based inquiry units of study, to 'build deep knowledge and deep understanding' of the topic under study and to 'gradually build towards independent learning' (Kuhlthau in Todd 2010, p. 7). School libraries are constituted in the discussion as key sites of learner support, information access and information generation, through guided inquiry processes implemented collaboratively by teachers and teacher-librarians.

The text integrates physical and digital learning spaces through a discussion on quality school libraries emphasising that such spaces are 'structured' (p. 30) to accommodate diversity of learning and teaching styles and enable individual and collaborative learning. Space criteria include qualitative dimensions to stimulate and support intellectually challenging learning experiences and to facilitate access to multiple information media types and tools (Todd, 2010a, pp. 30-31).

Resourcing for curriculum innovation (Wall & Ryan, 2010), ranges across the scope of information resources for learning and teaching through school libraries. The text cross-references others in the series to contextualise inquiry approaches to learning and teaching (Todd, 2010a) and discussion on digital and online media integration (O'Connell & Groom, 2010a). School library spaces for learning and teaching are not discussed in detail, however

characteristics of flexibility for diverse learning modes and space for electronic infrastructure are included in criteria for 'facilities' (Wall & Ryan, 2010, p. 29). Cloud computing information storage sites (Wall & Ryan, 2010, p. 24) are nominated in a single wisp of connection with historic discussions of libraries as warehouses and storehouses.

There are opportunities in this text for stronger connections with the spaces and places of school libraries in a discussion of resourcing for curriculum innovation. In summary it could be said that the physical and digital online spaces and places of school libraries are a dynamic connection across the specific topics dealt with in each of the *Learning in a changing world* (ASLA/ ALIA) series. However the opportunity for a synergy of designing potential across the texts could be more fully exploited.

Across the *Learning a changing world* (ASLA/ALIA) series school libraries are constituted in supportive resources, programs and materials for learners and learning, broadly in the current constructivist paradigm and most particularly focused for inquiry learning. Resources include supportive people and supportive information processes, as well as diverse information media forms, access and interaction types and modes. Learning spaces receive due consideration in the Designing Learning spaces text, but the designing of learning spaces and their impacts on learning are not well integrated across the remaining texts.

Reflecting on the *Learning in a changing world* (ASLA/ ALIA) series, it is thus worth advocating that productive connections between learners, learning, pedagogies and spaces can be considered to extend beyond the core of practical-functional and structural-functional dimensions so strongly inferred in these texts (Franz, 1998). As alternative entry points to learning space designing, experiential-existential conceptions could work to customise the ways in which practical-functional and structural-instrumental aspects of spaces might be brought to bear to enable rich dimensions of students' being and becoming, school-by-school (de Gregori, 2007). Refining the discourse of school library architecture (De Gregori, 2007), through individual projects and in publications about projects in the professional literature offers significant discursive opportunity for both teacher-librarians and designers/architects (Yeatman, 1990, p.165, as cited in Taylor, 2004, p. 445).

Given the increasing ICT and digital information media used in school libraries, *The learning spaces framework* (MCEETYA, 2008) has potential relevance for school library designers.

The text establishes concurrence of digital/online-ness and physical space placement with reference to generic 'learning spaces', arguing for 'ICT-rich' spaces (MCEETYA, 2008, p. 4). However this advocacy is presented without citations of educational or learning research. Well regarded online sites are listed for reference, but these are not cited within the text to indicate more specific influence on the designing approaches presented.

The text notes its purposes throughout as allied to activities of repositioning, rethinking, redevelopment, refurbishing and repurposing in response to a 'highly technological world' (MCEETYA, 2008, p. 4). The commentary and recommendations are directed to the designing activities of 'educators, planners, architects and communities' (MCEETYA, 2008, p. 8; p. 20) advocating focused planning and designing of ICT-rich learning environments as ways to change the culture of schools. A design decision-making schema is provided, but further detail of the design involvement and designing processes of the suggested participants is not explored.

Students are 'centred' in a number of ways in this web-based text; in the discussion, in the graphic representations and in focused textual features which condense learner characteristics and activity to include, 'thinking critically, solving problems, communicating, respecting diversity, behaving ethically' (MCEETYA, 2008, p. 5). Digital, online and interactive technologies are introduced in short sentences and itemised using dot-points in the manner of checklists. A similar tabular checklist style presents the 'ICT issues to be considered in the planning design and construction of learning spaces' (MCEETYA, 2008, p. 22).

The text uses language and grammatical structure to build direct relationships between and among elements.

> Spaces shape and change practice. Engaging, adaptable spaces energise students, teachers and the community. Well designed learning spaces inspire creative, productive and efficient learning (MCEETYA, 2008, p. 2).

The above example creates an evaluative schema in an apparently categorical, non-negotiable cause and effect relationship between spaces and their effects on people and practices. The descriptors 'engaging' and 'adaptable' introduce specific refinements to the influence that spaces are suggested to exert on users. The further refinement of 'well designed' refines the character of the spaces to signal their outcome-effects as levels of productive and efficient creativity. The overall statement operates to compress and

condense meaning and invest spaces with significant taken-for-granted agency in terms of learners and learning.

While the text offers designing schema, planning suggestions and directive checklists, the absence of a rationale referenced to educational theory and practice research, generates a technology-driven justification. In much the same way, as Fairclough (2009, p. 321) points out, the discourses and rhetoric of educational documentation and commentary can operate to justify increased priority to technology foci and to legitimise the pedagogy-technology nexus.

This emphasis creates a vacuum in the text for those seeking a pedagogical foundation for the integration of information and communication media and technologies into physical learning spaces. A reading of the schema and checklists suggests an underlying set of teaching and learning principles, which if made explicit would further assist educators and design professionals to customise designing decisions for specific sites. Another limitation is the naming of possible participants without reference to a rationale or processes for designing participation.

School libraries: research preoccupations and commentary

The National Clearinghouse for Educational Facilities (NCEF) in the United States documents sources concerned with the planning, designing, building and maintaining of educational facilities. Among these sources is a considerable collection of investigative materials including commercial product and process evaluations, exemplar facility building projects, guidelines related to all aspects of school buildings and facilities and academic research studies. In the area of school libraries, academic research studies form a very small proportion of the source material with the predominant focus being on designing guidelines.

In a similar vein, the research foci and approaches reviewed in the following segment suggest that the spaces of school libraries and their designing have not been a high priority for researchers. The following selection of four Australian and one international study are representative of priority research foci during the period of the study, and are reviewed in some detail.

Performing Hybridity: impact of new technologies on the role of teacher-librarians (Mallan, Lundin, Elliott Burns, Massey, & Russell, 2002) reports the outcomes of a study funded by a

Queensland University of Technology Scholarship in the Professions Grant, in which I was involved as a school system research representative. The study investigated teacher-librarians' and school principals' perceptions about their relationships with technologies of information and communication and made recommendations for policy directions related to qualification, training, deployment and professional development of teacher-librarians, (Mallan et al, 2002, p. 9).

This qualitative, interpretive and exploratory study was conducted in 30 Queensland government and independent schools. Interview and observation data were collected from school principals and teacher-librarians, focus groups and email-online discussions, and through the research, policy and professional literature. The key findings of the study indicated impacts of change related to new technologies on: teacher librarians' professional knowledges and skills; professional development options and requirements; workplace practices; school library environments; gender relations and perceptions and corporate image and marketing (Mallan et al, pp. 31-52).

The study noted the incursions of information and communication technologies into school library operations, services and spaces through information media, information access tools and pedagogical conduits. However, at the time of the *Performing hybridity* project (1999-2001), the complex interrelationship of these elements and their influence on school library users, on user relationships and on the designing of school library spaces, did not appear to be reflected adequately, either in the research literature and published support materials concerned with school library design, or in existing school library designing processes and practices.

A particular relevance to this doctoral study is found in the research findings and in the recommendations of the *Performing hybridity* report. The report emphasised that:

> The culture of the library – its ethos, physical layout of space, the nature of its contents, its flexibility of timetabling and hours of opening, its physical location in the school – affects the social, intellectual and emotional aspects of the school community (Mallan, et al, 2001, p, 44).

Study recommendations urged tertiary institutions which offer accredited courses in teacher-librarianship to 'review their programs to ascertain their relevance and appropriateness for developing students' knowledge and skills in areas of new

technologies, for example in Masters level programs' (p. 54) and in extended professional development programs.

The *Performing hybridity* study did not investigate the participants and processes of school library designing, nor did it investigate the capacity for designing dimensions to influence student learning through school libraries. However, the study has been significant for this doctoral project in that it alerted me to my previously taken-for-granted understandings, that school libraries could exert influence on the 'social, intellectual and emotional aspects of the school community' (Mallan et al, p. 44).

The study also opened the opportunity to consider the potential in a tertiary qualification program for educators, including teacher-librarians, to engage with the dialectical relationship of learners, learning, pedagogies, and the spaces and places of learning, most particularly school libraries. This is a focus not widely considered as a concentrated area of study in under-graduate or post-graduate education courses.

The opportunity stimulated by the *Performing hybridity* research has been realised in the Master of Education at QUT through a unit of study titled: 'Designing spaces for learning', which I developed with colleagues and introduced to the course offerings in 2004. The unit of study is a core unit in the Teacher Librarianship Study Area and an elective unit in masters programs across the university. Since its inception, between 25 and 40 students have enrolled in each semester of offer.

'Designing spaces for learning' is concerned with *who and what is valued* in the overlapping social, cultural, pedagogical, technological, physical and digital-online contexts and spaces of student learning. This study is concerned with who and what is valued in relation to these elements and the designing of school libraries. An unfolding interrogative beginning with learners and learning guides the conceptual framework of the unit and a similar interrogative can be used with respect to this study:

> 'Who are the learners in our orbit and what are the hopes for them (ours and theirs)? What are the learning experiences we value in the process of developing these learners? What kinds of learning spaces and places might support the development of such learners and learning? How might we go about designing and creating these spaces and places?' (Elliott Burns, 2004, Appendix G)

In spite of repeated calls by researchers such as Horne-Martin (2002, 2006), Australian post-graduate options for educators appear to be limited to the units of study: *Designing*

spaces for learning (QUT) and *Leading learning space design* offered through the Bastow Institute of Educational Leadership by the Department of Education, Victoria.

Impact of school libraries on student achievement (2003) is an annotated review of research studies commissioned by the Australian School Library Association under the auspices of the Australian Council for Educational Research. The review focus is on those research studies which have investigated the impact of school libraries on student achievement. The primary audience for the review is described as professional officers of the Australian School Library Association (ASLA,) teacher-librarian practitioners and other educators including school administrators. The publication is presented in report form and is described in the foreword as a 'critical desktop review' conducted during a 4-week timeframe (Lonsdale, 2003, p. 2).

The review found that, across the scope of studies, school libraries are considered to have a positive influence on student achievement given particular conditions. These include: a strong, well staffed, resourced and funded library program, a strong computer network, quality resource collections in multiple media including print, and higher library usage and borrowing rates for both inquiry-based research and recreational reading. Other positive factors are collaborative relationships between teachers and teacher-librarians. Such relationships are seen to be evident in curriculum programs incorporating information literacy integration, collaborative collection development and professional development programs. Student self-esteem, confidence and learning independence are also considered to be influential, through school libraries and through networking with community libraries (Lonsdale, 2003, p. 28). However, the spaces, places and human dimensions of school libraries do not feature in the review as aspects of potential influence on student learning.

The Lonsdale (2003) review notes strengths and research gaps in the field, proposes strategic responses and recommends further research for an Australian context. Subsequent to the Lonsdale Review recommendations two projects have been undertaken one in partnership between the ASLA and Charles Sturt University (Hay, 2005), and the other in a partnership between ASLA and Edith Cowan University (Combes, 2008).

The Lonsdale (2003) review is relevant for this doctoral project as a research focused, point-in-time snapshot of perceptions in the literature about relationships between school libraries and student achievement and the characteristics of and participants in this relationship. However, the Lonsdale review did not identify school library learning spaces

or physical and virtual environments as dimensions of school libraries. Thus, discussion of potential influence on student achievement is absent from the review and consequently does not arise in recommendations for further research. School library *facilities* receive only a brief mention in the review as part of Oberg's (1999) study of the United States *Library Power* program launched by the Wallace Foundation in 1988.

 Student Learning through Australian School Libraries (2004-2005) responds to the Lonsdale review's recommendation for increased Australian research. The study, undertaken with students (n6,718) and with teachers (n525), replicated the *Student Learning through OHIO School Libraries* conducted in the US in 2003. Local adaptations for the Australian research included a survey Australian student participants' personal computer and internet access (Todd, Kuhlthau & OELMA, 2003; Hay, 2005). The research began with the premise emerging from earlier studies, and cited by Lonsdale (2003), that *school library programs which are well resourced in terms of staff, materials and overall funding are more likely to impact on student learning experiences and achievement* (Hay, 2005, p. 2). Schools participating in the study self-nominated on the basis of the *effective programs* study criteria of, support for learning and teaching through 'information technology integration', the 'dynamic and responsive' resourcing of curriculum and provision of an 'information hub' library learning environment (Hay, 2005, p. 18).

Student data from 46 metropolitan and rural schools were collected through responses to an online 28-item Likert scale survey. Questions were configured around the notion of 'help' so that students responded with their estimations of 'how helpful' the school library was to them in 'getting information, using information, knowledge development, computing, reading, their independence in outside school learning, and their academic achievement'. Teacher survey questions were similarly configured, but required responses of teachers' observations of how helpful the school library was for students.

The Hay (2005) study noted the disparity or 'disconnect' between the students' personal 'computing' experiences and those available to them at school. This accords with the continuing and changing pedagogy-technology cusp as will be noted in the Chapter 5 discussions. Overall, the study noted that school libraries which met the study's *effective programs* selection criteria were likely to have a discernable impact on student achievement, in ways similar to the outcomes of its antecedent studies, and in similar studies reviewed by Lonsdale (2003). This replicated research format and application has confirmed similar outcomes in more recent studies in Canada (Haycock, 2011). However

the Canadian surveys (Haycock, 2011) foregrounded matters of digital-online security, safety, privacy and surveillance which have emerged in the intervening years and continue to challenge schools, as well as national, state and system policy makers and telecommunication providers.

Hay (2006, p. 21) considered physical spaces and places of school libraries in terms of 'space and facilities' and defined as 'information hubs'. The qualities of spaces are subsumed in references to being 'adequate' and 'open', in order to 'accommodate' users and 'suit' their purposes (Hay, 2006, p. 21). The term 'environment' is used in this study and in its antecedent studies in ways which imply, but do not specify, the designing and impacts of physical and digital-online spaces. Thus the impacts of the designing of school libraries to enable the kinds of learning experiences valued in the study is overlooked, taken-for-granted or subsumed in opaque concepts of *environment.*

The Australian School Libraries Research Report (Combes, 2008) is also a response to the Lonsdale (2003) review's call for increased Australian research, references to 'the lack of systematically aggregated national data', and the need for the profession to assemble information about the state of school librarianship in Australia prior to any plan for a broader, systematic program of research. Combes (2008) points out that advocacy for school libraries is hindered by the lack of statistical information. Thus *The Australian School Libraries Research Report* (Combes, 2008) is concerned with the gathering of demographic information, resourcing and library budget data, library staffing data. Physical attributes data are limited to the age of library facilities, the complement of seating and the space allocations in school libraries. Data are statistically reported in graphs of various kinds which enable the identification of school systems, school type, rural and urban locations. However data on school library spaces as influences on learning and teaching, are not part of the survey beyond a statistical rendition of building age.

By contrast, Limberg and Alexandersson's (2003) study, *The school library as a space for learning,* takes a sociocultural perspective on learning and a phenomenological perspective of space in the exploration of student understandings about school libraries as spaces for learning. The researchers consider students interactions with each other and with learning materials wherein the school is understood as a 'cultural tool with a communicative function' (Limberg & Alexandersson, 2003, p.3). From a phenomenological perspective the space of the school library is understood in existential terms as a space of human life, a place of experiences of being and becoming (Limberg & Alexandersson, 2003, p. 4).

Data for the study are drawn from questionnaires, observations and interviews with 8-19 year olds across the period of a year. Students' concepts of library as 'warehouse, storehouse, workplace' and 'a place of strict order and quiet', coexist with their ideas of 'a place of leisure and refuge' (Limberg & Alexandersson, 2003, p. 1). It is noteworthy that ideas of 'warehouse and storehouse' are rejected comprehensively by contemporary library commentators. The library as anachronism, relic or museum is not considered as a tenable position when juxtaposed against the surge of change in new library currencies of digital-online information and communication. In their research recommendations the writers make reference to the need to challenge containerised views of libraries.

 However, the study notes a significant rhetoric-practice difference between the discourses of research-based learning and the role of the school library, and the perceptions expressed by many students involved in the study. Whereas the 'rhetorical discourse' conveys school libraries as 'virtual, global spaces' and 'digital information collections', many students report much more physical experiences concerned with the materials and spaces of libraries, such as books, space for movement and comfortable furniture, for settled quiet reading, and space for freedom and choice away from confines of classrooms and scheduled activity (Limberg & Alexandersson, 2003, pp. 8-9).

The researchers see implications in the ambiguity of perspectives which suggest tensions, for example, between control and freedom, work and leisure. They suggest that settings designed for particular purposes, configured in particular ways, position those using the spaces to conform to these constraining features. Consequently, designing implications may involve understanding a school library as a complex of dimensions, reflective of its multiple users and their purposes, and the press of changing information resources and media, evolving a balance between different kinds of formal and informal learning (Limberg & Alexandersson, 2003, p. 13). It could be suggested further that these dimensions and their relationships have school-by-school implications which resist template approaches to designing.

Summary

This chapter has mapped the school library territory through selected professional, policy, and research sources available to educators and others to support school library designing decisions in period prior to and during the study. In these texts school libraries are spoken about in the *voices* of school library practitioners, researchers, academics and education

commentators and by the less easily identifiable contributors to Australian government documentation.

Predominately quantitative representations of school libraries emerge across a number of the texts, through governance conditions and accountability monitoring, activity-function renditions of m^2=$, and technical standards and guidelines. Technologies of information and communication and their implications are addressed in most texts, on occasions to the exclusion of other media and information examples and more informal learning experiences. Digital and online manifestations operate as a dialectical backbeat with *change* to create an almost irresistible momentum so that human dimensions of space and place struggle for consideration (Fairclough, 2001a).

From the foregoing commentary it appears that the gaps and silences in the reviewed texts and the dimensions which are least well developed, are those concerned with research conversations about school designing overall and with the participants in and processes of designing. Students and educators as school library users are mentioned only occasionally in relation to school library designing. It is also noteworthy that accredited designers, architects, education facility planners and project managers are also largely assumed in these texts.

There are opportunities for these participants to be made visible along with the potential for their involvement in designing endeavours. Through the analysis of the quantitative guidelines and standards it appears that the spaces and places of school libraries and other educational environments are assumed to materialise out of formulae and checklists, or are imposed through activity-space prescriptions or the satisfying of per-capita x m^2 x $ conditions.

Where participants and consultative processes remain unmentioned, schools and their communities are rendered discursively as socially, culturally, pedagogically and technologically indistinguishable from one another. From these viewpoints, it may be assumed that what works for a school library in Balmain, Burwood or Beachmere, would also work in Broome and Brisbane. Such assumptions infer that a form of school-library-combination can be parachuted in to diverse communities without, or with minimal reference to those who will live and work in the physical and virtual spaces and places of schools and school libraries.

The third literature review chapter takes up the implications for school library designing raised in the research and professional literature, along with the impacts of the technology-pedagogy connection dynamic and the language of change which has accompanied this advent. The preoccupations and paradigms of educational space research are discussed in order to suggest possibilities for richer approaches to research and to educational space designing.

CHAPTER 5: STORIES OF INFLUENCE: pedagogies, technologies, research

Introduction

The third chapter of literature review considers the impacts of the technology-pedagogy nexus with reference to selected sources pertinent to the broader circumstances of education and the particular circumstances of school libraries. The chapter explores research directions related to the spaces and places of learning and teaching, with attention to current Australian research.

Contexts and texts of pedagogy and technology

Pedagogies and technologies are a bonded connection, something of a symbiotic relationship, in current education discourse and practice (Harvey, 1996). Recalling the historical renditions of libraries discussed in Chapter Two 'Intermezzo voices', this connection can be seen as an ongoing and evolving feature of libraries over time, as libraries absorbed the technologies of their times. More recently, pedagogy-technology connections are also seen as a characteristic of globalisation in the documentation of organisations and systems at international, national, and local levels (Fairclough, 2009, p. 216). A status of normalisation is achieved as technologies of information and communication are projected, in government, economic, education and popular media discourses, as the preferred globally connecting, universally beneficial catalysts for learning, teaching, communicating and belonging in the world at national, regional and personal levels (Fairclough, 2009).

While priority given to the tools and processes of technological access varies across schools, Fairclough (2009, p. 321) points out that discourses can be used rhetorically to justify and legitimise policy positions and impose coercive representations of how the world should be. The rhetoric of educational documentation and commentary can operate to justify increased priority and legitimise the pedagogy-technology connection. As will be noted in the following review, for some commentators technology becomes pedagogy. Web 2.0 is learning and teaching.

Effects of pedagogy-technology connections in the allied networks of practices can be seen to influence the lives and work of education practitioners, students and communities,

through school system policies, curriculum statements and processes, and practice standards and guidelines for schools and educators. For example, standards for teachers in their practice of education require *the integration of information and communication technologies to enhance student learning* (Department of Education and the Arts (Qld), 2005, pp. 20-21).

In some documentation pedagogy-technology relationships are viewed as a vehicle for the achievement of particular outcomes, such as the equitable access to information and knowledge proposed through *school community libraries* as discussed in Chapter Four 'School library stories' (OECD, 2001b). However, some international reports and reviews accord priority to pedagogical approaches such as collaborative dialogue, active participatory learning and critical reflective questioning, ahead of technology dimensions, and as stand-alone, substantiating rationales for technology uses. For example, the recent UNESCO review 'Education for Sustainable Development' (ESD) (UNESCO, 2010) cites interactive technologies, social networking and the internet as only one set of options among a suite of diverse ways in which these pedagogical approaches might be exercised to promote learning. The case studies in the UNESCO report consider the limited availability of technologies in some communities as a key factor in the design and implementation of ESD initiatives.

In 2006 the OECD issued three publications which linked pedagogy and technology dimensions established in 'Schooling for Tomorrow' (OECD, 2006b), with the physical and digital online dimensions of educational spaces and their designing in '21st Century Learning Environments' (OECD, 2006a), and in the photographic case study exemplars of the 'Program on Educational Building Compendium of Exemplary Educational Facilities' (OECD, 2006c). '21st Century Learning Environments' (OECD, 2006a) makes connections among learners, learning, pedagogies and learning spaces in some dozens of schools in a number of countries through brief discussion and exemplars from built space projects, including dimensions of technology. The discussion opens opportunities for the creative influence of user participation in designing activity in the acknowledgement that, 'school design is not only an architect's conception; it can also embody the creative vision of students, the practical necessities of teachers and the enthusiasm of communities' (OECD, 2006a, p.3).

Pedagogy-technology trends are tracked and reported through consortia and independent research instrumentalities as well as through international and national bodies and academic research. Examples of research institutes with a particular focus on technologies

and education are the UK University sector funded Joint Information Systems Committee (JISC), and two not-for-profit organisations, the New Media Consortium, and the Pew Institute (US). Each institute operates with an Advisory Board which includes international research representatives, and the reports, analyses, trends and trend predictions are widely referenced in education documentation.

The independent 'Pew Research Centre Project on American Life' investigates the technology 'issues, attitudes and trends which are shaping American life', such as the social impact of digital and online technologies on youth, health, family life and education, including libraries (Pew, 2011, unpaged). Described as a 'fact tank', the institute gathers data through public opinion polls and social science research. Reports take into account research by government, the academy and commercial sources. The 'New Media Consortium' has produced annual Horizon Reports on technology impacts in consultation with the higher education sector since 2005 with reports in 2008 and 2009 focusing on Australia and New Zealand. Data are gathered using qualitative research methods. 'JISC' collaborates with UK 'post-16 and higher education institutions' and advises on ways to achieve education priorities through digital and online technologies. Examples of JISC supported initiatives, with participant commentary and implementation resources are made freely available through the JISC website.

The 'New Media Consortium Horizon Reports' generate pedagogy-technology data in statistical and social foci which are referenced in education decision-making and advocacy (O'Connell & Groom, 2010a), while the Pew Institute includes libraries and school libraries as specific topics in its data categorisation, although these data often emerge as side issues to a main investigation. However JISC exemplars of particular interest to this study are the 'Designing spaces for effective learning case studies' which includes the Saltire Centre student information centre/library at Glasgow Caledonian University. This video case study incorporates design decision-making and discussion of participation of library users in the designing processes and includes commentary on pedagogy-technology implications and implementation. The Saltire Centre example connects learners, learning and learning resources with spaces and their designing through the voices of both users and accredited designers. This synergistic focus has made the Saltire Centre project a valuable resource for educator-students in the QUT Master of Education unit of study *Designing spaces for learning*.

The effects of the pedagogy-technology nexus appear inescapable. These are the new conditions of participation in the world at a time which is represented as an age of knowledge and information. This is a world in which *knowledge* is seen to be created increasingly through distributed, people-focused activity in digital information environments, rather than solely through traditional publishing and information authorities. Governments in Australia have responded with policy statements which announce the embedded connections of pedagogies and technologies with the national economy (DEEWR, 2008). In early documentation such as *Learning for the knowledge society* (2000) and *School innovation: pathway to the knowledge society* (2001), the declarative language of announcement was one of threshold. Change was represented as 'transition' to an information economy related to 'vision and skills to develop and manage new approaches to learning', and with 'action plans' for this to be achieved through 'telecommunications infrastructure and online content' (DEST, 2000, p. 10). This evolving, transitional progress was constituted through 'school innovation' as a 'pathway to the knowledge society' (DEST, 2001, p. 1).

More recently, the language and representations have become a rhetoric of 'revolution' using specific strategic means of stimulating the 'Digital Education Revolution through sustainable and meaningful change to teaching and learning in Australian schools' and through 'digital tools, resources, infrastructure and teacher capability' (DEEWR, 2008, pp. 5-6). Commencing in 2009, the Building the Education Revolution (BER) initiative took these aims for transformation of education into the physical spaces of schools through a $14bn program 'to modernise schools through the delivery of necessary infrastructure, and by doing so, support local jobs and stimulate investment' (DEEWR, 2009, updated 2011). However, the imperative of 'stimulation' and the outcome-focus of 'delivery' is akin to the school library example of the *parachute principle* discussed in Chapter One where it is unclear how educational perspectives have been considered in the processes of designing the modernising package, and there is no indication of requirements to involve users of educational spaces as participants in their designing.

The chief reporting process for the thousands of BER projects emerges from the complaints-driven BER Implementation Taskforce (Orgill & Chandler, 2011), whose brief has been to manage the complaints process, propose complaint solutions and focus on statistical renditions of value for money, time taken for completion and quality of construction described as 'procurement and delivery models'. There is no brief for the

report to pay attention to the relationship between learners, learning pedagogies and the built educational spaces. Even the 'fit for purpose' criterion mentioned as an element in the evaluation does not mention connections between the built spaces and educational or learning purposes (DEEWR, 2010c).

School Libraries: pedagogies, technologies, literacies

The pedagogy-technology nexus makes a formidable connection in the library and school library literature through continuing discussion and research on information literacy (ASLA/ ALIA, 1993; 2001; Lupton, 2004; 2008; Hughes, 2009). The significance of connections among evolving, diverse information forms and the literacies and process competencies required for critical engagement with them have been part of library and school library practices, research and discussions in the literature over some decades. Over time, further connections have been emphasised between libraries' roles in developing information literacy competencies and the potential for people to live fulfilling social, cultural, professional and intellectual lives (Kuhlthau, 1993; Kuhlthau, Maniotes & Caspari, 2007).

Examples of early initiatives with information literacy dimensions include the stimulus of United States *Nation at Risk* (Zweizig, 1984), and the Wallace *Foundation's Library Power project* (Library Power, 1988). International reach was achieved through the information literacy and cooperative planning and teaching research and programmes of Ken and Carolyn Haycock, whose work influenced understandings about the potential of school libraries and the practice of teacher-librarianship in Australia (Haycock, 1984). Australian information literacy initiatives in school libraries have been promoted through the work of the Australian School Library Association and its state-based constituents (ASLA/ ALIA, 1993; 2001; 2010). Through an information literacy focus school libraries are positioned as 'lifelong-learning sites', bringing together learners and the competencies which will enable them not only to survive the exigencies of school-based learning, but to thrive in their learning and lives beyond schools. Digital literacies have emerged as the new information literacy frontier.

In some representations of school libraries, the contexts of digital, online and information technologies, appear to become the rationale and vehicle to subsume learning and teaching practices through a direct re-interpretation of learning embodied in Web2.0 engagement (Asselin & Doiron, 2008; O'Connell & Groom, 2010a; 2010b). In these terms longevity of experience of the *NetGeneration* in a world saturated by technologies of

information and communication, is used to support the representation of student learners and their perceived less experienced teachers, in the digital native, digital novice/immigrant dichotomy popularised by Prensky (2001). This dichotomy is used to position young people and their teachers in ways which infer unequal relations of power attached to the asserted knowledge and practice competence of students as natives in digital environments, and the implied out-of-touch knowledge and practice of less competent immigrant teachers.

Asselin and Doiron (2008, p. 1) specify the pedagogy-technology nexus and context for school libraries as 'Web 2.0', and even more broadly as 'Learning 2.0', citing the impetus of the decolonising effects of the Internet on the creation and ownership of knowledge (Asselin & Doiron, 2008, p. 4). The writers point out that this phenomenon has produced changed understandings of what constitutes knowledge and thus impacts specifically on pedagogical practices and the content of school curriculum. The contexts of 'new learners' of the NetGeneration, requiring 'new literacies' for the digital world, to engage with 'new concepts of knowledge' (Asselin & Doiron, 2008, pp. 2-4), are integrated as a pedagogy-technology logic. This logic is used to advocate for schools and school libraries to engage a 'new pedagogical framework' of 'collaborative connected learning, multiple diverse resources and user-centred technology in contexts of social responsibility and globalisation awareness' (Asselin & Doiron, 2008, p. 11).

While students are cast as 'new learners' who may be in need of more polished proficiencies, students are also invested with perceived natural, well developed and practised capacities in the application of 'a wide variety of new literacies associated with new technologies' and with the capacity to use these Web 2.0 tools to 'construct and distribute knowledge' (Asselin & Doiron, 2008, p. 1). Given this asset of student knowledge and experience, their contributions to the designing of school library spaces to support a new pedagogical framework would be of appreciable worth. However Asselin and Doiron's (2008) discussion is not taken into the realm of the impacts of these new practices on the designing of physical spaces to support the achievement of the 'work of school libraries in new times' (Asselin & Doiron, 2008, p. 1).

The integration of pedagogies and literacies of collaborative connected learning, multiple diverse resources, and user-centred technology, combined with heightened awareness of social responsibility and globalisation, is more broadly emphasised in the inquiry focused learning approach taken by some school library researchers and practitioners (Kuhlthau,

2010; Kuhlthau, Maniotes & Caspari, 2007; Todd, 2005 and Todd, 2010a). Guided Inquiry learning approaches are informed by constructivist theory, and involve learners in actively seeking meaning in a process of personal and social knowledge construction (Todd, 2010a, p.5).

Guided inquiry is defined as a strategic pedagogical process, 'a planned, supervised and targeted intervention' (Todd, 2010a, p. 5). Consequently, support for learners through teacher and peer mentoring is guided and developed through a range of competencies applied during the inquiry process. These competencies address personal and interpersonal capacities, cognitive engagement, reading literacy, resource selection and evaluation, knowledge creation and knowledge-sharing capacities. The pedagogy-technology nexus is assumed within the resource access, resource use, and information-knowledge generation competencies of the wider guided inquiry processes.

As noted in Chapter Three, Todd (2010a, p. 30) integrates physical and digital learning spaces under the auspices of 'quality school libraries' designed to support guided inquiry processes, diversity of learning and teaching styles, and to enable individual and collaborative learning. Qualitative criteria dimensions of such library spaces are described as those which will stimulate and support intellectually challenging learning experiences and facilitate access to multiple information media types and tools (Todd, 2010a, pp. 30-31).

However, Boyce's (2006) project to bring 'communications technologies, multi-literacies practices and emergent literacy identities' to bear on the spaces of an existing secondary school library, suggests that the achievement of such spaces may not be a straightforward matter. An aim of Boyce's project was to avoid replicating the order and organisation of the physical library in the digital online spaces, and to recognise the co-existence of different sets of social and cultural embodiments in the conventional, digital and liminal dimensions of the spaces (Boyce, 2006, p. 30). Attempts to reconceptualise the impositions and assumptions of print literacies in the digital spaces and to create openness in the physical spaces, had the effect of highlighting other sets of constraints, forms of enclosure and conditions of surveillance (Boyce, 2006, p. 31). The convergence of print and digital communications media could thus be said to create complexities for the learning spaces of school libraries which can be masked unhelpfully in simple-solution renditions of *flexibility* and *adaptability*.

Language of change: libraries and (re)flux

Volatile and pervasive developments of information and communications technologies and the incursions of Web 2.0 can be seen to impact on many aspects of life and work. In critical discourse analysis terms, a discourse of urgency in some of the literature reflects a cycle of change-begets-change (Chouliaraki & Fairclough, 1999); Fairclough, 2001a). This discourse echoes the power-influenced evolutionary and revolutionary histories of libraries and their changing projects and purposes, as discussed in Chapter Two. An insistent, technology focused undercurrent emerges through themes and rhetoric of transformation, wherein libraries and school libraries require re-invention, in conceptual, pedagogical and material terms.

Impetus for change, re-defining and re-naming is discussed in the literature most often in association with impacts of digital and online information and communications. Change impetus is sometimes represented in figurative language to indicate a significant paradigm shift, for example as a move from 'monastery to marketplace' (Boone, 2003, p. 358), or as 'digital shift' (Asselin & Doiron, 2008; Hay, 2010; O'Connell & Groom, 2010a). The use of *re* as a prefix to actions of defining, naming and invention can signal in the text, a subsequent rationale and proposals for the effecting of change. In this respect, O'Connell & Groom's (2010a, p. 39) 'recalibration' suggests attention to the finest dimensions of fit in relation to technology-motivated change as if the imagined mechanical and engineering dimensions of school libraries are under microscopic scrutiny.

Hay (2010) addresses concerns about the current network of practices which constitute some versions of school libraries in Australia, through a systematic program to 're-think, re-build and re-brand' (Hay, 2010, p. 5), and as ways to effect the changed and changing 'form and function' (Hay, 2010, pp. 8-9) of school libraries. Hay draws on a long association with school libraries, particularly with the experience of watching teacher-librarians 'fighting the same battles' and recycling the same arguments and conversations, to substantiate a rationale for re-thinking to begin 'processes of change' (Hay, 2010, p. 5). The figurative image of mechanisation infers a certain strength and force applied to re-branding as an opportunity for 're-engineering what we do' (Hay, 2010, p. 9). The extent of such a change is anticipated to be of such impact that the new nomenclature, the re-branded iCentre does not 'mean' a school library. Nor does it mean an 'information, knowledge or learning commons', which are among the library re-naming options in contemporary use. The transformed iCentre is a hybrid form.

This hybrid identity echoes the change influences of 'new technologies' and the pedagogy-technology nexus raised in the 1999-2001 QUT research project reported in *Performing Hybridity: impact of new technologies on the role of teacher-librarians* (2002), which is a stimulus for this doctoral study. The *Performing Hybridity* title emerges from the self-described focus identified by one of the teacher-librarian (TL) participants, in which her enactment of the TL role was a hybrid expression of 'core values and activities' grafted with flexibility and responsiveness to continually fluid contexts and responsibilities (Mallan et al, 2002, p. 41).

The *Performing Hybridity* study documents the technology impacts on school libraries through specific impacts on teacher-librarians' professional knowledges, skills, professional development and workplace practices, on gender relations and perceptions, on corporate marketing and on learning environments. The study anticipates school libraries as continuing sites of re-invention and hybridity through recommendations for (re) consideration of qualification courses and professional development by tertiary institutions and professional associations, for the redefining of teacher-librarian roles, and for a deeper engagement with pedagogy-technology implications through system and school policies.

For Brindley (2006, p. 484) 're-defining' in relation to the British Library grew out of questions about the library's relevance for users in the face of the evolving information forms of the 'digital-age'. Understandings of British Library users and motivations for change are evident in the recommended strategic marketing activities in which users are described as 'promiscuous' (2006, p. 486), suggesting a likelihood of user-unfaithfulness unless changes to services and access are implemented. Change motivations are expressed as juxtapositions of *old* and *new,* and in the search for *new ways* to constitute the identity and activity of the British Library in response to fluid contexts and presage of globalism.

Fairclough (2009) explores the relationships between social processes and practices of change and their representations in discourse aspects such as language, through a discussion of the multiple interconnectedness and networks of flows which currently constitute 'globalisation'. Discourses, established through repetition and recurrence over time in diverse social circumstances, can be said to operate in numbers of ways. Discourses can work to objectify and convey information as fact; to rhetorically project particular views and justify policies and strategies; to constitute and reproduce particular relations of power and to generate imaginary representations of possible futures (Fairclough, 2009, p. 321).

Discourses of education, emerging through the language of policy, curriculum, learning theory, pedagogical practice and popular commentary can be seen to constitute *imagined futures* as a key subject. Representations of future orientations in research and commentary on school libraries include terms such as *knowledge workers*, *anywhere, anytime learning*, *life-long learning*, *just-in-time learning*, and *learning futures.* Rhetorical and future-imagined representations of pedagogy, technology and 'change' may operate to project schools, learners and school libraries into the apparently 'good for everyone', 'irresistible, inevitable and irreversible' discourses and practices of 'new' ways of being, as exemplified by Fairclough (2009, p. 321).

Educational policy reform texts of *new times* are examined by Taylor (2004) using Norman Fairclough's approach to CDA to examine discursive practices, events and texts. CDA brings together social and semiotic aspects of the texts, to understand what is going on socially through the linguistic analysis and 'aims to explore how texts construct representations of the world, social relationships and social identities' (Taylor, 2004, p. 435). Understanding the ways discursive practices operate can open up opportunities for both proactive and responsive 'discursive interventions' to encourage 'dialogic and democratic forms of participation' (Yeatman, 1990, as cited in Taylor, 2004 p. 445).

Spaces of learning and teaching: research directions

As mentioned in the introduction to this chapter, the heightened level of interest in the designing of schools and educational spaces since the outset of the study is reflected in international and Australian research projects, government funding initiatives, academic writing, professional association activity through seminars and conferences and associated published works. Australian researchers interested in the links between learners, learning, pedagogies and spaces have begun to pursue more ambitious agendas through large grants funded by Australian Research Council, the Australian Learning and Teaching Council (previously the Carrick Foundation), and projects funded by individual universities. These research projects do not include school library designing, however a review of these projects offers insights into project priorities and research approaches.

While the research reviewed in this segment is not exhaustive, the sampled studies provide a sense of the scope of areas of research interest as a way of considering *who and what is valued* in what might be seen as an increasingly interdisciplinary field of educational space

design research. It is noteworthy that the terminology *educational environment* is used in a variety of ways in the literature, such that its' meaning is inconsistent across studies. The term is used to refer to elements and combinations of classrooms, buildings, school campuses and extended communities. *Environment* can refer to the specific interiors of classrooms with respect to physical atmosphere of ventilation, air quality and/or light and noise. It can also comprise non-material, social, cultural and pedagogical and other dimensions.

The review notes the research paradigms and methods, the potential effects of some of these, and the more recent inclusions of multiple variables which may indicate a growing tendency for researchers to regard schools as complex systems. Since a focus of this study is the connections between learners, learning, pedagogies and spaces and the potential of users and designers to exert *creative influence* on school library designing, then this aspect research review has the potential to inform understandings about *who is included and who is excluded* through research in the broader terrain of educational space designing.

Reflecting on preoccupations with causal connections

Numbers of studies since the 1960s have attempted to make causal connections between student academic performance and the efficacy of school building design. Study foci include aspects such as school size, (Barker & Gump, 1965); general building condition (McGuffey, 1982); noise exposure (Evans & Maxwell, 1997); and building renovation (Maxwell, 1999). Researchers report some connections between these aspects and student academic performance, but most studies stop short of claiming significant causal links. Small participant numbers and case study samples prompt reviewers of these studies to urge more rigorous research methodology and larger participant samples, to extend the often inconclusive findings in studies concerned with the influence of structural and design elements on student academic performance.

Fisher (2001) reviews 21 research studies that examined possible causal linkages between school building conditions, student outcomes and student behaviour. The studies reviewed are concerned with school size, building age, lighting, acoustics, noise, air quality and temperature, furniture and the use of colour, with some small but demonstrable links made in some studies. Only one of the reviewed studies examines the potential for a relationship between social and pedagogical contexts, in the design of learning spaces and

the school environments for young adolescents (DEST, 2003). The school library as a potential influence features in only one study (Doll, cited in Fisher, 2001).

In a number of more recent studies the preoccupation continues, with causal connections being sought between characteristics of spaces and a variety of interpretations of student achievement as well as between the physical condition of schools and the work of teachers. The key question in a causal focus works to isolate proportional increases or decreases in student performance indicators in standardised tests or administrative data and to relate these dimensions to features of school buildings such as building age, condition and state of repair (Lewis, 2000; Buckley, Schneider & Shang, 2004; Blincoe, 2008). Student performance measures used in these studies include test scores achieved in national or school district English Language Arts (ELA) and mathematics standardised tests, school attendance records, and surveys of school Principals and class teachers.

Recent studies also relate student achievement to aspects such as daylighting (Pulay, 2010), noise levels (San-Souci, Guerra & Campbell, 2010) and climate control (Lemasters & Earthman, 2011). Other dimensions of student performance in the scope of educational space research studies involve behaviour (Kumar, O'Malley & Johnston, 2008), school attendance and attitude to academic activity (Boese & Shaw, 2005; Duran-Narucki, 2008) and dimensions of health including mental health (Milkie & Warner, 2011), and substance use (Grana, Black, Sun, Rohrbach, Gunning & Sussman, 2010).

The potential for school buildings to both support and constrain teachers' work is reported by Stevenson (2001) and supported in subsequent studies of the relationship between classroom condition and teacher satisfaction and success (Bissell, 2004; Earthman & Lemasters, 2009). In some studies relationships between school building condition and teachers' circumstances are reflected in teacher productivity and health which is in turn seen to be reflected in teachers' school attendance (Schneider, 2003; Buckley, Schneider & Shang, 2005).

Scoping reviews of the literature: observations, agendas and effects

Findings in the studies mentioned in this discussion so far, range from a high degree of causal connection reported between school building condition and selected academic outcomes (Stevenson, 2001; Hughes, 2006), to a Wyoming study reporting no discernible relationship (Picus, Marion, Calvo & Glenn, 2005). Roberts, Edgerton and Peter's (2008) review of Canadian and international studies suggests that while effects of school facilities

on student performance are indirect, school facilities appear to be controllable, consequential contributors to student performance.

While numbers of studies report an inability to make causal connections, a recent review of studies undertaken since 2000 suggests that there are indications of small increases in positive relationships over time between the quality of public school facilities and a range of academic and community outcomes. That is, student test scores tend to rise in high quality environments and tend to fall in low quality environments (Filardo & Vincent, 2010).

A review of research studies conducted in conjunction with the Building Schools for the Future (UK) initiative presents an overview of the calibre of research studies to date (Higgins, Hall, Woolner, McCaughey & Hall, 2005). Across the reviewed studies the researchers looked for ways in which research evidence might inform the designing of educational spaces. In the primary analysis, the review concluded that while dimensions of effective learning environments were evident in many studies, there was little empirical evidence in studies to date, to link particular aspects of school environments with improvements in student achievement in ways which would directly inform designing decisions (Woolner, Hall, Higgins, McCaughey & Hall, 2007).

However the researchers describe a 'secondary level of analysis' which suggests that 'targeted environmental improvement is worthwhile, but that the solutions will vary widely across the country' (Woolner et al, 2007, p. 68). These analyses point out that diverse school communities constitute multiple variables which will bear on design decision making across school sites. This suggests that these reviewers are also looking for research foci and approaches to research which recognise the diversity of schools.

The Woolner et al (2007) literature review also acknowledges that some widely consulted commercial publications appear to assume that the design of educational spaces must influence student learning and achievement. Although these texts sometimes make mention of educational theories, pedagogical practices and student learning and link these with the likelihood of spaces designed to enable, for example collaborative learning experiences, many do not cite supporting research or refer to evaluative studies of their design recommendations or to the impact of designing decisions in terms of student learning in exemplar cases (Nair & Fielding, 2005; Erikson & Markuson, 2007).

In the wake of the United Kingdom (2005-2010) Building Schools for the Future (BSF) review of studies, Edgerton, McKechnie and McEwen (2010, p. 44) cite the paucity of empirical evidence as the most significant barrier to the building of high quality schools. Research design and implementation is advanced as a key consideration of their in-progress study of student behaviours and self esteem related to student perceptions of school environments. An added motivator for the study is the level of reported teacher dissatisfaction (32%) with facilities built to date in the BSF initiative, along with teachers' assertions that poor school designs prevents them from teaching effectively (Edgerton, McKechnie & McEwen, 2010, p. 44).

These researchers proposed that careful selection of methodology and methods was essential for evidence-based research. The mixed method study was planned as a 3-phased pre/during / post construction project in six schools where new buildings were scheduled. Data from each phase was used to inform the investigative foci in the subsequent phases. A semi-structured interview protocol was used with Stage One focus groups to engage with the structure of 'a typical day' and to invite student responses to their current school environment prior to the building phase (Edgerton, McKechnie & McEwen, 2010, p. 45). This approach provided an opportunity for the voices of students using their own words to express engagement with dimensions of the school environment and their affective responses to emerge.

Student responses from the Stage One focus groups were then categorised into themes and used to construct a section of the Stage Two Questionnaire which related student perceptions of the school environment to their behaviour. A standard Academic Self Esteem measure was also used as a section of the questionnaire. The data analysis from the questionnaire was used to inform the methodology and methods for Stage Three, to create a prospect for continuing responsiveness to the research setting across the stages. However the outcomes of the Stage Two questionnaire were analysed and reported statistically. This raises concerns about the voices of participants, which were fore-grounded in Stage One interviews, being distilled and diminished, *lost in translation* within the themes assigned by the researchers in Stage Two surveys.

Citing a similar concern for research methodology, a study through the School Design and Planning Laboratory (SPDL) at the University of Georgia sought to 'compare student achievement with three school design classifications: movement and circulation, day lighting and views' (Tanner, 2008, p. 381). Student achievement measures included

standardised test results in reading, mathematics, science and social studies. While the study's findings noted significant associations between the design classifications on most measures of student test performance, Tanner (2008) emphasises that a key purpose of the study was to continue the SPDL research agenda to measure impacts of physical environments on affective, behavioural and cognitive learning using quantitative measures. The advantages proffered for this quantitative-only approach include the development of a replicable research model for wide application in other quantitative studies. In addition it is suggested that the study 'creates a statistical means by which school administrators and architects can assess building quality' (Tanner, 2008, p. 381).

Overall, these foregoing study findings may contribute to understandings about aspects of the relationships between learners, learning and educational spaces in something of a jig-saw effect across the limited scope and of the separate matters being researched. On the other hand, their limited dimensionality may serve to mask the complexities and relationships of the multiple variables which might be considered in designing the educational spaces of schools, and most particularly of an individual school. It could be suggested that school facility designing studies which seek to answer causal relationship research questions can oversimplify and fail to account for the scope of relevant variables or for the diversity of schools. Students and teachers can disappear in graphic, statistical representations.

In addition, studies which use standardised literacy and numeracy test results as peak indicators of student achievement, risk defining student learners and teachers in very limited ways. It can be suggested that the human dimensions of schools, the social and cultural dimensions of relationships between those who find their places in schools, are almost invisible when students are reduced to the sum of their test results in English and mathematics. Further to this, Boyce (2006) draws attention to the political dimensions of research agendas in education, where policies of governments, funding conditions and compliance with national research agendas (e.g. research quality frameworks such as now Excellence in Research in Australia [ERA]). These frameworks create coercive tension for academic researchers, and it can be argued subsequently for educators and for schools. Nixon, Comber and Cormack (2007, p. 93) note the tensions for academics as a 'very strange policy place' where calls for openness through cross disciplinary research co-exist in contradictory tension with funding and research grant conditions which imply that 'only certain types of 'scientific' research count' (also cited in Boyce, 2006).

Research design: seeking richer research possibilities

Questioning the selection of academic achievement benchmarks used in many studies, prompts Upitis (2004, p. 19) to ask why, for example, student achievements in music, drama and visual arts are not considered in studies as learning experiences which might be influenced by 'architectural space', rather than the customary standardised test results in mathematics and language as the chief measures of student learning. It can be observed that the performing arts may constitute a much more fluid assessment target for researchers, not so easily reducible to percentages or the kinds of scalable numerics needed for statistical studies. It could also be suggested that using qualitative methodology approaches and mixed method research designs increases complexity, and opens the potential to consider schools as more multidimensional entities than causal connection studies allow.

A study by Lackney (1996) has endured as a foundation work for ongoing research. The multiple case study investigations examined the perceptions, attributes and applications of a range of environmental quality elements in schools and their potential relationships to the achievement of educational outcomes. The study also reflected on the effectiveness of action research methods defining problems. Subsequent development of *33 research based principles of learning space designing,* based on the original study also drew on outcomes of a wide scope of research studies current at the time (Lackney, 2001). The principles consider the learning and work of both students and teachers and structure the principles in the 'pattern' style of Christopher Alexander (1977; 1979).

Principles in the Lackney study were matched with associated research references and substantiated in short discussions. Lackney's (2001) approach has been widely cited in subsequent literature and used in commercial publications (Nair & Fielding, 2005; 2010), for its capacity to bring to bear a diverse scope of educational impact variables such as classroom adaptability, safety and security, aesthetics, physical comfort and health, privacy and social interaction, on the creation of schools spaces identified as quality school environments (Lackney 1996).

Two studies reported by Uline and Tschannen-Moran (2008; 2009) pursued investigations of school climate as a mediating factor in student and teacher responses to high or poor quality school facilities. Overall the studies were concerned with the interdependent relationships between the physical and social environment of the school and the

relationship of each of these to student achievement. The first (quantitative) study, conducted with teacher and student participants in 80 schools surveyed school building quality, resource support and school climate. As with many quantitative studies, student academic achievements were benchmarked in English and mathematics. The resulting statistical analysis confirmed the researchers' initial hypothesis of positive links sufficiently for them to undertake case studies in two high-poverty schools identified from the first study.

By contrast, the second study involved students, teachers and parents in qualitative methods with rich data possibilities to unfold 'the stories that occupants tell' (Uline, Tschannen-Moran & Wolsey, 2009, p. 400). The instrumental case study design invited participant contributions in semi-structured individual and focus group interviews. Student photographs of aspects of the school buildings which were significant to them were discussed and reflected upon with peers and the researchers. 'Walking tour' interviews between the researchers and small representative groups comprised of a student, a parent, a teacher and a school administrator, allowed the physical environment to be experienced by the researchers accompanied by the commentary of the participants and shared discussion (Uline et al, 2009, p. 407).

The researchers reported a sense of place and a sense of community emerging in the study responses. 'The personality of the space and the identity of the occupants' were evident for the researchers in the participant commentary on 'the layers of history, events, changes made to the spaces and the presence of others who inhabit the space' (Uline et al, 2009, p. 408). The participation of the users of the spaces in the second study and the focus on affective and relational dimensions, foregrounds the voices and experiences of those most closely and enduringly connected to the educational spaces of their lives and work.

The quality and design of research studies concerned with relationships between architecture and educational practice is addressed by Gislason (2010, p. 127) through a proposal for a theoretical framework for studying 'how instructional space, teaching and learning are related in practice'. Beginning with a school climate model (Owens & Valesky, 2007, as cited in Gislason, 2010), the researchers conducted a series of case studies in established schools, to trial their research design and develop a framework. Three interdependent foci represented in a Venn-diagram, constituted the proposed framework of educational space design relationships and research: 'ecology and organisation' (teaching and learning philosophy, practice and management in spaces); 'culture' (student-

teacher relationships enabled/disabled in spaces); and 'student milieu' (movement, freedom, independence in spaces).

Gislason (2010) proposes that such a framework regards the school as a network of elements which may shape and be shaped by the physical environment, and that influential non-material elements of 'environment' are made specific through the framework. While the idea of a *framework* has template connotations, the expansion of the framework through focused questioning invests the framework with the capacity to act as a heuristic or self-questioning device. The research questions emerging from the Gislason (2009) study offer researchers (educators and designers) possibilities for design orientations which open up research directions pertinent to individual schools and communities.

Gislason (2010, p.142-143) suggests that educators and designers begin with examination of school 'philosophy and values, cultural assumptions and educational vision' followed by an evaluation about how these value-sets align with existing spaces and the capacities of the spaces to meet instructional purposes and educational outcomes. The next set of proposed scoping questions examines the 'extent of milieu, social dynamics and relationships to cultural assumptions, educational practice and the use of space'. The final question phase examines the school's program of 'teacher professional development, resource and materials support, planning time allocation, and administrative support' for the millieu elements. It is noteworthy that the focus of the questions in the Gislason (2010) study reflects aspects of the interrogative foundation of the unit of study *Designing spaces for learning* established in the QUT Master of Education in 2004 (Mallan, Elliott Burns & Russell, 2003) as noted in Chapter Four.

The studies discussed in this section include examples of qualitative and mixed method approaches which suggest some acknowledgement of the dimensions of schools as multi-dimensional and complex. Such an acknowledgement implies that there can be richer possibilities in research investigations which consider users, encourage their voices and pay attention to the values, philosophies and practices of specific school contexts.

De Gregori (2007) points to the rich, contextualised possibilities in the potential to energise designing dialogue between architects and educators and thus to refine the discourse on school architecture, when these aspects are integrated and considered 'one school at a time'. The following section refers to one long-term, in-situ, research example undertaken by educator practitioners and specialist colleagues, which regards the spaces and places of

learning as 'third teacher', vital to student learning, and to be addressed in a cycle of research, implementation and reflection.

Longitudinal studies: Reggio Emilia

Early childhood education in the Italian province of Reggio Emilia provides an example of a longitudinal study using learning theory and praxis to explore relationships across multiple dimensions of children's learning. In the Reggio Emilia (Reggio) philosophy, learners, learning, pedagogical practices and 'environments', are seen as reliant on physical spaces. Rinaldi (2006) reports a continuous process-cycle of hypothesising, research, documentation, practice and theorising, undertaken since the institution of the Reggio schools by Loris Malaguzzi in the 1950s. The Reggio schools are two-stage municipal schools particular to the Reggio Emilia province, catering for children three (3) months to three (3) years (*nido*) and three (3) to six (6) years (*scuole dell'infanzia*).

Reggio schools and the learning-work of the children and educators are regarded as *progettazione,* as works in progress. Reggio educators, *pedagogistas* and *atelieristas*, regard their work in learning and teaching as a form of research in the process-cycle mentioned earlier with a strong emphasis on the importance of documentation as part of their reflective practice and research. Documentation is understood as a 'pedagogy of listening', as 'listening made visible' (Rinaldi, 2006, p. 65). Documentation of the *progettazione* serves the interests of each child's learning, the teachers' communications with parents, and the cycle of recorded actions and interactions, observations, reflection, analysis, dialogue and planning which informs learning and teaching practices (Fraser & Gestwiki, 2002, p. 146). As with the overall Reggio terminology, the language of *progettazione* has developed significance. Over time, the terminology has taken on specific meanings, such that alternative terms developed elsewhere (emergent curriculum, integrated curriculum) are regarded as inadequate translations (Rinaldi, 2006, pp. x-xi).

Learning in the Reggio philosophy is understood as a series of narratives, and uses the image of knowledge as a rhizome. Knowledge is understood to be constructed through learning experiences in 'contemporaneous advances, standstills and retreats that take on many directions' (Malaguzzi, 1994, as cited in Rinaldi, 2006, p. 7). This approach rejects understandings of learning as knowledge transmission and dismisses ideas of knowledge construction as tree-like and sequential. The complexity and multiplicity of children's learning worlds are understood in developing theories such as 'the hundred languages of

children' (Rinaldi, 2006, pp. 192-193). This theory considers the interconnection, interdependence and transformative potential of current and evolving communicative forms – beyond verbal and written texts to images, narrative, science, music, drama and beyond (Gandini, Hill, Cadwell, & Schwall, 2004).

The childhood spaces of Reggio learning environments are considered as the 'third educator' and the development of physical spaces is a project within the ongoing research and learning process-cycle of the Reggio schools. Rinaldi (2006, p. 79) describes the process of designing school environments as a social, cultural and political activity. Educational spaces are realised through the shared research of 'pedagogy, architecture, sociology, anthropology' and most particularly 'as a pedagogical project evolved through in-depth dialogue between architectural and pedagogical languages' (Rinaldi, 2006, p. 80).

The implications of applied longitudinal research such as that of the Reggio schools, are constituted in understandings of educational space designing as learner and learning centred, multi disciplinary, research focused and responsive processes. Pivotal to this is an understanding of the spaces of schools in somewhat existential terms, as *progettazione,* as works in progress, rather than as once-and-for-all activities or add-on enterprises to be revisited chiefly when educational spaces are considered to be at the end of their useful lives. Such a values foundation further implies that educator-architect partnerships in designing are also *progettazione,* part of continuing consultation in the evolving of schools, and that these are informed through interdisciplinary knowledge building and dialogue.

Australian studies: learning space designing

A number of Australian researchers interested in the links between learners, learning, pedagogies and spaces have undertaken research grants funded by Australian Research Council and the Australian Learning and Teaching Council. Some of the projects outlined in this section are in-progress and are yet to come to final report stage. During three of these projects educator-designer dialogue has formed a significant element. These projects established forums for discussion about educational space designing across a wide constituency including international participation. Thus each of these projects is significant for its dialogic component and for its consequent discursive potential.

Next Generation Learning Spaces (2006-2008) was part of the funded Australian Learning and Teaching Council Priority Project Program (ALTC). The collaborative project between the University of Queensland (UQ) and Wilson Architects explored the 'interdependence of

pedagogy, space and technology' in relation to learning and teaching spaces in higher education settings (Radcliffe, Wilson, Powell & Tibbetts, 2008, p. 3). Among the examples of design projects undertaken in the program were the UQ Collaborative Learning Centre, an Advanced Concept Teaching Space and the Biological Sciences Library. The project developed a pedagogy-space-technology (PST) framework which the researchers advance as a way for education institutions to create and improve learning spaces focused on 'learner engagement and the achievement of identified learning outcomes' (Radcliffe, Wilson, Powell & Tibbets, 2008, p. 3). The PST Framework and applications is reported in 'Designing Next Generation Places of Learning: Collaboration at the Pedagogy-Space-Technology Nexus' (Radcliffe, Wilson, Powel & Tibbets, 2008) and were reviewed in Chapter Four.

The project *Smart Green Schools: Educational and Environmental Outcomes of Innovation in School Building Design* (2009-2011) is funded through an Australian Research Council Linkage grant. The project is developed as a collaboration between University of Melbourne (Australia) School of Design researchers, government and independent architects, and a number of independent design and research enterprises. The study is focused on National Research Priorities which link 'an environmentally sustainable Australia' with the strengthening of 'Australia's social economic fabric'. The study considers innovations in school designing to achieve healthy, stimulating school environments, and links these with student learning about sustainable lives and their experiences of physical and virtual spaces of schools.

In 2009 and 2010 the Smart Green Schools project hosted two symposia attended by academics, educators, architects, designers, researchers and other interested participants. The 'Talking Spaces' symposia comprised sessions led by researchers and practitioners, site visits and opportunities for participant discussion related to the integration of 'new' pedagogies, school philosophies and spatial designs. The *Take 8* publication, *Learning spaces: the transformation of educational spaces for the 21st century* (Newton & Fisher, 2009) presents interviews and conversational accounts with participants in the Smart Green Schools discussions: educators, accredited designers and school system voices, and those from wider national and international forums and agencies including LEARN, the Learning Environment Action Network based at the University of Melbourne.

The inaugural *U21 Learning Environment Design Forum* (2007) was conducted as a five-day workshop at the University of Melbourne, attended by international representatives of the

Universitas 21 Network and Woods Bagot architects. Participants include librarians, researchers, designers, Information technology specialist and facility managers. Forums have since been held in Hong Kong, Virginia (US) and Dublin, with the 2011 forum scheduled for Edinburgh. Designing approaches developed at the inaugural forum are reported in, 'Creating new generation learning environments on the university campus' (Jamieson, 2007) and were reviewed in Chapter 4.

The School: Designing a dynamic venue for the new knowledge environment (2008-2010) is an ARC Linkage funded project being undertaken at Swinburne University of Technology, Melbourne, Australia. The project is a case study of two schools which seeks to identify the 'well designed, school physical environment of the 21st century' with respect to pedagogy and technology integration, 'in order to facilitate individual and collaborative learning that is grounded in school communities'. One of the project tasks has been to document the scope of Australian research about educational space designing.

Summary

Across the scope of texts, contexts and research directions, there is a sense of evolving potential for long-term, sustained Australian research-in-practice to energise learning space designing. As noted in Chapter 4 'School library stories', learning space designing research related to school libraries has not been a high priority concern for researchers in the profession or in the wider zone of educational space designing.

CHAPTER 6: GATHERING *small stories*: research design and ways of telling

Introduction

The study investigates the potential for multiple voices of experience, of educators, designers/architects, education facility planners and students, to exert creative influence on the designing of school libraries. It is proposed that the school library is a social and cultural entity within the social and cultural context of school life against the backdrop of social and cultural expectations of wider society. Thus the study is concerned with '*social action taking place within sites and locales that are influenced by social systems'* (Carspecken, 1996, p. 38). It is suggested that school library designing is a social interaction of concern to those influenced by its practices and outcomes – particularly educators and students – as well as those with professionally accredited roles in the processes of school library designing – designers/architects and education facility planners.

The inclusion of students as participants in the research allows for voices often unrepresented as contributors to educational space designing projects or as contributors cited in the literature on the designing of learning spaces. Particular attention is given to understandings about learners and learning, to understandings about school libraries, and to the impact of these understandings on designing approaches and designing relationships within the educational, technological and socio-cultural contexts of school libraries.

The study is concerned with the understandings, activities and influences of the study participants as told through the *small stories* of their engagements with school libraries (Sen, 2004; Georgakoupolos, 2007). The study is located within the field of qualitative inquiry in recognition of the participant-focused, social nature of the research, its exploration of human interests and actions and the potential for participant agency in designing processes (Denzin & Lincoln, 2003; Janesick, 2003). A critical qualitative research methodology supported by ethnographic methods and data gathering techniques such as semi-structured interviews, has been brought to bear on the development of the research questions and on the formulation of interview processes, in order to investigate aspects of human meaning relevant to the study and to achieve the research objectives (Yanow & Schwartz-Shea, 2006, p. 3).

Methodology and research design

The study takes a critical ethnographic approach in order to move beyond descriptive, interpretive renditions to a position of identifying, proposing and evaluating opportunities for the creative influence of participants on the designing of school libraries. While the study is not a traditional ethnography, Wilson's (1984) view of the classical ethnographer provides some inspiration for the project:

> Ethnographers seek to construct descriptions of total phenomena within their various contexts, and to generate from these descriptions the complex interrelationships of causes and consequences that affect human behaviour and belief about the phenomena (Wilson, cited in Goetz & LeCompte, 1984, p. 3)

Ethnographic, participant-observer research strategies have facilitated the exploration of the contexts, understandings, values, sources of influence and actions of those participating in the study (Denzin, 2000). These phenomena have been addressed and investigated in real-world settings with emphasis on the complex of dynamics among the sources, relationships and consequences impacting on participant understandings and actions in relation to school library designing.

In the field of qualitative enquiry, an ethnographic account can be evaluated by the extent to which the reader is able to see the cultural picture that was seen by the researcher (Glesne, 2006). The participant-observer role is described by Pader (2006, p. 163) as the 'fine art of hanging-out', communicated so that readers of the study are able to recognise and appreciate the knowledges which have contributed to the study, such as local knowledge, expert knowledge and the researcher's knowledge meeting the reader's own knowledge. The art of managing such a balance in a qualitative study can be evaluated as evidence of a well developed 'ethnographic sensibility' (Pader, 2006, p. 163).

Among the criteria for evaluation of critical qualitative enquiry is its capacity to emancipate and empower (Seale, 2004). While the study is not engaged with extreme political oppression, it is ethnographic in its intention to write about people and a range of their socio-cultural activities – specifically in the designing of school libraries – from an emic, or insider perspective. In particular, the study seeks to *question the often unquestioned* with respect to *voices of user experience,* of educators and students who are most often absent as participants in education facility designing projects. The study addresses the wider

context within which processes and practices of designing take place and engages with factors influencing user absence or participation.

Noteworthy aspects of a critical ethnographic approach include maintaining flexibility in the pre-entry phase with respect to planning for data gathering and the formulation and reformulation of interview processes. Sensitivity to contexts, individuals and groups is required as participant perspectives are sought through interviews and recorded in researcher observations, and in the selection and review of relevant documents. Consistent with an ethnographic approach is the capacity to be comfortable with change and emergence as the study progresses. For example the openness of the semi-structured interview statements invites participants to select and express those aspects of most significance to them in relation to the study (Glesne, 2006; Yanow & Schwartz-Shea, 2006). Pre-conditions and protocols of the semi-structured interviews are detailed in Appendix D.

The research has adopted a critical interpretive stance to examine and understand the practices of school library designing through the diverse language and multiple meanings of the study participants, *the voices of user and designer experience*. The study has engaged with perspectives from critical theory to examine the power issues associated with pertinent aspects of education, culture, society and governance related to the circumstances of school library designing. The critical theorist asks *'Who and what is valued here?' 'Who is included, who is excluded?'* (Popkewitz & Fendler, 1999). By taking an interrogative stance to critique school library designing participants, processes and practices, the study challenges assumptions of school library spaces as containers for objects, subjects and selected events, examines how these spaces are socially constructed and considers the ways in which the exercise of power is visible in the design and designing of these spaces.

Interpretive theories assume 'emergent multiple realities' (Charmaz, 2006, p. 314). Interpretive approaches in data analysis prioritise the study phenomena, give precedence to connections and allow for uncertainty rather than looking for causal relationships or seeking linear cumulative logic. The researcher enters into and is affected by the worlds and experiences of participants aiming to understand the participants' implied meanings and seeking to build a conceptual analysis of them. Thus the data and the interpretive processes reflect the mutual constructions and shared experiences of the participants and the researcher, providing 'an interpretive portrayal of the studied worlds' (Charmaz, 2003, p. 314).

Interpretive practice engages both the *hows* and *whats* of social reality; it is centred on how people construct their experiences and their worlds and in the configurations of meaning and institutional life that inform and shape their reality-constituting activities (Gubrium & Holstein, 2003, p. 215).

Research questions

The research question frames school libraries as spaces and places of significance for those who have an investment in their use and in their designing: *How can the voices of user and designer experience influence creatively the processes of school library designing?* The question draws on the perspective that 'all occupations engaged in converting actual to preferred situations are concerned with design' (Schon, 1983, p. 77).   The research question implies that there are capacities for collaborative action through the *voices of user and designer experience* - educators, designer/architects, education facility planners and students.

Contemplating the key research question prompts contributing questions about how school libraries are understood by those with an interest in their use and designing and with the kinds of learners and learning imagined in designing activity. Questions also surface about who exerts influence on school library designing, about what agendas are fulfilled through designing roles and processes and about how design participants are influenced in their approaches to designing. Beyond these exploratory questions are those which create prospects for the ways in which the study might identify creative possibilities and propose opportunities for *creative influence* (Harvey, 1996) via the voices of experience in the study. These questions form the foundation of the study objectives, which are to:

- Investigate understandings of school libraries, learners and learning across participant groups with an interest in school library designing;
- Critically analyse framing contexts, influences on and participation in the designing of school libraries;
- Identify opportunities for, and approaches to, creative influence on school library designing.

Study sites and participants

The study has been undertaken in school library designing contexts with participants drawn from associated communities of educators, students, designers/architects and education facility planners.   The school contexts are: **Greenock College**, a Catholic system school located in an outer Brisbane suburb opened in 2002, with students between Preschool and Year 12; **St Mary's**, a Catholic system school, established in the 1940s in inner suburban Brisbane, which enrols students between Preschool and Year 7; and **Harrison Secondary College**, a non-government secondary school, located in suburban Brisbane, established in the 1910s, currently enrolling students between Years 8 and 12 and with a prospect of a middle school from Year 5. A fourth school was involved in the project only to the extent of two early planning phase meetings: **Fordyce College**, a non-government school located in inner suburban Brisbane, was established in the 1920s, and enrols students between Years 8 and 12.

The school sites were selected as representative of education sites with library building projects undertaken prior to and during the period of the data gathering for the study (2002-2006). The Greenock College Library (2004 – 2006) is a purpose-built school library facility which has been constructed as a 3-phase project in conjunction with a master-planned approach to the designing and building of the facilities of the new school campus. Between 2002 and 2004 the Greenock library operated in a two classroom space pending the construction of a school library in Stage 2 of the project 2004-2006. The Stage 2 school library was further extended in Stage 3 of the building program. The school library is mentioned in the original Educational Design Brief for Greenock College and a section of this document forms part of the project data.

The St Mary's primary school library is a re-designed facility (2003) combining an earlier version of the library with spaces previously used for other purposes and with the addition of newly constructed spaces. Harrison Secondary College library (2005) is a purpose-built school library in a multi-level building. In the cases of St Mary's and Harrison Secondary College a Reference Group was convened to engage with the process of designing the new or re-designed library facility. Reference Group membership was drawn from among school staff: administrators, teachers, teacher-librarians, and from among project staff: education facility planners, designers/architects, business managers and school system consultants.

Fordyce College commenced planning in 2006 to re-locate the school library in an alternative site at the school and a Reference Committee was formed to develop an Education Brief for the project. Membership comprised the Deputy School Administrator, two teachers including the teacher-librarian and two designer/architects. Researcher participation in the study was limited to two meetings of this group at which observation notes were taken on the planning discussion.

A Pilot Study assisted in developing the investigative processes for the study, including refinement of semi-structured interview protocols. Appendix D Preconditions and Procedures provides a detailed account of the semi-structured interview statement design and interview procedures. Participants in the semi-structured interviews for the study were volunteer groups and individual teachers and school administrators from Greenock College, St Mary's Primary School and Harrison Secondary College along with student participants enrolled in these schools. A separate group of educators were teacher-librarians, dual qualified members and associates of the professional association, the School Library Association of Queensland (SLAQ) which is affiliated with the Australian School Library Association (ASLA), who responded to an open invitation through the professional association to participate in the project. Some of the teacher-librarians had participated previously in designing activity associated with new or refurbished school libraries and the remainder of the teacher-librarian participants were engaged in what might be called *quotidian designing* – the often daily adjustment of school library spaces to accommodate learning activities and needs.

The education facility planner participants were employees of either Catholic school system entities or Independent schools. Two (2) of the three (3) facility planners had been involved in built space projects including school libraries, and one (1) was a school business manager. Designer/architect participants were principals and/or directors of architectural practices, independently engaged by school systems but not direct employees of the school systems. Each of the designer/architects had been involved in education facility designing for more than 10 years and the architectural companies for which they designed included education facility designing as one focus of their specialist services. Five (5) of the six (6) designer/architect and education facility planner participants were members of the Council of Education Facility Planners International (CEFPI).

All participants were volunteers who responded to open invitations to participate in the project. On this basis the selection of participants was limited to the issuing of project information and the invitation to participate by the researcher, and to accepting the participation responses of school principals on behalf of students and school staff, and from individual teacher-librarians, designers/architects and education facility planners. In reviewing the participant offers I noted that the spread of student groups allowed for a range of student participation between Year 5 and Year 11.

I noted also that educator participants who volunteered for the study ranged between teachers of Year 3 students in the primary school to teachers at the upper secondary level. These volunteers were in a gender balance of one (1) male to between three (3) and four (4) females which is broadly similar to the gender balance of the teaching profession in primary and secondary schools in Australia (DEEWR, 2007). The designers/architects and education facility planners across the pilot study and the formal research project were in the balance of one (1) female to six (6) males. Matters of gender balance may be a dimension for future research in the field of educational space designing, and this is raised in Chapter 11 *A Conversation with the situation.*

Table 6.1: Interview and observation schedule, on the following pages, records sites and groups with participant numbers.

Table 6.1: Interview and observation schedule

Table Interview Groups	*Participants*	*Schedule*
Pilot Study	Pilot Educators (2) Teacher-Librarians (2) Pilot Students (2) Designer/Architect (1)	**May-June 2005** Adult participants 60 m Student Participants 30-45 m Semi structured interviews [Audio-record, transcribed]
Educators: Greenock, St Mary's, Harrison	Teachers (14) (self-nominated)	Oct 2005-June 2007 Semi structured intervs 60 m [Audio-record, transcribed]

Aust School Library Assoc	Teacher-Librarians 1. Group of 2 2. Group of 3 By invitation to professional association (SLAQ). Invitation and information circulated by email	Oct 2005-June 2006 Semi structured interv 90 m [Audio-record, transcribed]
Primary students: Greenock, St Mary's	Year 4-7 (12 students)	Oct 2005-June 2006 Semi structured interv 30-45 m [Audio-record, transcribed]
Secondary students: Greenock, Harrison	Year 10-12 (12 students)	Oct 2005-June 2007 Semi structured interv 45m [Audio-record, transcribed]
Education Facility Planners	Education facility planners (3) By invitation to members of the professional association (CEFPI) and by direct approach	**Oct 2005-June 2006** Semi structured interv 90 m [Audio-record, transcribed]
Designers/Architects	Designers/architects (3) By invitation through professional association (CEFPI) and by direct approach	Oct 2005-June 2006 Semi structured interv 60 + m [Audio-record, transcribed]
Observations	*Participants*	*Schedule*
Field Notes Fordyce College 2 x Reference Committee Mtgs	Facility planners, educators, designers/architects	***Oct 2005-June 2006***

Conference Field Notes ASLA Online I 2004: *Constructing communities of learning and literacy* ASLA Online III 2008: *Under construction a world without walls*	Teacher-librarian educators in online forum discussions Participants approached to request permission to retain sections of their'blog' discussion	2004 & 2008
Council of Education Facility Planners Int (Australasia) Conferences; Perth 2001 Brisbane 2003; Adelaide 2006 Melbourne 2008; Darwin 2009	Facility planners, educators, designers/architects Notations by the researcher related to topics, conference program trends and the Australian Government *Building the Education Revolution* initiative.	2001 to 2008

The selection of educators, students, designers/architects and education facility planners as study participants involved those with both long and short term investment in the designing of school libraries. It could be said that the participants represent two sets of encounters in relation to school library learning spaces. Research sources and my experiences with school library designing initiatives suggest that while educators and students are highly involved as quotidian/daily users of school libraries, they customarily have little involvement in the foundation designing of school library built space projects. On the other hand, designers/architects and education facility planners have little involvement as daily users of the school library but are highly involved in the foundation designing and construction of school library buildings (Radcliffe, Wilson, Powell & Tibbetts, 2008).

Thus, in relation to school library designing and recalling the designations applied by Lawson (2001) and Day & Parnell (2003), educators and students could be described as experienced users of school libraries and vernacular or novice designers, whereas designer/architects and education facility planners could be described as vernacular or novice users of school libraries and experienced/accredited designers. Through the semi-

structured interviews, participants were invited to draw on both the 'experienced' and 'vernacular' dimensions of their experiences and engagement with school libraries.

Beyond the intensity of their designing or project management involvement designers/architects and education facility planners do not customarily experience school libraries as sites for their working and living so that the consequences of their designing decisions remain largely invisible to them. Although post-occupancy evaluations may raise matters of concern, such activity appears to be regarded as after-the-fact and as lessons for future designing projects rather than as aspects to adjust or re-design responsiely in an existing facility.

Data gathering methods

The most significant body of data has been gathered in a dialogic form through *semi structured interviews* with participant groups. Supporting data was gathered as *field observation notes* made in conference forums and reference group meetings and retained with the permission of participants. Supplementary data for reference in the data analysis discussion are drawn from the Education Brief documentation developed for Greenock College which outlines the school's mission, vision and education statements.

Semi structured interviews: inviting the *small stories*

Semi structured interviews were selected as a participant data gathering technique in order to invite responses which were most directly connected to the participants' understandings, experiences and influences. The open invitation to speak offered through the semi-structured interview focus statements aimed to encourage the use of language natural to participants. The circumstance of the semi-structured interview provided an opportunity for more time to be spent in dialogue between the researcher and the participants. This feature had the potential to establish a more equal status between participants and researcher and to foster in-depth connections of interest and investment in the project (Glesne, 2006).

Although I considered that the semi-structured interview offered a forum for open discussion, Carspecken (1996) cautions that the focused attention and interest of the researcher may influence participants to speak in ways which differ from the ways they speak in their ordinary lives. Semi-structured interviews offer opportunities for equal status

engagement, however there are also limitations to this method in the potential for some participants to dominate discussion, for participants to choose to be listeners rather than speakers and for the interviews to be lengthy as a result of participant digressions from the interview statement focus. Each of these elements was evident to some degree in the semi-structured interviews for the study. Strategies to alleviate the effects of participant hesitancy or dominance and to refocus discussions are outlined in the following discussion. [Patton re semi-structured interviews]

The semi-structured interview statement was expressed as follows:

In relation to the research project I am interested in what you understand about school libraries and in how you imagine learners and their activities in relation to school libraries. I am also interested in how you see your role as a designer of learning spaces, for example school libraries, and in the experiences and influences you call upon as a designer of learning spaces.

Consistent with a critical approach, the interview statements pursued a *how does* character of inquiry, in order to explore *why should* implications (Kincheloe & McLaren, 1994). The semi-structured interview statements were developed and refined during a set of pilot interviews with educators, students, and a designer/architect. The educator and student pilot study was undertaken in conjunction with a review of library services in a school not included in the project and an architect was interviewed to trial the interview questions for the designers/architects and education facility planners. Data from the pilot study is not included in the final study.

Across the participant groups the data clustered broadly into the focal points of the semi-structured interview statements. However, in addition to the points concerned with understandings about libraries, learners and learning and those points concerned with designing approaches, processes and influences, several of the educator discussions expanded to include detailed exemplars (examples of built spaces) and scenarios (specific designing activity) related to *designing outcomes*. Aspects raised were concerned with material features of the built spaces in which educators undertook their work, such as libraries, classrooms and other aspects of school sites and facilities.

The focus on designing outcomes with accompanying illustrative scenarios was most prolific and specific in the interviews with educators and students. While some commentary on designing outcomes emerged in the data from the designer/architect and

education facility planner interviews, many of these exemplars and scenarios were offered from the broad scope of their work in education sites rather than related to specific school library examples.

Table 6.2 on the following page, provides an overview of semi-structured interview data of designer / architects and education facility planners related to the focal points of the study with the added participant focus on designing outcomes.

Table 6.2: Participant data focus example

Participants	Libraries	Learners & Learning	Designing processes	Designing Influences	Designing outcomes
Designers Architects					
A [Director]	Beliefs/Philosophy Practices	Beliefs/Philosophy Practices	Status Quo Practices, Relationships SQ Partnerships, Scenarios, Process & collab proposals	Personal philosophy & experiences	Exemplars from work experience
B [Director]	Exemplars from experience	Personal experiences, anecdotes	Status Quo Practices, Relationships SQ Partnerships, Scenarios, Process & collab proposals	Personal philosophy & experiences	Status quo practices
C [Director]	Exemplars from experience	Personal experiences anecdotes	Status quo practices Designing preferences SQ Partnerships	Personal philosophy & experiences	Status quo practices
Ed Facility Planners	**Libraries**	**Learners & Learning**	**Designing processes**	**Designing influences**	**Designing outcomes**
#1 Educator	Beliefs/Philosophy, Experiences, Practices, Examples/Scenarios, Reflection, Evaluation, Advocacy	Beliefs/Philosophy, Practices Experiences, Examples/Scenarios, Evaluation	School System focus, Status Quo practices, Report, Reflection	Beliefs/Philosophy Practices, Exemplars, Research	School System focus, SQ evaluation
#2 Project Mgr	Observations, School focus Limited libraries discussion	Beliefs/Philosophy Observations, Experiences	School System focus, SQ practices	Experiences, Research, Observation	Status quo practices, Innovation example
#3 Business Manager	Disclaimed capacity to comment	Disclaimed capacity to comment on either learners or learning	Status quo project Problem examples Project schedule	Status quo project	Design features focus, Design problem examples

Observation data

Two categories of observation data are part of the written record of the research. Observation data were gathered in conjunction with the activities of a Reference Committee and in conference forum discussions, in person and online. The Fordyce College Reference Committee data are in the form of handwritten field notes taken during two meetings at which I attended as an observer but did not participate. This committee was given responsibility for the development of educational brief documentation for the

planning and designing of the library. The Fordyce Reference Committee met during the months leading up to the finalising of building and funding approvals. The work of the committee was observed during discussion contributing to the development of the education brief, noting the character and process of planning and designing interactions, and indicators of understandings about learners, learning and school libraries which emerged through the discussion.

The observation notes relate to the conceptualising of the school library rather than to technical matters of physical construction, although some links made to the relationship between the two are recorded. Observation data from the Fordyce Reference Committee meetings are recorded in the same study-focused categories as the semi-structured interviews: understandings about school libraries, learners and learning, designing approaches, designing relationships and designing influences, but leaving open the potential for other categories to emerge during the observations and later in the data analysis. An Educational Design Brief document from one of the school sites forms part of the data, providing a record in more formal language and structure of matters discussed in Reference Committee meetings.

Data analysis methods

Dialogic data gathered in semi-structured interviews formed the bulk of the project data. Data in observations and field notes were integrated into the analytical discussion at points where these formed intersections of enhanced meaning, discord, clarification or challenge with semi-structured interview data. Documentary sources reviewed in the literature chapters are woven into the analytical discussion at relevant points. Samples of data analysis phases are offered in Tables 6.3 and 6.4 in this chapter and in Appendix L: Data analysis notation sample, which is a working document linking the initial data coding phase with CDA prompts.

Data analysis processes for semi-structured interview data were undertaken in two phases. Firstly, Charmaz's (2003; 2006) coding method for grounded theory analysis developed data categories in *actions, perspectives,* and *events,* according to the emphases of interview participants on the areas of interest to the study of libraries, learners, learning, and designing. The coded data were grouped into these areas of interest foci in preparation for the analytical discussion. Secondly, critical discourse analysis (CDA) provided an analytical

framework to work with the data to examine the relationships between participants' language and practices, and related social dimensions of school library designing. This approach is premised on CDA as 'analysis of the dialectical relationships between semiosis (including language) and other elements of social practices' (Fairclough, 2001a, p. 123).

The analytical discussion has aimed to maintain the integrity of the data in relation to participant groups as sources of diverse understandings and examples of practices. For example, data were coded within the original transcripts and categorised and analysed within the original interview groupings (students, educators, designers/architects, education facility planners). In order to maintain the diversity of individual and group discussion these data are integrated only at the point of the analytical discussion. Individual participant contributions are preserved, and quotes in the analytical discussion can be identified and traced to the transcripts in Appendices. The analytical discussion foregrounds the key questions of the study which have informed all aspects of literature review, the formulation of the semi-structured interview statements and the compilation of observation notes across the time span of the study.

Data analysis processes: Charmaz's coding method

The seventeen (17) semi-structured interviews conducted across the participant groups generated a large amount of data. The interviews were audio-taped and fully transcribed in order to preserve access to the scope and richness of the discussions and to maintain the data in their contexts. For this project, 'designing' in relation to the evaluation and selection of data analysis methods has involved decisions about managing the bulk of the data in order to maintain closeness to the data in all stages of the analysis and into the analytical discussion.

The data were coded in phases. Data analysis began using the *initial*, *in vivo* and *focused* coding phases as preparatory analytical stages in order to work with the data leading into the critical discourse analysis (CDA) and discussion (Charmaz, 2003; 2006). Tables 6.3 and 6.4 following exemplify these coding phases.

As a first analytical step the *initial coding* phase named segments of the data in terms of *actions, perspectives and events* (Charmaz, 2006), in order to preserve these particular elements, which correspond to elements in the research questions. The codes emerged from the data to allow the 'assigning [of] analytical handles' (Charmaz, 2006, p. 43), naming segments of the data in order to categorise, summarise and account for each piece. Coding

was applied using participle verb-forms to reflect what the participants were doing in the statements, for example *defining, explaining, exemplifying*. This phase enabled the identification of apparent assumptions, implicit actions and meanings and provided an opportunity to make analytical sense of material which may challenge taken-for-granted understandings (Charmaz, 2006, p. 54).

Examining participant statements for *in vivo* references involved noting participant language for symbolic markers of meaning particular to their own experiences. *In vivo* references are those terms which signal condensed meanings such as colloquialisms, innovative terms which portray specific experience and specialised insider language of concepts peculiar to professional groups. While these terms are not stand alone categories, they may serve to reflect assumptions and to assume that particular meanings are shared. This step in the coding enables the participant statements to be examined for implicit meanings and for the language to be problematised rather than simply repeated (Charmaz, 2006, p. 55).

The *focused coding* phase enabled the most frequent earlier codes to be noted for their potential to provide cohesive focus points across the data from the participant groups. The most frequently occurring earlier codes were identified in order to decide which codes made the most incisive and complete analytic sense. This phase was helpful in identifying 'moments of significance' (Charmaz, 2006, p. 56) and to select quotes for incorporation and examination in the analytical discussion.

Table 6.3: Coding phases

Initial coding (Educators)	In vivo codes: participants specialised language	Focused Coding
Defining /Characterising - school libraries - learning / learners - designing - influences	*Information literacy* *Information fluency* *Information process*	**Representing** - school libraries - learning / learners - designing - influences
Explaining **Exemplifying** **Proposing** - meanings - processes - responses **Examining**	*Just-in-time learning* *Anywhere anytime learning* *Lifelong learning*	**Valuing / Theorising** - meanings - processes - responses **Advocating** **Substantiating**

| - perspectives
- actions
- roles

Questioning

Rationalising
- practices
- understandings

Illustrating
- events
- scenarios
- positive / neg | *Snowboarding*

Big 6

Guided Enquiry

Knowledge Workers

Half-life of information

Learning Styles

Middle schooling | - perspectives
- actions
- roles

Evaluating
- processes
- understandings
Analysing

Reflecting
-anticipate
-predict
-forecast

Narrating
- events
- scenarios
- positive / negative |

Table 6.4 exemplifies the initial coding and focused coding of statements in one of the educator interviews.

Table 6.4: Initial and focused coding: educators

Original Transcript	Initial Coding	Focused Coding
Interview GE1 Transcript 11 P: Principal TL: Teacher-Librarian (TL) I'm probably biased but I think they should be central to all the learning and teaching that takes place in the school. I think that they should reflect the values, the missions the vision of the school community and their prime, probably their prime role is to support student learning and I guess teacher facilitation about student learning. I see them as a place of community not, not, not the right of any particular group, a place for everyone. Do you want to elaborate while I think some more? (P)I think it's central to the whole enterprise we've got I think it's more than, it's more than functionality. It's about for me, a statement of what you believe about learning in the community and I use the word community broadly because I think it's bigger than you know, students and staff and I see that happens at this place, so I think how, what you put in	**Perspectives, Actions, Events** **Ascribing / assigning** symbolic, metaphoric meanings to school libraries. **Justifying** perspectives **Proposing** school libraries as a place for everyone **– equity places** **Proposing/Defining** school libraries as entities with cultural, social, personal, community dimensions and functions.	**Beliefs, Philosophy, Vision** **Multiple dimensions** **Equity assumptions** **Beliefs, Philosophy, Vision** *Figurative language* *central, statement,* *learning 'enterprise'* *marketplace* **Conceptual focus** **Substantiating - perspectives** *'things we discover*

| place, how you design it, what happens here is a good reflection of what the overriding approach to learning is in a particular place. Yeah, I just believe that it's one of those, this is, like in many ways the school should be designed around it because of the fact that so much of the whole learning enterprise relates to not just what's there or who's there, or the interactions that happen with learning so it's like the marketplace of the school. | **Proposing/Defining** school libraries as symbols, representing, exemplifying the school's belief system and practices.

Conceptualising | *and make in the world' (Grosz, 2000)*

School libraries as entities or 'things'

(Grosz, 2000)

Educators constructed images & perceptions of school libraries through their use of ...metaphors which signal the position, character, qualities, purpose... |

The initial coding process shadowed Fairclough's CDA analysis framework, based on Bhaskar's *explanatory critique*, at the point of seeking to identify what there is in the participant interview text, what the text is drawing on, *what's the problem and for whom is it a problem?* and how is it spoken about (Chouliaraki & Fairclough, 1999; Wodak & Meyer, 2009). My stance in the coding phases was to remain open and closely in touch with the data, moving through the data, coding for actions, perspectives and events, identifying tacit assumptions, gaps and implied meanings as these emerged through the data (Charmaz, 2006, p. 47).

In the first instance, samples of categorisation and analysis were undertaken manually to evaluate its effectiveness and to consider the appropriateness of using NVIVO software to develop an enhanced systematic relationship among categories of data. The scope of the data and the expression and language of multiple participants supported my decision to continue with the manual processes. Undertaking multiple passes through the data in the coding phases worked to establish the 'quality' in the qualitative research design and data analysis processes which are foregrounded by writers such as Carspecken (1996); Kvale (2002); Denzin & Lincoln (2003); and Seale (2004) and which are discussed later in this chapter.

Data analysis processes: critical discourse analysis (CDA)

 The study used data gathered through participant interviews and observations. These face-to-face sources and documentary sites, or 'moments of discourse' (Fairclough, 1999, p. 28) are acknowledged as likely locales of reference to participant experiences, social, cultural and technological contexts. In addition these discourse moments sit within accompanying economic imperatives, assumptions about learners, pedagogic priorities, characteristics of valued knowledge, and implicit or explicit approaches to the designing of the learning spaces of 'school libraries'. The research did not undertake fine grained analyses of these texts, but sought to uncover who speaks, by what authority, what can be spoken about, and how it is spoken about in such texts. To this end critical discourse analysis (CDA) was employed for its potential to facilitate the examination of data from these diverse sources as examples of the 'habitualised ways, tied to particular times and places, in which people apply resources (material or symbolic) to act together in the world' (Fairclough, 1999, p. 21; Fairclough, 2001a).

Fairclough (2001a) situates critical discourse analysis (CDA) within the critical social sciences, and particularly within research in the social sciences in late modern society. 'Late modernity' (Chouliaraki & Fairclough, 1999) is a pertinent descriptor for the temporal scope of the study which makes reference to 'school libraries' from the 1970s to the present time of the study, albeit recognising contemporary libraries' connections with their historical antecedents. The focus, the objectives and the key questions of the study correspond with the motivations of the critical social sciences: 'awareness of what is, how it has come to be, and what it might become [,] on the basis of which people may be able to make and remake their lives' (Calhoun, as cited in Chouliaraki & Fairclough, 1999, p. 5).

The processes associated with the designing of 'school libraries' could be described as habitualised sets of social, cultural and everyday life practices which emerge from understandings about libraries, learners and learning, schools and schooling, and which converge in arenas influenced by Government and school system processes, standards and authority. These junctures are further complicated by the participants' understandings about who is accorded with the knowledge about and the responsibility for designing. In Fairclough's (Fairclough, 1999, p. 21) terms such practices and moments of practice are 'constituted through social life … and involve configurations of diverse elements of life … and diverse mechanisms'. Thus the disparate experiences and understandings of the study

participants and the influences on them, articulate with their semiotic resources and uses of language to coalesce the social moments of designing.

However, Fairclough (1999) emphasises that descriptive accounts of these aspects are insufficient for a rich understanding of the dialectical relationship among them, or of the ways in which such interactions produce the social world. Fairclough (2001a, pp. 212 - 228) contends that meaning is generated through and represented in the co-presence of particular combinations of *genres*, or ways of acting in a discourse aspect e.g. meeting or interview; *discourses*, or ways of representing the world which become shaped and shared and gain relative stability over time; and *styles*, ways of being or social and personal identities.

In the manner of Rogers (2003), and in relation to this study, I have used CDA with an ethnographic approach to accommodate contexts, texts and participants in order to appreciate more fully the character and configuration of the social practices of designing *school libraries* (Wodak & Meyer, 2001, p. 3). Rogers (2003, p. 147) exemplifies the capacity for CDA to deal with 'moments of tension' and to 'permit surprises' and agency as part of a process of using language and discourse to describe, interpret, and explain social practices and conditions and subsequently to influence them. In this sense CDA has potential as an analytical tool to guide clarification of the practices and representations of designing with 'relative explanatory power and contribution to meeting needs' (Fairclough, 1999, p. 35).

In choosing CDA as an analytical approach I have found Henderson's (2005b) evaluation of CDA helpful in foregrounding the relative value and the relative concerns about CDA as an approach. My understanding that Fairclough's version of CDA has been based on the overlapping connections between language, social practice and socio-cultural context in order to challenge taken-for granted assumptions, has supported the choice of CDA as a worthwhile approach for the study.

 However CDA has not been without its critics. In using the *explanatory critique* framework outlined in this chapter, I am conscious that aspects of the theoretical positioning of CDA have been challenged, for example by Widdowson (1998, also cited in Henderson, 2005a, p.21) who has asserted that CDA picks and chooses among theoretical positions in an *ad hoc* approach. Henderson (2005a) points to Chouliaraki and Fairclough's (1999) idea of theory as social practice, influenced by networks of social practices, and therefore

malleable and open to change, to support the use of multiple theories in the implementation of CDA (Henderson, 2005a, p. 27).

Henderson (2005a, pp. 26-27) also notes that matters of power in CDA have evolved from Marxist positions of overt social oppression to more discursive constructions of power through language, social practice and social conditions. These renditions of power and potential for influence in relation to this project relate to the implication in the study focus and the key research question, that educators, architects/designers, education facility planners and student learners have the potential to influence, to act together in endeavours of school library designing. To the extent that acting together implies talking together, dialogue has the prospect of creating opportunities for the expression of diversity – not obscuring or silencing difference, but rather seeking partnerships towards 'a voice in-common on particular issues' related to particular contexts (Fairclough, 1999, p. 6).

Fairclough (2001a) develops an analytical framework for CDA based on Roy Bhaskar's concept of *explanatory critique* (Bhaskar, cited in Fairclough 2001a, p. 125; Chouliaraki & Fairclough, 1999), and this framework guides the data analysis. This problem-based methodology includes both relational and dialectical elements. In addition to, *'negative critique, in the sense of diagnosis of the problem'*, the framework incorporates 'positive critique, in the sense of identifying hitherto unrealised possibilities in the way things are for tackling the problem' (Fairclough, 2001a, p. 125).

Fairclough develops and explains the explanatory critique framework in a number of texts (Chouliaraki & Fairclough, 1999; Fairclough, 2001a; Fairclough 2003). The analytical framework used in this study is therefore part of the evolving and developing of CDA as a method, through extending its application to texts and theorising of discourse in new areas and new foci (Chouliaraki and Fairclough, 1999). The explanation of the framework, the inclusion of text samples and the integration of the framework elements provides both support and flexibility for the application of the framework to the ethnographic approach taken in this study.

Chouliaraki and Fairclough (1999) exemplify the potential in the interdependent capacities of CDA and ethnographic approaches. The systematic field-work presence of the researcher throughout an ethnographic data gathering processes can contribute:

> the kind of knowledge that CDA often extrapolates from text, that is knowledge
> about the different moments of social practice: its material aspects (for example its

locational arrangements in space), its social relationships and processes, as well as the beliefs, values and desires of its participants. Ethnography can illuminate multiple aspects of a practice, both synchronically (at the time of the study) and historically.

(Chouliaraki & Fairclough, 1999, pp. 61-62)

Explanatory critique is used in this study as a framework to work towards deeper understandings of school library designing *as a social problem with a semiotic aspect* through the analysis of data gathered in interviews, observations and documents. The analysis has examined the circumstances and obstacles related to the problem being tackled, and considered what might be, with respect to the functioning of the problem in sustaining existing social arrangements. The analysis has incorporated positive critique in terms of possible ways to address the obstacles and taken opportunities to reflect critically on the effectiveness of the analysis (Fairclough, 2001a, p.125).

The following discussion applies the explanatory critique framework to the circumstances of the study. This exemplifies the ways in which the aspects of the framework have been used with the texts and practices of school library designing, to examine understandings, language and relationships, to critique status quo issues and obstacles, to propose possibilities for addressing issues and to reflect on the analysis undertaken through the framework.

With regard to *the social problem with a semiotic aspect*, the semi-structured interviews invited a focus on *what is* in relation to the *problem*, (fore-grounded by the researcher), of the processes of school library designing, including the silencing of voices of the primary users of school libraries, students, educators and the communities of schools. These data enabled an investigation of participants' expressed understandings and experiences of libraries, learners and learning, and their perceived influences on designing. The scope of participant discussion in the semi-structured interviews created a bank of data which allowed me to examine the 'social action (of school library designing) taking place within social sites and locales (school libraries, schools, school systems) that are influenced by social systems' (education policy, administrative, funding and accountability conditions), and to consider prospects for creative influence (Carspecken, 1996, p. 38).

The analysis phase concerned with *the obstacles to the problem being tackled*, considered *what is* in relation to the participants' semi-structured interview renditions of the problem

through the network(s) of practices within which school library designing is undertaken. Practices are understood as the 'habitualised ways, tied to particular times and places, in which people apply resources (material and symbolic) to act together in the world' (Chouliaraki & Fairclough, 1999, p. 21).

In respect of this study, the practices of school library designing, 'the specific, occasioned, social goings-on' (Chouliaraki & Fairclough, 1999, p. 61), are constituted predominantly within a complex network of structures, processes and practices: for example, national political, social and economic; education; school system; school community and designing/architecture. The analytical discussion examined the semi-structured interview statements for indicators of the ways in which the participants' language operated to construct material activity, social relations and processes and to articulate mental phenomena of understandings, values and desires as well as noting the discourse perspectives within which aspects of participants' realities were expressed.

For example, participant statements using figurative language about libraries, particularly metaphor and image, revealed traces and cues to their systems of representation and evaluative classification (expressive values). Figurative language and its implications were explored in Chapter 2 because of its wide use in the literature about libraries. Study participants used figurative language in diverse ways to signal representations and agency. Cues to participants' understandings of social relationships (relational values) could be seen, for example in the use of euphemisms, personal relational references and in their selection and mix of formal and informal language use. Cues to participants' experiences (experiential values) could be seen in their language related to processes, participants and agency (Fairclough, 2001a, pp 96-105).

The analysis was also concerned with the social order which maintains the problem and considered whether and how the problematic aspects in focus had a particular function in the practice, for example in sustaining particular relations of power. Chouliaraki & Fairclough (1999) note that this phase marks a shift in the analysis from *is* to *ought*, from explanation of the practices which result in the problem to evaluation of the problem in terms of the 'reproductive effects discourses can have cumulatively on social structures – sustaining or changing them' (Fairclough, 2001a, p. 134). Focus points in this phase include critiquing those systems and processes which cause problematic effects (Chouliaraki & Fairclough, 1999; Fairclough, 2001a).

The analysis considered ways to address the obstacles and the possibilities for change, even within current structural/organisational conditions, and with reference to the key and contributing questions and objectives of the study. The objective of this analytical stage was to consider potential impetus to mount a challenge to taken-for-granted practices, to discern resources for change and to examine the possibilities within systems made versatile through openness to alternatives (Chouliaraki & Fairclough, 1999). As noted earlier, the focus, objectives and key questions of the study and the reach for opportunities of creative possibility and creative influence through the study corresponds with motivations of the critical social sciences: "awareness of what is, how it has become [,] on the basis of which people may be able to make and remake their lives (Calhoun in Fairclough, 1999, p. 4).

The effectiveness of the analysis hinges in part on the overall implementation of data gathering methods, the selection of analysis processes and transcription, the maintenance of data records and the organising of transcript quotes for access via the analytical discussions. In this study for example, participant data transcripts are coded, and speakers are identified individually by work-role for adult participants and by Year level for student participants. Thus the participant statements are traceable from the analytical discussion to the verbatim statement transcripts in Appendices.

In evaluating and reflecting on the data analysis through the framework of Bhaskar's *explanatory critique* as outlined by Fairclough (2001b), it is acknowledged that as a researcher I am both participant and observer in the field of education, which could be described as an *insider* position. In this respect the contexts and language of education, educators and students are broadly familiar for me; much more familiar than some aspects of the contexts and language of designers/architects and education facility planners. Thus while I have aspired, designed and implemented the study to exhibit the thoroughness and craftsmanship commended by Kvale (2002), in order to maintain the quality of the analysis in terms of processes, the CDA analysis and discussions may be more limited in working with the semi-structured interview data of the design professionals.

The selection of analysis approaches using Charmaz's (2003; 2006) coding method with CDA processes and analysis, have worked to respect the participant data and permit balanced commentary. These processes have enabled me to identify possibility, potential and opportunities for creative influence through the *voices of experience* and thus to exercise both 'negative critique, in the sense of diagnosis of the problem' and 'positive

critique, in the sense of identifying hitherto unrealised possibilities in the way things are for tackling the problem' (Fairclough, 2001a, p. 125).

In summary, the explanatory critique framework, has enabled the analytical discussion to proceed in phases of description, interpretation and explanation, to examine understandings, language and relationships, and to critique status quo issues and obstacles. In each of the analysis chapters the analytical discussion moves to positive critique with respect to creative possibilities for addressing the issues raised, to identify resources for creative influence, and to examine the potential within systems for openness to alternatives. Some of these creative possibilities are further developed in Chapter 11 'A conversation with the situation'.'The dialogic data are examined in most detail, with the inclusion of field notes where these coincide with matters raised in the semi-structured interviews.

Trustworthiness: craftsmanship and quality

How might a research account be trustworthy? If it can be considered that an account of a research project extends to the totality of the work then facets and issues of trustworthiness could be said to permeate the project. Early in this project I encountered the work of Kvale (2002) who promotes attention to craftsmanship as a hallmark of quality research. Craftsmanship is seen as integral to the trustworthiness of the reported research and the consequent respect accorded to the credibility of the researcher.

Seale (2004, p. 380) points to a balance in the integrity and exercise of the craft of qualitative research between inner dialogue stimulated by philosophy, social theory and methodology in selecting and developing research strategies, and the outer dialogue through which the study is being communicated. Quality craftsmanship in practices of research is relevant to all stages of the study rather than simply as a checking procedure for rigour and dependability at the end on a project.

 In studies using ethnographic approaches issues of rigour can be addressed through prolonged researcher engagement in the field, the use of a variety of data gathering methods and *'disciplined subjectivity'* in data analysis across the phases of the research (Burns, 2000, p. 419). Other techniques to support researcher claims of quality and rigour include peer debriefing focused on the researcher's field notes and appropriately timed member checks wherein study participants engage with the researcher's records of events

(Carspecken, 1996). Exposure to the circumstances of school library designing in my own practice and working with field practitioners in architecture and education has provided a prolonged lead in to this project for me. Data gathering in semi-structured interviews and field observations has been conducted over a number of years as the study has unfolded, and enabled informal member check discussions with the Principals and Teacher Librarians at Greenock, Harrison and St Mary's during the period of study and in informal discussions with some of the designers / architects and education facility planners. Data from the study have not been discussed in any openly published form to this point.

Applying Kvale's (2002, pp. 299-326) concept of *quality craftsmanship* to this project implies paying attention to thematizing, designing, interviewing, transcribing, analysing, verifying and reporting. In the early stages of the research consideration was given to the development of the research questions, recognition of the assumptions within them and making links to theoretical positions *(thematizing.)* As noted in preceding chapters the work of Grosz (2001) and the selection of an appropriate research design and methods was linked to an explanation of the purpose, context and hopes of the research. Design craftsmanship includes detailed description of data gathering methods and the development of statements for the semi structured interviews which emerged from the research objectives and the key and sub-questions. As the project proceeded, the quality of the interviewing and the designation of categories of interest to the participants were subjected to questioning and re-evaluation.

The experience of the pilot study enabled the re-evaluation of the semi-structured interview statements across the participant groups. An example of this re-evaluation is the decision to order the interview statement differently for each of the groups according to the participants' areas of experience. This change was made in order to create a sense of ease for participants on entering the discussion while still maintaining the key foci of the study.

Quality in *transcribing* interviews implies the need for the selection of an appropriate linguistic style to carry the translation from spoken to written records (Kvale, 2002). Verbatim records and a low-inference vocabulary (introductory levels of meaning) have been used in order to avoid forms of expression which are overtly normative-evaluative or subjective-referenced (Guba and Lincoln, 1994; Carspecken 1996). The verbatim records are carried into the data analysis through the unedited statements and language of the participants which are used in the data analysis discussions and are traceable to the

statements in Data Transcript Appendices. Data analysis began with the use of Charmaz's (2003; 2006) grounded theory coding phases and was developed using Bhaskar's critical discourse analysis framework of explanatory critique (CDA) (Fairclough, 2001a; 2003). Particular attention was given to the appropriateness of these methods and to the questions applied to the data through Fairclough's framework and the logic of interpretations (Kvale, 2002).

Aspects of *verifying* and *reporting* are relevant to and addressed through the research participant communities. The research objectives and key research question name those with the potential to influence creatively the processes and practices of school library designing and consequently the designing outcomes. It is with these participants in mind that the research report is developed and to those in the wider education, design/architecture and education facility planning communities that the research report is directed.

Ethics

Ethical considerations are relevant across the design and conduct of the study. Kvale (2002, pp. 299-326) notes that in ethical terms the authenticity and 'validity of a research design relates to the value of the knowledge produced to the human condition'. The potential for this aspect to be addressed is outlined in Chapter 1: Significance of the Study and in the literature review chapters. Specific ethics considerations related to the conduct of the study have been made via the Queensland University of Technology Research Ethics Committee and these aspects are raised in the following discussion.

At the outset of the project, the schools selected for the study were familiar to me through my work as a school library consultant and academic. I acknowledge that my previous employment in Brisbane Catholic Education may have influenced the preparedness of schools to participate in the study. At the time of the selection of the schools, application and approval procedures for conducting research in Education Department (Queensland) schools were changing. Previous experience with these processes indicated that application timelines were likely to be more protracted than those required by the Independent school sector. Thus, in order to maintain the timeliness of the study my familiarity with independent school systems and more straightforward access to school sites and participants informed my choice to proceed with the selection of schools from the independent school sector. As noted in Chapter 1, the schools were selected on the basis of

having undertaken a new or redesigned school library building project during the period immediately prior to the study or concurrent with the study.

I approached the Director of Brisbane Catholic Education in writing for permission to conduct research in the Brisbane Catholic School System sites. I was referred to the customary processes for researchers, which entailed communicating directly with school system Principals to request permission to undertake the research in the selected schools. In the case of the independent schools Harrison Secondary School and Fordyce College, the school Principals were approached directly by letter and followed-up by telephone to invite their participation and to seek permission to undertake the research.

Ethical clearance was granted for the research project in November 2003 by the Queensland University of Technology Research Ethics Committee. The ethical clearance acknowledged that there were no unnecessary risks to research participants. Information samples submitted with the ethical clearance application demonstrated that sufficient information would be offered in order that participants would be able to make informed decisions about their participation in the study.

Participation in the study has been voluntary and by invitation to participants through their school administration representative, with the professional association or directly with participants through my local knowledge of school library building projects. The selection of participant groups is based on my experience and understanding that there is significant interest and investment in school library designing from the educators, designers-architects, and education facility planners. Students are included in the study as the often silent or overlooked voices, deeply impacted by educational policy, practices, and in this case school libraries, but rarely included as direct voices in research related to the designing of school libraries (Marshall & Rossmann, 1999; Hay, 2005).

As part of the Queensland University of Technology (QUT) Ethical Clearance requirements, written information about the nature and purpose of the research was provided initially to Brisbane Catholic Education and subsequently to the Principals of the selected schools. Letters of support were received from the schools with their agreement to participate in the project. This agreement was contingent on individual teachers and students agreeing to participate as members of semi-structured interview groups. Teachers received individual information and agreement/consent forms for signature at the time of the interviews.

These are retained by the researcher/interviewer and examples are provided in Appendices.

An information and agreement/consent form for student participation in the project was prepared for both parents and students. On the advice of the QUT Ethics Committee, students were invited to receive information about the project and to give their signed consent to participate. The school principals were asked to assist with a student/parent distribution process according to school policy and procedures of each school site. Students who agreed to participate in the semi-structured interview groups received an oral explanation and individual information and agreement/consent forms which were signed in the presence of the supervising teacher and retained by the researcher/interviewer.

To ensure that adult participants, (educators, designers/architects, education facility planners and parents and teachers on behalf of students), were fully informed, the distributed information included an outline of the nature and purpose of the research. The semi-structured interview explanation outlined group membership constitution and the planned duration of semi-structured interviews. Participants were informed that their identity and data would be confidential and that transcribed data and early draft research reports would be used in member checks as appropriate to the project. Student semi-structured interviews with student participants were conducted by the researcher in company with the teacher-librarian in each case. Document samples pertinent to the ethical conduct of the research, such as correspondence to invite and establish the project and participant permission forms are in Appendices.

Summary

Methodology and methods for the study have been selected to enable the fulfilment of the research objectives. An ethnographic approach has supported the purpose of the study to explore the qualitative dimensions of school library designing through the *small stories* of participants' understandings about libraries, learners and learning and the practices and influences on designing in relation to school libraries (Sen, 2004; Georgakopoulu, 2007).

A critical interpretive stance engaging with perspectives from critical theory has assisted the examination of the power issues emanating from the dynamic among aspects such as education, culture, society and governance in relation to school library designing. In adopting a critical interpretive stance, the purpose has been to identify gaps and silences in

the processes of school library designing and to identify the opportunities for creative influence through the voices of experience of participants such as educators, students, designers/architects and education facility planners.

This chapter has linked the purposes, methodology and methods with the analytical processes of the study as a bridge into the reporting of findings and the analytical discussion which is undertaken in the following chapters. The rationale for selection and use of analytical tools has been explained in order to link the initial and focused data coding with the potential of CDA as *explanatory critique* (Fairclough, 2001a).

CHAPTER 7: EDUCATORS' *small stories*

Introduction

Data from semi-structured interviews and field observations are included in the analytical discussion in this chapter. Educator participants in the semi-structured interviews for the study were individuals and groups of teachers and school administrators from Greenock College, St Mary's and Harrison Secondary College. Two groups of teacher-librarians were interviewed. An overview of participants is in Chapter 6 'Gathering small stories', Table 6.1.

One (1) educator was interviewed individually and the remainder were interviewed in groups of between two (2) and four (4) participants. New or re-designed school libraries were part of the direct recent experiences of ten (10) of the educators interviewed and the remaining participants were familiar with one or more of these new school libraries through visits to the completed sites. One of the Principals and three (3) of the teacher-librarians had participated in new library facility projects in previous schools.

As noted in Chapter 6 'Gathering small stories: research design and ways of telling', and detailed in Appendix B3, educators were invited to discuss aspects raised in the semi-structured interview statement:

> *In relation to the research project I am interested in what you understand about school libraries and in how you imagine learners and their activities in relation to school libraries. I am also interested in how you see your role as a designer of learning spaces and in the experiences and influences you call upon as a designer of learning spaces.*

The statement elements were ordered so that the discussion opened with the participants' area of experience. However, to maintain consistency across the analytical discussion, each of the analysis chapters is ordered commencing with the focus on libraries, learners and learning, followed by the designing focus. During the interviews and subsequently in the analysis phase, it became clear that educators in particular commented at length on designing outcomes, so that this category has been added in the analytical discussion.

Table 7.1 below indicates the focus and emphasis given by the educators in the semi-structured interviews. Throughout the interviews educators assumed the integration of the study elements of *school libraries* and that of *learners and learning*. I considered that

separating these elements in the analytical discussion could limit the impact of their interrelatedness as expressed by the participants. Thus the educators' analytical discussion deals with these elements together within the first segment of the literature review. Educators discussed these elements in terms of beliefs, philosophy and vision; experiences and relationships; through renditions and examples of practices, and in reflections on the relationships between research and practice.

Table 7.1 Educators' data focus: libraries, learners and learning

Educators	Libraries	Learners & Learning
Teacher-Librarians	Beliefs/Philosophy, Vision, Experiences, Research Practices, Examples/Scenarios	Beliefs/Philosophy, Experiences, Research Practices, Examples/Scenarios
Principals	Beliefs/Philosophy, Experiences, Research Practices, Examples/Scenarios	Beliefs/Philosophy, Experiences, Research Practices, Examples/Scenarios
Teachers	Beliefs/Philosophy, Experiences, Research Practices, Examples/Scenarios	Beliefs/Philosophy, Experiences, Research Practices, Examples/Scenarios

To facilitate the flow of the discussion, participants' direct quotes are in *italics* and participant codes (GE1, ME etc) are located at the end of sentences or paragraphs to reference data transcripts in Appendices (DVD Transcript Record).

Participant data codes related to the educator groups are:

> GE1: Greenock College [Principal and Teacher-Librarian];
>
> GE2: Greenock College [Year-level teachers];
>
> ME: St Mary's Primary School [Deputy Principal and Teacher-Librarian];
>
> HP: Harrison College [Principal]
>
> ATL: Teacher-Librarians (Group 1)
>
> BTL: Teacher-Librarians (Group 2)

Libraries learners and learning

The following analytical discussion introduces participants' understandings and experiences of school libraries, learners and learning as expressed in the semi structured interviews, in reference group observations and conference forums. Educators represented school libraries as complex, evolving, cultural, social and pedagogical entities, shaped by changing

technologies of information and communication, integrating changing pedagogical practices through research. Educators constructed the material activity of school libraries through the learning lives of students and the forming of students' identities as learners.

Educators merged their understandings of libraries' equity obligations with students' opportunities for freedom and choice, and with aspects of supervision and surveillance.

The discussion addresses the dialogic data related to these dimensions in some detail using the CDA *explanatory critique framework* explained in Chapter 6 (Fairclough, 2001a). Data in field notes is incorporated where these coincide with matters raised in the semi-structured interviews. The analytical discussion unfolds in phases of description, interpretation and explanation to examine the relationships between participants' language and practices, and related social dimensions of school library designing. This approach is premised on CDA as 'analysis of the dialectical relationships between semiosis (including language) and other elements of social practices' (Fairclough, 2001a, p. 123). The analytical discussion moves to positive critique with respect to venturing creative possibilities for addressing the issues raised by the educators, to identify resources for creative influence and to consider the potential within systems and relationships for openness to alternatives.

Multiple and interdependent dimensions

As synergies of culture, practices, relationships, information and technologies, school libraries assumed particular significance for those educators who also chose to represent them as conceptual and material, meaning-making entities which exemplified a school's belief system and practices. In an interchange between the Greenock school Principal and the teacher-librarian, school libraries were represented and positioned as pivotal *central* entities symbolising sets of values about learning and teaching.

Cues to the significance of school libraries were represented in the figurative, symbolic-conceptual representations of the school library as a *statement of beliefs about learning* and a *reflection of values, mission and vision*, and as such was conveyed as an embodiment of community ideals. These representations took on direct, relational, experiential and evaluative attachment in declarations of *I believe, I think,* and *(i)t's how we are*. Further implications of personal experience and agency were conveyed in *I see what happens in this place,* whereby the speaker positions him/herself as a witness to expressions of learning through the library in its physical form, because *how you design it* reflected the *overriding approach to learning in the school* (GE1).

Evaluative statements that school libraries *should* be central and *should* reflect values, mission and vision, and in the conviction conveyed in the emphasis, *that's how central it is*, emphasises the educator's commitment to these representations and projects the current and future significance of school libraries more broadly. The proposition that *the school should be designed around it* (the library) inferred both physical and conceptual centrality (GE1).

The use of figurative linguistic expressions in commerce-commodity and economic metaphors of *enterprise* and *marketplace* exemplified and extended the meaning of school libraries as social-relational sites of particular kinds of practice, of *interaction* and *transaction* implying perceptions of relationships between users, access by a wide group of users and signalling forms of activity and agency attributed to those who use school libraries (GE1). These renditions could be said to reference the economy and commerce metaphors found in the literature implying forms of trade and commodification associated with libraries, particularly in relation to the media and processes of information and learning. One teacher-librarian made the direct connection that, *(f)or me learning involves information and information is the currency of libraries* (ATL).

A conceptual-symbolic focus also featured in the Fordyce Reference Group discussion about a proposed project to relocate and refurbish a school library in an existing building. The participants elaborated their personal experiential, relational and evaluative statements using particular figurative language descriptors and images to represent and explain the desired qualities of the school library to be incorporated in the built-space-project.

> *Three concepts: ideas of marketplace, bridge and neighbourhood.*
>
> *Marketplace: everybody's place, learning commons, intranet bazaar, showcase, community.*
>
> *Bridge: learning links, outreach, mentoring, real-life engagement, community*
>
> *Neighbourhood: cultural hub, service, community.*
>
> (Observation Notes 2007 Fordyce)

Metaphors of *marketplace, bridge* and *neighbourhood* were associated with dimensions of human activity and ideas of community interaction to produce an impression of a school library as a dynamic, people-focused entity with reach and influence, open to all-comers, with capacities to gather, engage and foster people and their relationships. The association

of *marketplace* with *learning commons* and *intranet bazaar* projects the locale of the school library beyond physical placement into digital-online spaces and virtual worlds, consistent with the continuing focus on digital and online information access and experiences across educational settings which are pursued in the professional literature (ASLA/ALIA, 1993; 2001; 2010; Lonsdale, 2003; O'Connell & Groom, 2010).

Aspects of *culture* and relationships to *neighbourhood* and *community* and ideas of extended influence were also raised in the educator interviews in which the library as *cultural hub,* provided a site, a kind of common ground, for *both educational and school community* events (BTL). *Celebrating the learning*, extended the experiences of student learning to learning as performance in the spaces of the library, drawing in parents and members of the wider community as witnesses to the *learning taking place* (ME). Through these shared activities of observation and witness the school library as *meeting place* and *marketplace* was reinforced.

One of the teacher-librarians offered a perspective on the potential agency and influence of school libraries on particular practices of student learning, proposing that these would carry forward to students' future learning, in university libraries for example. The notion that *this will culturalise you to the possibilities and expectations in those libraries and what they will expect of you as learners*, implied a belief in the potentially powerful effects of school-based experiences to induct students into proficient practices of information access, use and generation, so that they will develop capacities to navigate and negotiate *other libraries* in terms of both *possibilities and expectations* (BTL)*.*

In these respects the educators' statements inferred that the school library acted as a catalyst for and a conduit between students' current and future learning experiences, mediated by educators and information processes. These cultural practice perspectives referenced discourses of education and learning through the educators' *invivo* language (Charmaz, 2006) of *lifelong learning* and *information literacy*.

References to schools' learning philosophies were made across the educator groups, and connected to multiple dimensions of social relations and practices, in ideas of libraries as cultural, social, intellectual, personal, community, and equity sites for people, their diverse relationships and activities. Matters of relationship and community were expanded with figurative language, restatement, contrast and comparison to produce both complexity and clarification in conveying the educator's understandings about school libraries.

The facility is the partner, a partner in teaching and learning, linked the generic place descriptor of *facility* to that of *partner,* so that the status of the school library was personified and enhanced to the level of 'colleague'. This status was further emphasised in the restatement of *partner in teaching and learning*. Outcomes of partnering were made specific through activities of *accessing information*, *designing and creating* wherein the school library was represented as both *source* and *tool*. These relational and evaluative statements suggest creative agency on the part of the inferred 'others' in the partnership, taking advantage of what is available to them through school libraries (ME).

Transformative influences of a school's beliefs about learning on the creation of school library spaces, emerged in the relational connections made between the *school's philosophy of total learner development,* as a purposeful foundation for a school library which was *designed with the development of learners in mind,* and with an extended scope of *extra curriculum and community overlaid.* These interdependent aspects were expressed in the transforming ideal of *a community of learners* (BTL)*.*

Discourses of *learning communities* draw on the work of Lave and Wenger (1993), and have gained wide currency in the literature concerned with collaborative approaches to education pedagogy and practice and with the continuing discourses of libraries and their involvement in learning (ASLA/ALIA, 1993; 2001; 2010b). These connections are further strengthened by the intense collaborative character of socially oriented digital and online worlds which demand high degrees of engagement and are increasingly promoted in the school library literature as 'new' and sometimes 'ideal' sites for learning communities (O'Connell & Groom, 2010).

Educators' perspectives about the multiple interdependent dimensions of school libraries reflected predominant foci of the research and literature wherein school libraries are represented as learner and learning centred sites, sources and resources, as catalysts for collaborative learning and teaching endeavour and are embodied as facilitators of learner capacities in the accessing, processing and creating of information in response to learning and inquiry purposes (ASLA/ALIA, 2001, 2010; Lonsdale, 2003; Todd, 2010).

Change, change effects and technologies

Educators across the groups appeared to present and represent school libraries as evolving entities, such that change was anticipated as a characteristic or taken for granted dimension. Change influences were associated predominately with evolving technologies of

information and communication. The introduction of the terminology *resource centre* (GE1) to identify the school library signalled the re-naming phenomena attached to aspects of change, as discussed in the Chapter 4 'School library stories'.

The language used by educators to convey perceptions of change exemplified many variations of change terminology and meaning/implication. Versions of change emerged in actions of *growing, adapting, responding, customising, creating* and *learning* which suggested flow and malleability in the dynamic of practices associated with school libraries. For one of the Principals, aspects of change were constituted in an observed *shift*, a *marked change*, which resulted in a perceived transformation in the rendition of the school library through digital technologies which exerted influence on *the ways we work*, *even the library's resources* and in the ways in which the library was *regarded in the school*. These statements conveyed a potentially transformative synergy of people, practices, materials and perceptions with no clear 'start-point' but producing key effects in and through *relationships, education and leadership* (HP).

Influences of digital, online, information and social media technologies were pervasive in the educators' discussions. These influences rendered school libraries as sites of contestation in terms of their ongoing relevance in schools. One teacher librarian was prompted to *rethink that, because as a TL I have been challenged here by the teachers, because we have laptops in classrooms and the internet and mobile technologies, what's the point of a library* (ME).

Changing pedagogical approaches, and information access also cast doubts on *(t)he idea of the library as place* which, *starts to get more shady too because the learning can be taking place anywhere and not restricted to a particular site as in the library so again the delivery needs to be flexible, anywhere it needs to happen* (ATL). This sense of a precarious position for the library as a place was juxtaposed in the same conversation, with the example of a school library *space* which continued *functioning* but which had *become obsolete,* suggesting a significant mismatch between the current space and the technological and other demands on school libraries in changing circumstances (ATL).

Changes in information media, distribution and access were evaluated as carrying deeper more empowering meanings than students simply *being able to access information online*. Students were represented as active agents, creatively *customising information for their learning, making connections* and participating in *being part of the world wide web of*

information and learning, as taken-for-granted aspects of learning in contemporary times (HP).

For one educator, the technologies of information and communication exerted change which was *rapid* and *dramatic*. This demanded a response *to learn so much more particularly about ICTs and not be such a digital refugee, I won't be a digital native – but at least try, and the library is a catalyst for that.* In this example, the library was a means to continue learning with the technologies of information and communication in attempts to address a perceived *digital refugee* status (ME). It can be noted that descriptors of *digital native* and *digital refugee* draw on discourses of education and technology which contrast those of us positioned as 'born into' the technologies and mind-frames of a digital, online social media world, with those who have encountered this version of the technological world at times beyond their primary or secondary schooling (Prensky, 2001).

The personal reflection and exhortation: *but at least try,* is mirrored in the literature about the 'ever changing landscape of education and technology', to urge educators that 'without question teachers owe it to their students to *keep up'* (O'Connell & Groom, p. v & p. 6), as if referring to teachers as recalcitrant or unwilling participants in the process. Even where *digital native* is used alone to refer to students learning in digital-technology-saturated environments, the inference is of a dichotomy, of *digital refugee* as a troublesome underside to *digital native* status. The statement captured a sense of this educator's personal need to keep pace with technological change*,* eventhough it was argued, *coming from the 80's* meant that *I won't be a digital native.* The rationale proffered here was to the potential for the school library to be a catalyst for learning not only for student learners but for educators in coming to terms with learning with and through digital online tools (ME).

In responding to the uncertainties, tensions and challenges created by technologies of information and communication, educators' proposed solutions which included radical transformations involving a need *to rethink* or *get rid of* earlier or existing paradigms or versions of philosophy, policy and practice. Re-naming roles and re-naming libraries in the light of changed responsibilities were justified as ways of correcting perceived mis-understandings of colleagues/others. *We really need to re-think that, to leap over that and I'm not quite sure what the terminology should be but, so get rid of the word services, because people just view you as a lending service and not much more than that* (ATL)*.* Evaluating the potential of proposed changes in terminology implied generating different

ways of thinking or operating, or of disposing or abandoning in order to produce changed perceptions or practices.

Such versions of the school library being re-thought and re-worked call to mind *those thing(s) with history and identity, made and remade; the thing(s) we discover and make in the world* (Grosz, 2001, p. 171). In these respects the educators' discussion reflected the focus on change, change motivations, influences and effects discussed through themes of learning in changing information media environments. These change foci are current in the school library literature and involve variations of re-thinking (O'Connell & Groom, 2010), re-conceptualising (Kaptizke & Bruce, 2006), and re-branding (Hay, 2010). The discussion also referenced themes of convergence and transformation in the literature about libraries more broadly (Boaden & Clement, 2009).

Equity assumption and potential

Matters of equity as an aspect of school libraries were represented through references to an array of physical-spatial, social-spatial, intellectual and emotional qualities and values dimensions. In many statements educators expressed these dimensions variously as statements of fact, belief, practice, right and justice which intimated firmly held views related to their experiential and relational activity and their observations of engaging with school libraries with students or on their own behalf. In some statements educators' school library philosophy and practices emerged through their evaluative and reflective commentary.

References to school libraries as *everybody's place, accessible by everyone* with *teaching and learning space being available to all students* (ME) and with *access they don't get anywhere else* (ATL), suggested open flows of relationships associated with the physical-spatial and intellectual dimensions of a 'place' which is available to all-comers engaged in diverse human activities. These statements invested school libraries with porous and permeable qualities, inferring multiple entry points for users. This contrasts with some of the student data (Chapter 8), which indicated that, for some users, such unproblematic access was not their experience. In some instances the educator statements may be more an expression of an ideal of equitable access rather than a fully realised, demonstrable condition, particularly if the power in libraries' s*ystems of opening and closing,* and the influence of the entry-ticket condition of information literacy for users of libraries is taken into account (Foucault, 1997a).

The totalising effects exerted on school library users through descriptors such as *everybody, every child, all* and *they,* implied that the skills to access information resources through libraries, both physically and intellectually, were assumed within the capacities of users and in concepts of school libraries as sites of freedom, choice and belonging, *(b)ecause this is everybody's place, you know there's no sense of not belonging* (GE1).

> *Because of our range of learners, we get a few that are happy to sit down with picture story books, and yeah there doesn't seem to be the stigma attached. Whereas if you're in the classroom you know obviously they're going to cop some flak for it from other children* (GE2).

In this example, ideas and value dimensions of equity extended to the potential for diverse and un-stigmatised expressions of 'being' by students and the inference that the school library site was able to include and enable student agency with respect to an individual's own being and choosing (GE1).

The connections made between matters of equity, 'rights' and dimensions of social justice represented equity as an *issue.* Access to the spaces of the library was formulated as *an idea of justice for students* to be extended *to our parents and our wider community*. This statement suggested that such views and practices represented a change in an earlier status quo, and extended the idea of access to a broader group. Such a change in beliefs and practices was represented in the proactive advocacy for *taking that up to our parents and our wider community*, which was held in tension by the tentative check on this understanding, *Isn't there a role for a library to offer that now as well?* as if the speaker was seeking a response to this suggested approach (ME).

Using the above analysis these aspects take on a more complex character than those discussed by Cleveland (2009, pp. 60) who contends that, rather than being concerned with diverse learning needs, equity matters in education discourse are more likely to be addressed in association with non-discriminatory practices related to ethnicity or with religious and socio-economic circumstances. For the educators in this study, the scope of equity matters to support learning needs could be said to hinge on a combination of in-common characteristics of student identities as well as those which consider student diversity. Characteristics such as their student-ness – *everybody, every child, everyone* – were particularised in the participant discussions through recognition of diverse, individual learning needs and connected with 'right' or social justice dimensions of equity. These

dimensions were exemplified, in access to information sources for formal learning needs, reading and recreational choices, resource advocacy for learning and teaching and equitable access to spaces of school libraries according to students' learning needs and preferences. The *range of learners* mentioned in the earlier picture story book scenario is a case in point.

Learner identities: attributes, capacities, futures

Educators discussed learner attributes in statements of beliefs, values, and desires which were attached to the perspectives, actions and events of their experience. These statements reflected current discourses of education and were connected with the foci of recent literature on learners, learning and school libraries (ASLA/ALIA, 2006).

Learner identities emerged through renditions of *lifelong learners, knowledge workers, self directed learners* and more broadly *readers and thinkers, and problem solvers* which are frequently associated with the broader classification of *21st century learners* and are terms used widely in the literature of learning, teaching and pedagogical practice. One of the study participants drew conscious attention to the use of *knowledge workers* as a *metaphor for the twenty first century* to represent what it means to be a learner in contemporary times (ATL).

Positioning of *the learner at the centre of the process* indicated the conscious placement of focus on the singular form of *learner,* signalling a concern for the individuality and by inference the diversity of learners to be considered (ME). Reference to *the learner* in this statement is consistent with constructivist perspectives and practices wherein learners are considered to construct their own paths to learning, knowledge and potentially wisdom thorough processes of active engagement in learning experiences and consequent reflection on these. These aspired ideals for individual learners were also pursued in *promoting the idea and potential of the self-directed learner* and in prioritising opportunities for *students to have their own learning style* facilitated through a *library as an interactive place, a place for engagement* (HP)*.*

The educators' discussions expressed an amalgam of experiential knowledge, social-relational values and evaluative principles in the comments on learner diversity. The attributes and needs of particular learners and consideration for particular groups of learners were conveyed through references to *what we know about our students*. Some students were represented as *a bit tribal* and *in some ways are the disenfranchised kids.*

The *tribal* status was clarified as *not derogatory* but as characteristic of a need for social connection with a group and *having space, being able to spread out,* a circumstance made possible in the school library (GE1).

Differing student needs were exemplified in contrasting the physical configuration of a *desk setting* in the library at *some schools,* which would be considered to be inappropriate in others, for example *you wouldn't think of doing that here.* These statements expressed a dialectic relationship of flow and influence in relation to school libraries in physical sites, where student identities and attributes were used consciously by educators to shape the spaces and practices of the school library, and where the integrated school library and ancillary support spaces shaped the students' *connection which happens with the library* (GE1)*.*

School system and school level policy documentation are consequent sites for expressions of learner identities and for the use of figurative classifications such as *lifelong learners, knowledge workers, self directed learners* and *21st century learners*. These expressive terms are used in the literature to encapsulate the identities of contemporary learners who are seen to be in need of different or transformed learning experiences and strategies in order to negotiate the anticipated changing and challenging worlds of the present and the future. Such descriptors form a type of genre chain of figurative language used education documentation, reused in system and school policies and adopted by educators in the expressions of their beliefs and practices (Fairclough, 2001a).

In addition, and pertinent to this study, these terms indicate those matters of interest and research focus associated with national and international professional school library associations. Closer to the sites of practices used in this study, the terminology is also found in professional journal articles and policy documents such as Standards of Professional Excellence for Teacher-Librarians (ASLA/ALIA, 2006) which are used as guidelines to the policies and practices of Australian school libraries.

Learning and teaching: processes, pedagogies and research

The pedagogical significance of school libraries emerged in statements which cited the implementation of a valued pedagogical *model of inquiry learning* in the library as an *approach* (that) *could be transferred – and hopefully will be – to the kinds of learning that happens in classrooms* (HP). Dimensions of significance and influence were features of discussions which positioned the school library as an indispensable space for learning,

complimenting classroom spaces because *learning is just so big for kids today* and *the classroom is not big enough* (ME)*.*

Educators used the 'invivo' language (Charmaz, 2006) of education theory, practice and the literature to convey their familiarity and agency with the strategic implementation and evaluation of approaches to teaching and learning. Research connections emerged in references to learning theories and learning styles in educators' discussions, and in direct references to the perceived influence of theorists and research practitioners. *Michael Hargreaves, does that ring a bell? He said we only value what we can measure, not what we can learn. I think middle schools are starting to turn that around and some libraries already are* (ATL).

Theories of *inquiry learning, lifelong learning and learning* styles and terms such as *rich tasks* feature in the official documentation of school systems, in school policies and in professional association publications. One participant made a direct link between the descriptor *lifelong learning* and its foundation in the *system framework*, a particular policy text for guiding the planning and practices of education within a school system (ME). Again, theory and practice references in school system can be seen to be linked to texts of policy and practice within schools and texts of professional associations (Brisbane Catholic Education, 1990; 2005; Lonsdale, 2003; Todd, Kuhlthau & Heinstrom, 2005; Wall & Ryan, 2010).

Less formal, figurative language was used to make links to the literature, to expand and develop the meaning and value of specific pedagogical practices. Educators explained the strategic value in managing the use of digital and online information to foster *'just in time learning rather than just in case learning',* and the value of *snowboarding* (ATL), as an 'invivo' (Charmaz, 2006) reference to education theory about learning in which learners move from a strategic start-point (the known) to develop new knowledge or experience (the unknown).

Educators evaluated *pedagogy changes* such as *guided enquiry* and trends *towards independent learning and group learning* as influential on the ways school libraries were used by students, and on the designing of school library spaces. This created *demand* to accommodate individual and small group activity (BTL). However one teacher-librarian drew attention to the potential mismatch between innovative practices used in school library programs and the inferred status quo or business-as-usual practices of other

educators. This mismatch was perceived to engender a sense of *threat,* representing the school library as a site of potential pedagogical contestation (ATL).

The school library and its personnel were positioned as agents for learning through *(t)he sorts of pedagogies, the rich tasks that they're doing demand such a wide range of information gathering and delivery* . The contingent influences on the efficacy of student learning, was seen to hinge on the investment of resources, *time and effort and opportunities,* to enable teacher-librarians to *play a role* in *shaping that experience of information seeking and push it through to learning* . Creative agency was also conveyed in references to the transformative effects of *all of the research about the brain and how people learn that we have come to understand. It has actually changed our whole notion.* In this discussion the extent of research influence was exemplified in the implementation of *an active learning strategy from the brain conference* (ATL).

Spaces and places for learning

Educators conveyed their understandings about school libraries through the social relations and processes they observed in practice and the capacity of school libraries to connect learning across a school. Multiple dimensions of people and their relationships, aspects of the buildings and the dynamics of these were seen in effect, to produce school libraries through the everyday practices of users.

For some educators the influence of school libraries attached most significantly to matters of people and their relationships, *(i)t's highly relational. You can't underestimate the social value of this* (GE1). This idea was supported in an example of a school library consciously established as an outcome *of the critical thing, of what we encourage*, which inferred a philosophy or set of beliefs as a foundation influence on *how things are placed*. In this example, *relationships between people* and of *relationships between different elements within the physical building* influenced how things were *placed,* in order to achieve flows of *people moving around* and their *different ways of communicating* (GE1).

School libraries were credited with creating connections among people, particularly among learners, parents and the community in providing a place for culminating performances and demonstrations of learning, of *how it all comes together* (ME). The strength of the educators' attachment to these ideals was exemplified in statements wherein their expressive language worked to condense and epitomise: *It's the relationships of all the dynamics and, and the dynamics of all the relationships that take place,* as if these matters

had been considered and refined (GE1). The perceived agency of school libraries was expressed in the statement which connected the significant elements of *relationships, education and leadership*, with *the library as a research place in the school*, to convey a powerful synergy of the character and influence of school libraries (HP).

School libraries were evaluated as complementary learning spaces, as enhancements and as *an extension of the classroom* offering diverse space-types for the diversity of learners, learning modes, pedagogies and learning preferences, *a play-space; comfort; chat; games* (ME). Across the discussions educators appeared to conflate or collectivise ideas of space and place. In some statements, it was evident that 'space' was concerned with physical dimensions and locales, and that 'place' served to collectivise various spaces of school libraries into multi dimensional physical entities.

Spaces of classrooms were seen as constrained when compared with the more expansive possibilities of libraries. In one scenario, a Principal represented the school library as a space which exemplified the *model of learning valued in the school*, such that, *(t)he library spaces will be translated to the Middle School so that there are spaces of quiet, access, interaction, hospitality, physical ambience, independent spaces, group spaces* (HP).

The educator discussions evaluated school library spaces on their capacities to support learner-centred pedagogies and practices. Across the scope of the discussions educators cited examples of planning for these possibilities in built space projects by creating links between learners, learning, pedagogies and spaces and reflecting on the quality of a building project outcome to satisfy the pre-conceived potential for students and teachers.

Educators forecast school library space requirements in terms of *needing spaces in the design to enhance those educational opportunities and activities* which allowed for *different kinds of learning* (BTL). These were exemplified as spaces which were diversely able to accommodate *quiet, noise, energy, industry and independence,* with access to *all kinds of media,* and where there was people-expertise to support *students' developing expertise with the technologies and media* (HP)*.* Student learning in such spaces was also conveyed as *active, diverse, people-mentored and resource-supported* (ATL). The school library exemplar sites mentioned in the discussions emerged as purposefully and consciously designed, in that the educators involved linked *our students* with school philosophy and vision, *that's the way we are,* to the school library project outcomes: *and I think this building reflects that* too (GE1).

In these respects the pedagogical threads of the discussion reflected constructivist approaches to learning and teaching and represented school libraries and their learning spaces as potentially diverse, responsive and adaptable. The discussions pursued current themes in the literature and in school library policy and documentation of practices. These aspects reference discourses learning through representations such as 'lifelong learning', 'just-in-time learning' and 'mentor-supported learning', and through the educators' language of *timely intervention, rapid feedback* and *support so learners can meet the need at the moment* (ATL),(Wall & Ryan, 2010).

Freedom, choice, supervision and surveillance

The educators' discussions about space and place exemplified the value of school libraries as open and accessible sites of freedom and choice for students, with the capacity to attract students of all ages with diverse needs and desires. However these options were moderated and in tension with discussions of limitations on access and use, and with matters of surveillance. `

Openness and accessibility were exemplified in the strongly positive characterising of school libraries as *welcoming, flexible,* adaptable and *changeable*, desired by students, and as *good* places to *celebrate* learning. Flexibility and diversity was applied to the scope of students, *15 year olds and preschoolers,* who could *free range* where they desired (GE1). Students needing semi-private or non-contentious spaces were acknowledged, in that they could find *find the quiet spaces and the shells that ultimately they don't find in the playground* (ME)*.* In these terms the school library was constituted through recognized dimensions of student need and desire for privacy and a sense of safety, and built-in to school library spaces prompted by educator understandings of 'who and what is valued here' in particular school contexts.

Educators' malleable estimations of openness and accessibility conveyed an almost laissez-faire potential of coming-and-going for all. However, the expressed moderator of students *being given a little bit of independence here* (GE1), created limitations as if to emphasise that *free range* did not mean free-for-all. Similarly, the euphemistic reference to maintaining *that visual connection,* created a social-relational value, partly veiled by the educator's language of freedom, and partly revealed in an expressed need for teachers to maintain continued eye contact supervision of students (GE2).

As was noted in Chapter 3 'Story starters', and will be further noted in the students' *small stories*, there are implications for behavioural expectations and for the designing of spaces when supervision/surveillance conditions are applied. Students in schools are positioned to remain 'in view' in numbers of ways, for example: through school system and school policies and practices pertaining to student safety and supervision; through curriculum structures and assessment regimes; through adult and peer expectations of behaviour in schools; and through the coercion of spaces designed to integrate visual surveillance points for those acting to supervise. Effects of *maintaining that visual connection* remain unexamined in the educators' discussions and were not seen as discordant or problematic in relation to ideas of *being given a little bit of independence*.

Surveillance and supervision threads in the educators' discussions are also features of the literature on school library designing in which checklists and plan-view representations of spatial layouts propose and evaluate the efficacy of surveillance/supervision as an element in the design of the spaces (Erikson & Markuson, 2007). These elements can be seen to be held in tension within those discourses of education and learning which elevate learner independence and individuality via the rhetoric of constructivist approaches to learning and teaching.

These complex dimensions represented through the educators' discussions suggest challenging briefs for the designing of the learning spaces of school libraries across school contexts. Keeping these aspects in mind, the discussion moves to consider educators' *small stories* of designing.

Designing

This segment of the analytical discussion is concerned with designing processes and participants, influences on designing and outcomes of designing raised by educators in the semi-structured interviews, and supplemented by commentary from observation data from conference forums. Table 7.2 below indicates the focus and emphases given by the educators to designing dimensions in the semi-structured interviews.

Teacher-librarians and Principals discussed these dimensions in terms of beliefs, philosophy and vision; experiences and relationships; through practices and examples of practices and reflections on the relationships between research and practice. Leadership endeavours in

built space projects was evident in the varied experiences and evaluations of designing relationships between teacher-librarian educators, principals and architects.

Classroom teachers exemplified the processes, influences and outcomes of designing through scenarios of student learning and their own teaching practices in the spaces of classrooms and libraries. Overall, the educators' discussions involved reflections on experiences, a mix of evaluation and critique with respect to designing processes and advocacy for change based on those experiences and evaluations.

The analytical discussion proceeds as previously outlined, with participants' direct quotes in *italics.* Participant codes for schools and groups are explained at the beginning of the chapter. These (GE1, ME etc) are located at the end of sentences or paragraphs as references to in the data transcripts in Appendices.

Table 7.2 Educators' data focus: designing processes, influences and outcomes

Participants	Designing processes	Designing influences	Designing outcomes
Teacher-librarians	Practices, Relationships, Partnerships, Questions Reflection, Evaluation/Critique, Advocacy	Beliefs/Philosophy, Vision Experiences, Research, Practices, Exemplars Reflection, Evaluation/Critique, Advocacy	Exemplars, Scenarios Reflection, Evaluation, Advocacy
Principals	Practices Relationships Partnerships, Scenarios Reflection, Evaluation, Advocacy	Beliefs/Philosophy, Vision Experiences, Research, Practices, Exemplars Reflection, Evaluation/Critique, Advocacy	Exemplars, Scenarios Reflection, Evaluation, Advocacy
Teachers	Scenarios Anecdotes Questioning puzzlement Reflection, Evaluation, Advocacy	Questioning puzzlement Reflection, Evaluation/Critique, Advocacy	Scenarios, Anecdotes Questioning puzzlement Reflection, Evaluation, Advocacy

Designing processes

Vision and leadership

Educators discussed a number of new or re-designed school library projects as part of their recent experiences. Across these *small stories*, designing was represented in a variety of ways, involved diverse participants and participant relationships, and varied in reliance on

documentation and the monitoring of progress. In several of the designing scenarios a discourse of designing emerges as creative processes of discovery, of *unfolding* and *feeling our way* (Heath, 1989; 2010).

Matters of vision and leadership were introduced early in several of the educator discussions as ways of relating and substantiating the expression of a vision for learning with the designing of school libraries, and as ways of reflecting on and evaluating designing processes and outcomes. While *(t)he library needed to be designed with vision*, the expression of a vision in a educational plan or brief for the building of a school library was regarded as *not a once for all thing*. Architects were perceived to *have a lot to answer for in that their vision of planning quite often ends when the project is viewed to be completed*. Educators were represented as *carrying the vision on* while architects were perceived not see beyond the *delivery of the building* (ATL).

Connections were made between leadership taken in designing projects and the expression of a vision. Related to the Harrison project, the teacher-librarian emphasised the experiential-emotional dimension that, although she had *been able to articulate a vision,* there was also a sense of risk and apprehension: *it does leave you worried and frightened about who will come with you on the vision* (ATL). In a separate interview, the Harrison Principal evaluated the *good leadership by the TL and comprehensive knowledge. There was a vision. The team was with the [TL] in the vision. There was trust; trust and excitement; trust by the staff* (HP).

In the *small stories* of St Mary's Reference Group *it was a rich vision; it took time.* Pauses and reflection protracted the project in the planning stages because, *(i)nitially that vision was shared only among us* (Principal, Assistant Principal and teacher-librarian) and *some of the teachers couldn't cope with the ideas.* However, it was perceived that *what changed* the circumstance for teachers*,* was taking a *path of learning* to explore ways *the spaces (of the library) might be used differently,* and with *modeling the use of the spaces*. This pause-in-process was conveyed as a way forward so that (*e*)*verybody informed each other's vision. Everybody learned from each other.* The result was that: *the architect had to change his approach half-way through, because of the way things developed* (ME)*.*

The effectiveness of the St Mary's project was evaluated and attributed to the leadership of the Principal: *I really believe that it wouldn't have happened without [Principal],* emphasised by, *I really believe that.* The Principal was regarded as *very good at gathering*

people, particularly *experts*, (and) *at getting them together to talk and to learn from one other.* The Principal's negotiant role was substantiated as important (*b)ecause the architect had to hear how we wanted to use the space and what we had to say – so that the spaces fulfilled our needs not what he* [the architect] *thought should happen here* (ME)*.*

Articulating a vision was evaluated by one teacher-librarian as a strategic action to garner administrative support for projects: *you've got to align with the sort of, objectives and mission statement of your immediate supervisor and you've got to find out what s/he's aligned with.* This was rationalised on the basis that *if you can align aspects of the school vision, it gives you a focus too and then by default because you've linked the vision, it gives them* (administrators) *the focus and they know that everybody then is working towards that* (BTL)*.*

Highlighting relationships between learning, spaces and change emphasised that, *(w)e constantly have on our radar that it's an ever changing world for these kids,* and on that basis *we don't want to set up anything here that even five years down the track we're stuck with* (GE1)*.* This approach was clarified as being as *responsive as we can to emerging needs, the curriculum, the community* (BTL). Through their discussion educators were thus represented as being tuned-in to discourses of change, in education and in the wider world. Educators were able to evaluate influential discourses and were thus well placed to respond with respect to dimensions of learning space designing.

Material processes of designing

Educators described the processes and progress of projects, exemplifying stages, phases and conditions and linking these with particular events or dimensions of designing activity. Across the interviews the educators' discussions about designing processes were represented as diverse discursive opportunities with a range of effects. For the St Mary's educators the library re-design *went through several transitions.* Opportunities for dialogue, included *a curriculum council, a conference* and staff engagement with discussions about *pedagogies,* to produce a dovetailing effect, *so that the spaces actually came out of the thinking that everyone was doing* (ME).

Discursive opportunities in the Harrison project moved through committee stages, initially involving a number of groups, indicating participative designing activity in the early stages across a wide range of *teachers, volunteers and parents* (HP). On the architect's suggestion, *the committees were asked to make a presentation to the staff of what their educational*

philosophy was in terms of the new building and from those presentations a Building Reference Committee was selected. The initial group processes were represented as *planning and consultation moments* through which there was *a lot of dialogue and the architect listened and responded*.

Subsequent Reference Group activity led into the design-drawing activity of the architect who *came back with preliminary drawings* which *were shared and reviewed and modified and then that's it, there were no more changes* (ATL). The Harrison Principal described *focus groups and forums with teachers, volunteers and parents* and the involvement of *teachers throughout the time, who joined for particular things and I came to the occasional meeting* (HP)*.* In these discussions educators and the architect were represented as actively engaged in the discursive exchange to produce the philosophical, educational and physical dimensions of the library through discussions, documentation and consultation.

For the Greenock project the process differed in a number of respects. As the only staff member appointed prior to the building of the new P-12 school, the Principal recounted his discursive collisions and thwarted efforts to include a library in the first construction stage: *for us it was the case that 'this is the model this is the process', sort of take it or leave it.* The Principal's appointment to the school was too late to influence the overall design, *(t)here was no way we were going to get a library in the first stage.* Template planning approaches were exemplified in, *things like design briefs* being *pre-determined and I think [facility planner] had a design brief* which was used *like a list and it all just went ahead.* Agency in this case was thus hedged about by ready-made designing decisions. The template approach was evaluated in advocacy for change: *the whole, the brief, the design all of that, whoever's involved needs to see it as a partnership rather than as a client architect thing*, and further rationalised in questioning, *(w)hy would you separate it? Things get overlooked.* (GE1).

Further tensions emerged in the building stage for the Greenock school library as the *pre-determined* design and process was presented by the *facility planner.* A proposal for study carrels in the library formed a symbol of a *linear-dynamic* dichotomy between the educators' understandings of learners and learning and those of the facility planner. Although the staff rejected the study carrel option *for young students*, the facility planner, *couldn't see us building a library without them, so we have some.* Educators objections were justified in the outcome of having *two or three students sitting here by themselves*

and they're away from everything, and the decision *that's possibly as far as we will go with the, in that regimented, linear type.*

This event crystallised further designing exchanges with the facility planner, where educators attempted to prevail as they *fought that linear option hammer and tong,* trying to *make it very informal wherever we could in the school.* This approach was substantiated on the basis that *(f)ormal wouldn't work here,* because of *the nature of the kids* (GE1).

Relationships and communication

In the foregoing scenarios, the range of experiences and participant relationships, produced and implied considerable diversity in the calibre of communication, both within these experiences and in the ways educators represented the experiences in their discussions. The relational diversity of library users (including non-participants) was demonstrated, for example, in renditions of designing experiences reported variously as trust relationships, as strategic, negotiated, evolving or responsive, and as confrontational relationships. In some cases, participants' *small stories* recalled designing experiences to produce a cumulative experiential logic of purpose, strategy and evolving progress, of moving through stages of designing, rationalising and substantiating, to suggest productive outcomes. Thus experiences were classified in terms of *exploring, informing, developing, negotiating, pausing, sharing, planning* and *consulting* (ATL; HP; ME; BTL).

Where confrontation and tension characterised designing experiences, educators' more informal (invivo) language served to emphasise the potentially messy and provocative instances of designing, and to suggest circumstances of almost non-negotiable, unequal power relations, reinforced as system processes, as in the Greenock example cited earlier. Further oppositional relationships were suggested in *the client-architect thing*, which had the effect of categorising and crystallising difficulties into participant roles, and of subsuming the complexity of the relationship in the catch-all designation of *thing* (GE1).

In the Greenock project educators and students were positioned as less influential in decision-making, and subject to the perceived imposition of 'no library in stage one of the building project', and in the *linear* carrel decision. Educators' resistance was galvanised so that they *fought that linear option hammer and tong,* again without success, and subsequently expressed resigned acknowledgement of the decision as, *so now we have some.* In this rendition, educators were positioned outside designing processes through decisions made on their behalf (GE1).

Educator reflection and evaluation of non-participant effects in the St Mary's project, was argued on the basis that *it was the people who did not contribute to the vision who did not know how to use the spaces.* This prompted the question, *what does that say?* and the emphatic response of, *contribute to the vision.* An evaluative reflection of *(g)et everybody talking about it,* produced the retrospective resolve that*, (w)e should actually have gone bigger, involved everyone*, was moderated by the compensatory reflection that, *probably we harnessed the people who wanted to have input, the people who were excited* (ME).

Similarly, in the Harrison project, although many staff were involved, *(n)ot enough people made their way to it* [preliminary architectural drawings display], to appreciate the impact of some design decisions. Thus for the teacher-librarian, *the sad thing is there were key moments right throughout the planning process where people who are now being challenged had opportunity to have input and they didn't take it up* (ATL). In these discussions, educators and designers / architects were positioned variously as *inside* and *outside* designing processes, both materially and discursively.

Accredited designers were positioned as *inside* when they were involved in consultative processes which engaged educators. They were considered as *outside* or distanced from the foundation ideas about a proposed school library, either by virtue of their adherence to constraining system policies and practices, or through processes in which a negotiator occupied the discursive middle-ground between the educators and the accredited designers. The use of euphemistic terminology such as *delivering a building* (ATL) accentuates this temporality, serving to imply that this end-point for designers / architects inferred that they were not so inclined as educators to anticipate a school's future in the designing of learning spaces. Educators were seen as positioned *inside* designing processes by virtue of choices to participate in proffered opportunities for discursive contribution to decision-making, and *outside* as a consequence of decisions not to participate, or by policy and procedural structures which limited their participation *in decision-making.

Influences on designing

Interconnectedness

Sometimes you have to put yourself into the shoes of the learner (ME). Educators cited multiple and interconnected influences on the designing of school library spaces. Across the discussions a key stimulus was the dynamic of learners, learning, pedagogical

approaches, and the resources and spaces to enable learning. Influences included informing research and practices and evolving pedagogy-technology connections. In particular pedagogical practices were nominated by educators as a foundation for designing decisions.

Pedagogical influences, for example were exemplified in a library *specifically designed to support inquiry based learning and the ICTs to support that* (ME). In the Harrison circumstance, spaces for *attending to individual needs and learning styles*, meant creating diverse spaces which did not allow for *thirty students all doing the same thing at the same time* (ATL*). Active learning, investigations, self-directed activity*, and the connecting of information inquiry, technology resources and people support, was related directly to *recognising what we're doing in the learning we are establishing here and the spaces have to meet that* (ME). In these comments, the designing of learning spaces is represented as ways to change pedagogical practices for some educators, and as ways to support the existing pedagogical practices of others.

The planning starts with people in mind and that's what we kept coming back to, was how we visualised the learner and the sorts of things that they would be wanting to do, not necessarily required to do (ATL*).* These interconnected, formal and informal learning possibilities focused on learner identities were acknowledged as *difficult to cope with in a traditional sort of, what do I say, more sort of old fashioned library* (BTL).

Research

A wide scope of research sources influenced and informed educators' decisions about the kinds of spaces and conditions which would support learning, such as *(b)eing immersed in literature, educational literature about information literacy and lifelong learning*. Coming to understand that (*t*)*he library operates best when they embrace the client and for me that's been teenagers,* convinced one teacher-librarian that young people *require understanding and flexibility and compassion in some instances.* These aspects were connected to the *importance of lifelong learning* and subsequently to designing approaches *that might translate lifelong learning in a school environment* (ATL*).*

Educators referenced research and professional literature on learning, reading trends, knowledge management, technology integration and the impacts of increasing learner independence on learning space requirements. In some of the commentary, consulting formal research emerged as an ongoing activity involving detailed contemplation over time,

and pointed to the scope of matters for consideration in contemporary discourses of education. *All that research about the brain and how people learn that we have come to understand. It has actually changed our whole notion* (ME). In the Harrison project, *the TL used research to bring things to our attention, brain research, learning research, research about the effects of natural light, about colour, the list goes on. As I said sometimes the detail was overwhelming* (HP).

Site visit research constituted valuable opportunities for *listening to the research that (public libraries) have done in terms of retail and trying to translate that*. Research on adolescent health and well being added understandings about *movement,* as *one of the essential things for oxygenating the bloodstream and making the brain you know, ready for learning*. Building this possibility into the Harrison library meant providing energising sources of light and ventilation through wide doorways and open-air balconies, which also took advantage of *the view* (ATL).

Educators responded to research which challenged the designing of school library spaces in terms of their responsiveness to learners' needs and preferences. Research about student access to digital online information was cited, noting the propensity for students to believe that *everything was online they don't need to go to a library any more.* This caused educators to wonder *how come they are happy to go to Borders but they are not happy to come here [school library] for recreational reading*? The difference was rationalized as, *Borders was creating an experience, a social experience, with dimensions of the café* (ME). Similarly for the Harrison educators, the rationale for the café-space in the new library, responded to research *about why the reading drops off after students come into secondary schools*. This research was given material expression in the café-space, based on an understanding that *secondary libraries are set up as research atmosphere and spaces and don't welcome the reader – there's no display space and hard to find somewhere to read* (ATL).

However not all research was considered to have been taken seriously enough to influence some aspects. For one of the schools, the matter of building on a long established site, where historic buildings formed part of the built environment posed problems for access and movement between buildings: *the way finding that the articles talk about and connecting new buildings to old buildings and keeping the aesthetic is a challenge.* Although *we have a building that's functioning,* people have been challenged by *how do you get into*

this building, so that *there are now dilemmas being experienced by the community because of way finding* (ATL).

Evaluating influences

Classroom teachers paid particular attention to who was influential in designing activity and how those influences were observed in practice. In their discussions, these teachers implicated designers / architects in decisions about the size and configuration of spaces on the basis that: *(y)ou can tell the architects or designers actually work it out how much space one body takes up*; *how much space per child this class or this walkway, that's it, an equation*. Teachers acknowledged that formulae for spaces were tied up with funding in a similar kind of numeric calculation of, *(f)unding says this is how much we'll give you per child for your school, therefore we're restricted to that.*

The outcome perceived by one teacher was that *the architects and designers try to do the best with that space.* However in decisions to do the best with the space, the teacher suggested that architects' own views about the design of the spaces would prevail, *given that they're very much into their own design thing and putting their mark on it.* These circumstances created a puzzling emotional conundrum for one teacher: *I mean we, you feel so privileged to be in something that's so new and so wonderful and then you think, why didn't they listen to the people* (GE2)*.* Teachers were thus positioned without agency, influenced directly by policy, designing decisions and formulaic renditions of learners and spaces, made by others and about which they had not been consulted.

Teachers connected architectural designing decisions to imposed constraints on their practices, embodied in educational spaces. The coercive qualities of some spaces were seen to mis-understand students and the processes of learning, and were regarded as inconsiderate of students' and teachers' health and welfare. Contentious features such as *(g)lass from floor to ceiling, one piece of glass that hasn't got a window in it, just this big sheet of glass on the western wall,* created heat, air circulation and seating problems. The repetition of *glass* serves to emphasise a degree of amazed puzzlement about such a designing decision. This was further stressed in the potentially ironic implications of *(n)ice view of the garden but you can't go near it in the afternoons everything cooks.* The implications for this circumstance also related to the perceived further irony of the post-occupancy evaluation (POE), *part of the frustration too, is that you know, that the buildings are built – a huge dollar investment and yet there is no money for blinds.* (GE2)*.*

Internal classroom layouts and fittings were evaluated for their function in enabling learning, in their management dimensions and in matters of safety. The positioning of fans to cause light-flickering effects were matters of concern for educators on behalf of *those students who are more sensitive to little nuances like that and it can really stop them from being able to concentrate* (GE2)*.*

Display space for children's work featured in the teachers' discussions on the basis that *if you made a whole wall of corkboard for children, and let's face it that's what we're on about, to display their work*, the position of the display could be varied so that children could access it. *Not everything has to be up high, but there's this whole idea that anything below probably 1.2m is wasted*. Teachers implied that children were overlooked in not making the lower spaces available to them*: almost as though they* (designers / architects) *don't realise that children wouldn't mind if things were down there closer to them. The displays are for the children* (GE2)*.*

Educators observed that *private enterprise has come so far with setting up offices and work spaces,* which was represented as a consequential response to changes in work practices: *(o)ffices are much bigger now than they used to be because industry has changed, and teaching is changing. Learning is changing.* However one teacher considered that workplace change had not extended or translated into changes in education environments, *(b)ut they're [designers/architects] not actually thinking education's changed* (GE2). In these discussions some designing discussions were conveyed as significant influences on teachers work and student learning and as constraints on the human dimensions of the built spaces for learning and teaching.

Outcomes of designing

Reflection and evaluation

Overall, the educators' discussions about outcomes of designing involved reflections on experiences, a mix of evaluation and critique with respect to designing processes, and advocacy for change based on their experiences and evaluations. Although the material spaces are the visible, tangible dimensions of designing outcomes, this discussion concentrates for the most part on the affective and dialogic outcomes of designing experiences and relationships and on the consequent advocacy for different ways of thinking and acting as expressed by the participants.

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It's a context challenging, exhausting experience (ATL). In a number of the discussions educators reflected on affective-emotional and relational connections with the experiences and outcomes of designing. These affective dimensions included excitement, apprehension, uncertainty, satisfaction, disappointment, frustration, puzzlement and anger. As noted in the introduction to the chapter, some experiences were conveyed as *small stories* of designing, as creative processes of discovery, of *focusing*, *unfolding* and *feeling our way,* of backtracking and venturing (Heath, 1989; 2010). *It was exciting and we were learning. The planning process was a bit organic. It was a kind of unfolding according to the vision and problem solving according to the budget* (HP).

The experience of entering the completed Harrison library created *a sense that it's uplifting almost, when you walk in. You're uplifted and that's to do with the quality of the light and the dimensions of the internal space itself; and we know that quality of light and quality of air are essential for learning* (ATL). For the St Mary's educators, satisfaction emerged in evaluations of the school library as *welcoming and memorable and interesting*, indicating a sense of achievement of their expressed hopes for the spaces: *(t)he point of that gathering space was to have a presenting, celebrating space for all that was going on, as well as a space for getting together. So it's very exciting* (ME).

Satisfaction was balanced by other realities, such as examining and understanding the effects of persisting with the sharing of research implications throughout the project. *There can be barriers so you start to think of yourself as a whining nag after a while, because there is a hierarchy that exists so you need to have a lot of stamina* (ATL), and on those occasions *when the information becomes overwhelming* (HP). For one TL, research into an appropriate security system using a set of architectural drawings resulted in frustration and failure: *my understanding from the plans was that* [the circulation desk] *wasn't far from the front door, until well into planning and I'd actually wasted all this time, energy and money in ordering a security system that we can no longer use because of the design of the building* (GE1).

Disappointment and anger were expressed in the scenario of an architect who, *came along with the design and didn't even white out the previous school's name on it*. The delay in engaging another architect, *cost us a lot of money* and the school *missed the BGA round*. For this principal, *it's about what comes first, and to me, the 'what comes first' is looking at your learners and what you see shows you where are you heading with all of the rest of it.* School system policies established networks of practices which were seen to inhibit the

capacity of educators to develop *a new school (for which) the brief is to do something different, something innovative.*

This challenge can be seen as magnified when *(t)he underlying culture (of the system) has been that somebody who thinks he knows better than everyone else chooses the consultant, you know, your architects and designers* (GE1). These discussions provided further insights into the educators' awareness of the effects of system policy and the network of designing practices which framed their particular circumstances. Outcomes of the educators' persistence and proactive approaches can be considered to have come at a price.

Some realities of designing were evaluated with apprehension, awaiting the beginning of a project. Colloquial invivo language (Charmaz, 2006), gave personal relational impact to the sense of uncertainty in the educator's statement: *It is a really scary position to be in*, anticipating the possibilities,*(w)e've got to look at a couple of years down the track so it's an interim process but the thought of planning for that, I just realise how much more research and investigating and seeing other ideas.* This interim time would be spent in an interim library which also had its own designing challenges, *(i)t's a dog's breakfast of a design,* so while anticipating the refurbishment, *we're still going to have to try and make those spaces work in some form for a whole new need as well* (ATL).

Designing in dialogue

Dialogue, conversation, discussion, negotiation, consensus approaches and listening featured as stimuli for designing in some circumstances and were notable for their absence and discordant, negative effects in others. Educators evaluated the presence, absence, character and influence of discursive opportunities on the progress and outcomes of projects and on their understandings about what could or should occur to create more productive possibilities.

For example, designing dialogue featured prominently in the St Mary's project, *(w)e did a lot of talking to the people who were going to use it as well as the people who were going to create it*. The discussions represented dialogue as a catalyst, in a dialectical relationship of spaces and change that, *helped us create a space to meet the needs and to stimulate the changes – to be spaces to create the changes as well.* The educators emphasised that discussions were effortful and persisted with, so that *it always comes back to the conversation, to discussion that happens between the people.* It was suggested that *(i)t's only when you have the conversation that the ideas come together, that you start to get a*

common view of what needs to happen there. The dialogic process required commitment *(b)ecause it wasn't a common view at first was it?* and was rationalized as a key to the outcomes of the project, (i)*f it is just say the money people and the architect, then you are never going to get anything worthwhile. We had to work at it, but in the end there was a strong consensus and it was positive* (ME).

In another example dialogue preparatory to a project, between one teacher-librarian and a principal, was represented as an accustomed, strategic process in which, *I have always had to bring the external evidence*, because *there has been a history of our administrators needing to catch up with current ideas and practices.* This apparently familiar dialogic pathway was regarded as a requirement, in that, *you've got to prove often with figures and statistics, and it's no good just going in and making suggestions.* The need to substantiate with evidence in statistical forms was evaluated as *a little bit of a male thing,* which suggested that this form of dialogue constituted a particular kind of communicative genre with rules and procedures and in this case, perceived to be steered with a male-gendered world-view (BTL)*.*

Similar dialogic histories were inferred in the evaluation of the role of the architect in the outcomes of the Harrison project. The principal acknowledged that the architect *has a history in the school*. Previous encounters between the school and the architect were interpreted as the foundation for shared understandings of *the culture,* and *the spiritual aspect,* and these encounters meant that *(h)e knows that we have a seasonal aspect to the year here at Harrison.* This emphasis implied that the architect brought certain kinds of local knowledge to the project, developed through earlier dialogues, and that this was considered valuable in the achievement of project outcomes as they related to school culture and values (HP).

The effects of the absence of dialogue, particularly the dimensions of listening and responding, was emphasised in one of the classroom teacher discussions, with respect to *those people that are in charge you know.* Frustration and puzzlement was expressed in that, *(t)hey just don't, they don't listen to people who are initially working there, who spend so many hours in a place* and therefore *should be able to have a bit more of a say.* The repeated refrain of dialogic absence and disregard in the teacher statements was exemplified in a contrast with the kind of dialogue which might be expected, *if I was designing a house my architect would have to listen to me and I would get what I wanted.* These statements and the rationale expressed a categorical, non-negotiable position in

which, *teachers and principals and people who are in that environment really need to be listened to and heard, the people who are actually here* (GE2)*.*

 The fitting out of the school library provided another example of dialogic discord. Teachers recounted the installation of a metal barrier which *wasn't necessary, we hated it and there were massive arguments about it. No one wanted it, even [the Principal].* Negotiations were fruitless in terms of removing it and the teachers reported that *they* [project decision-makers?] *wouldn't change it, we're told well just put plants in front of it.* In these discussions teachers inferred that design decision-makers were unfamiliar with school environments, and *those people that are in charge, really need to be spending time in schools* (GE2).

One teacher-librarian described perceived communication difficulties, confusion over spatial understandings related to the interpretation of plan-view drawings, and a lack of flexibility in consultative approaches. The entry *needed to be a big enough catchment area for when we have larger numbers of students entering and exiting simultaneously*, but this has proved to be inadequate in the final building design even-though this need was discussed with the education facility planner. Hesitancy and uncertainty characterised the teacher-librarian's rendition of her difficulty in appreciating the spatial dimensions and relationships in the plans, and in her struggle to communicate, (*s)o I'm wearing some of that, that I either didn't communicate that well enough to* [education facility planner] *or I didn't have the understanding* . These outcomes were rationalised on the basis that, *I'm not someone who's got that background. While I have designed things, that's not my area of expertise.* Contrasted with a library designing project in a previous school, *I haven't felt that same ownership here at all. Like it's presented but to me it's basically a fait accompli* (GE1)*.*

Advocacy

 Educators' advocacy for changes was evaluated in terms of conceptualising and understanding school libraries in new ways: *(s)ome schools are now designing using the metaphor of a street rather than the metaphor of a book* (ATL). This image echoes the figurative language used to imagine and represent the changing social and pedagogical circumstances of libraries discussed in Chapter 2 'Intermezzo voices', and in the opening segments of this chapter. Educators also proposed changed processes of designing and the inclusion of students in designing activity.

In a critique of status quo designing approaches and school system policies, one principal advocated for the early appointment of leadership staff to new schools, *those people should be engaged before everyone else is engaged,* in order to enable matters of learning and teaching in a specific community to influence the designing of learning spaces. *This is a principle I'd apply in any new school,* was substantiated on the basis that it would also avoid having to contend with *the things here that we have inherited that we would never have agreed to [if engaged earlier]. There are some areas within the college that we just wouldn't do in a fit* (GE1).

Responsiveness to change and the capacity to work with this in designing educational spaces was represented as a pressing need connected to changing pedagogical approaches: *(w)e are thinking about active learning, investigations more self-directed activity. When students come from Prep they will be more confident and self-directed as learners so we need to design for this, we can't put them into highly structured classrooms* (ME). Responsiveness also inferred an ongoing cycle of change in learning space designing, *I think it's got to be consistently able to be growing and changing and adapting* (ATL).

The customarily absent voices of students in designing were foregrounded in two of the educator discussions. Students' involvement was substantiated on the basis of changing learning and pedagogical practices, and possibly with a certain realization which may have been stimulated by students' inclusion in this research project. The learning needs of students, and their perceived capacities for responsible participation were offered as reasons *for the kids to have input into that - into how they would like the spaces to be. They will come up with good ideas and they have ownership of it and then they are prepared to look after it* (ME).

 A failure to involve students was also regarded as *ignoring the reason we're here when we design all of this,* and tempered by the speculation that, *I don't know how much input kids have ever had in designing schools. I don't think anyone has ever asked them what they think should be here.* A changed approach to include students was emphasised in proposing processes, assigning designing roles and evaluating students' potential: *You know I would actually do things differently. I would ask students. I mean talk to the kids. Like this* (this project?), and *(t)hey could be consultants. They're the ones we should ask. I love that idea, they'd do a good job* (GE1).

Some of these foregoing matters of change were referenced directly to wider school system policies and processes. The perceived circumstance that *we're still funding to this you know, one child per this much area or whatever,* was critiqued on the basis that such a formula did not acknowledge that, *education has changed .* Nor did it recognise that education *will continue to change dramatically,* and that *(l)earning isn't just sitting at a desk,* and that as a consequence *(t)he funding needs to be looked at* (GE2). Funding matters were also seen to impinge, through system and school policy and governance practices which assumed a built space project to be completed on the *delivery of the building.* These approaches *did not even contemplate* a *responsive approach to post occupancy evaluation* in order to *review what's going on in a brand new part of the school or consider needs in the next budget* (ATL).

Summary

In the educators' *small stories* school libraries were produced in dynamics of multiple dimensions of learners, learning, people and relationships, as well as in spaces, places and material dimensions. Educators' understandings of school libraries were connected to discourses of learning constituted in collaborative, individual, formal and informal activity. Human dimensions emerged in references to students' being and becoming as learners, and in the expression of their identities as supported through the multi-dimensional milieu of school libraries. These dimensions were closely coupled with the work of teacher librarians through discourses of their professional knowledges and pedagogical practices. The pedagogy-technology nexus created both challenge and uncertainty, emphasising school libraries as works-in-progress with evolving hybrid qualities within broader, changing landscapes of libraries and learning.

Discursive opportunities and relationships achieved key significance in educators' discussions as pivots for designing possibilities and limitations. For educators, designing was constituted broadly in terms of vision, leadership, relationships and communication. In preferred circumstances school library spaces were designed in productive discursive engagement between educators, communities and designers, through what could be identified as discourses of creativity, wherein the dispositions of education and architecture negotiated productive designing relationships. In less amenable circumstances, school library designing was produced in discourses of constraint. In these circumstances, competing knowledge, experience and roles, influenced by matters of policy

and status quo processes, produced communication difficulties and worked to inhibit designing relationships.

Opportunity and potential, as well as constraint and limitation can be seen as characteristic of human circumstances. Through the educators' *small stories* it could also be suggested that designing processes which involve educators, communities and designers may work to bridge tensions between creativity and constraint and present opportunities for agency, even within current policy and governance conditions, to enable creative influence.

CHAPTER 8: STUDENTS' *small stories*

Introduction

Data from semi-structured interviews with students and field observations are the basis of the analytical discussion in this chapter. The semi-structured interview statements invited groups of between four (4) and six (6) students from primary and secondary schools – a total of 24 students across the study - to share their understandings, observations and experiences of school libraries. As noted in Chapter 6 'Gathering small stories: research design and ways of telling', student participants were invited to discuss aspects raised in the semi-structured interview statement:

> *I am working on a research project about school libraries. So I am interested in what*
> *you think about school libraries, and I am interested to know how you use your*
> *school library. I am also interested in the other libraries you might have visited, and*
> *in what you think about the spaces of the libraries at your school and in other*
> *places.*

Appendix D details the pre-conditions and protocols for the semi-structured interviews. This discussion outlines the value of the Pilot study in refining the approach taken to introducing the research to the students and the development of the semi-structured interview statement.

Table 8.1 below provides an overview of the key characteristics of students' discussions in the semi-structured interviews. Student focused on their beliefs and practices, and described and exemplified their relationships and experiences of learning with peers and teachers. To facilitate the flow of the discussion, participants' direct quotes are in *italics* and participant codes (HS: Harrison Students; MS: St Mary's Students; GS: Greenock Students, with Year Levels) are located at the end of sentences or paragraphs as references to the data transcripts in Appendices (DVD Transcript Record).

Table 8.1 Students' data focus: school libraries, learners and learning

Students	School Libraries	Learners & Learning
Primary	Beliefs/Philosophy [min] Practices, Examples, Experiences	Beliefs Practices, Examples, Experiences, Relationships
Secondary	Beliefs/Philosophy [mod] Practices, Experiences	Beliefs Practices, Examples, Experiences, Relationships

As discussed in Chapter 6, the framework of *explanatory critique* enables attention to 'moments of discourse' (Fairclough, 2001a) as likely locales of reference to participant experiences. The analytical discussion proceeds in phases of description, interpretation and explanation to examine understandings, language and relationships, and to critique status quo issues and obstacles. The analytical discussion moves to positive critique with respect to creative possibilities for addressing school library designing and related matters as discussed participants, to identify resources for creative influence and to examine the potential within systems and relationships for openness to alternatives (Fairclough, 2001a, p. 127). The dialogic data are examined in most detail, with the inclusion of field notes where these coincide with matters raised by students in the semi-structured interviews.

Libraries, learners and learning

Students' *small stories* represented school libraries as cultural, social and learning entities which invited and enabled formal and informal engagement. The school library was considered as connected to and symbolic of the school's philosophy; not only openly accessible to them as a matter of right, but proactive in outreach to all members of the school community. Student identities were expressed through learning and teaching interactions and relationships, which were both enabled and constrained by students' varied capacities for physical and intellectual access to changing modes of information and communication. While school libraries were represented as sites of freedom and choice, students also recognised the political dimensions of school library sites and spaces.

An education playground

Students made relational connections between cultural and symbolic aspects of the school library, their understandings of the philosophy and vision of the school, and its wider cultural manifestations. These connections addressed both qualitative and material dimensions.

Students' cultural and symbolic connections drew on sources such as the representations they observed in the school insignia and motto displayed at the school reception entrance. One student linked the insignia with the school library, *because it's about the same culture*, in the manner of a symbolic unifying device creating cohesion across the activities of the school (GS Yr 10/11). Less specific attributes were inferred as *things about the culture of our school in the library* (HS Yr 11)*.* However these inferred qualities were reasoned and made visionary in the evaluative statement that *(t)he library should be inspiring and even the school,* so that observers would recognise these attributes as indicators of other significant qualities in both the school and the people, for example that both the place and the people were *bright and energetic* (GS Yr 10/11).

The school library was also constructed through the students' expectations of the practices considered to be appropriate in a school library, identified on occasions by attributes of difference – *it's a library because of the way it is used* - when compared with a classroom, *it's different from a classroom*. This difference extended to the contrast in the quality of the school library environment, defined *as quiet, almost secluded* by comparison with classrooms. However, evaluative meanings contained in the figurative description of the school library as *sort of like an education playground* bring a more playful tension to the coupling of formal and informal activities and relationships. Such a rendition is at a generative cusp, producing a potential opening for creative understandings about school libraries as entities and arenas of formal and informal learning (GS YR 10/11).

Year 10/11 on behavioural dimensions: shaped by and shaping

> *Because the way you set the school up in a certain way will make people respect*
> *how the school is and how we should behave in the school* (GS Yr 10/11).

The students expressed personal relational value through references to *our school,* and extended these to a wider group of participants (*you*), implying that others involved in the school had chosen particular ideas or principles in order to *set up the school in a certain way,* suggesting a foundation philosophy or set of beliefs about how the school might be. A further link was made between this *certain way* of establishing *how the school is* and the respect likely to be accorded to the school; as a result of this demonstrated philosophy and the consequent influence of that philosophy on expectations of students, about *how we should behave in the school* (GS Yr 10/11). In these respects, students were positioned as

subject to the principles on which the school was established and the consequent expectations of particular kinds of behaviour.

Students' relational framework emerged in the use of *we* and *you* and *ours* to move between personal and generalised speculation about the influences of spaces on user behaviours. Students speculated (*I think it ... might be*) that spaces of the library were shaped by *how you want it to be,* inferring a philosophy or set of values which was referenced as a foundation to underpin the designing or *creation of a certain space done a certain way.* The consequences of the designing of the spaces was expressed as influential in shaping users' behaviours in the library, inferring that the process of designing acted in between the philosophy and users' behavioural responses, in 'shaped by and shaping' effects (GS Yr 11).

> *A library requires a different sort of etiquette than a regular classroom. We have different manners and a different way of behaving in this area (the library) than we would in another* (GS Yr 11).

The particular *difference* in student behaviour in the school library as contrasted with behaviour in *another* place/space - an inferred classroom - was teased out in the shades of meaning students assigned to the concept of 'behaviour', refined through ideas of *etiquette*, *manners* and *behaving.* Behavioural expectations were expressed in terms of 'we' and 'ours', which suggested that students understood that these aspects were in some ways agreed upon across the student group. The differences between behavioural expectations in the classroom and those in the school library were contrasted and evaluated through the students' designation of the library as *like one of the public places* and thus distinguished from the implied non-public space of the classroom - *the classroom is ours so it's different* (GS Yr 11)*.*

These statements indicate that some students perceived the school library to exist in relation to the wider philosophical and cultural framework of the school, and that the dynamics of this framework can influence the school library as an entity within the school. Students attached the emergent identity of both the school and the school library to the school's philosophy and to expectations of practices and relationships. By extension, the students' own identities as learner-participants in the school and in the library can be seen as influenced (Grosz, 2001).

Learning and teaching interactions and relationships

Students' interactions with people and with information resources, activities and spaces featured strongly in the semi-structured interviews. Interactions with each other and with educators formed an intrinsic part of the students' designation of their material activity, their processes of engagement in school libraries and in other libraries and their perceptions of themselves undertaking activities in library settings. While students did not identify themselves specifically as 'learners', the exemplar interactions they described positioned them as participants in learning and recreational activities in school library settings.

Students exemplified a range of their activities in school libraries and other libraries as *you can* experiences, as if these were assumed to be generalised practices across the body of student library users. Although *reading* featured as a key element of student activity, the majority of activities were conveyed as relational, interactive with other students and with educators, proactive on their own behalf, and proactive and responsive in relation to educators. The seeking and receiving of *help* characterised many interactions, such as *help to choose*, *help to find the information you need* and *help at the front desk* (GS Yr 11)*. These interactions took on the quality of relationships of significance when they were linked with school library staff who were perceived to be aware of student information needs - *they know what you need for projects* (MS Yr 5) and who formed associations close enough to know, to recall and to act on their knowledge of students' reading preferences, knowing *about new books,* and, *if you like an author they tell you when there is a new book* (MS Yr 5)*.

The quality of these relationships with educators was further evaluated by students in reference to *nice people in the library* (MS Yr5). Educators who made the interactions in the school library *more personal,* were also considered to be more available, *because you see them more often and they know you, yeah* (GS Yr 10/11). However students also noted that they encountered *some staff (who) are not very approachable* (GS Yr 11)*. Students evaluated experiences in public libraries where staff interactions were qualified as being, *not as friendly. Like they are friendly, like the staff and everything,* but preferring the school library experience because *it's more personal at school libraries* (GS Yr 10/11)*.

Students' identities and agency as learners emerged in the interplay between the seeking and receiving of help to negotiate information sources and systems, and students' moves

to more independent practices in school library settings. This transition was illustrated in the scenario wherein the *librarian and the staff demonstrate databases and stuff at the beginning of the year. Then you can use them whenever you want to* (HS Yr 11)*.* Students further described increasingly independent and self-directed practices in their engagement with public, council and university libraries by way of *coaching sessions* and *seeking help at the front desk* (GS Yr 11)*.* In these respects students could be said to position themselves as in transition between outsider and insider practices of participation in the knowledge-power systems of libraries, becoming adept with those organisational routines and 'systems of opening and closing' according to societal expectations as noted by Foucault (1997a).

Equity: assumption and potential

A sense of assumed, almost non-negotiable value emerged in one student's estimation that the school library was *a benefit for the students ,* that it was accessible, *it's there so you can go there easily* to *get help* (HS)*.* That it was not only available to *everyone* but that the school library embodied and implied a proactive obligation to a diverse clientele in that it *should attract everyone in the school*. In the proposition that *everyone should feel welcome* students implied that the school library had an outreach and equity responsibility related to inclusion and access, and that this responsibility was potentially unconditional, extending to a diversity of users *even those who don't like reading* (GS 10/11).

Technologies of information and communication

Perceptions of change and the impacts of change were expressed most often in relation to the technologies of information and communication. Greenock Yr 11 students were conscious that things had changed in relation to the modes and formats of information, in *how the information is now,* so that *good access to online information* was required by them *now*, marking a change when compared with the kind information modes available or warranted at an earlier time (GS Yr 11).

Students connected this change in information modes and formats with the possibility of a consequent change in the allocation and arrangement of the physical spaces of the school library, wherein access to online databases was seen to diminish the physical (shelf) space previously needed for books. *Maybe that space could be for computers or people,* proposed that, rather than reducing the size of the school library, the spaces could be

turned to other uses, giving priority to further online access via computer or to spaces for people and by inference to their selected activities (GS Yr 11).

Mediated access to online information was evaluated by students through their experiences of school libraries which provided access to online *databases you can't use from home.* Ease of information access was also related to students' use of public and university libraries, where access was provided freely to online sources which, in turn, were not available to them from their school. Thus open access to online sources was 'firewalled' differently for students at both the level of the school and the level of the home. The student statements provided a view of the 'gatekeeper' role taken on by schools, for example, in limiting access to certain online sites and services. The inference in the student statements was that this limitation could be circumvented by using public and university libraries where *(y)ou can open-surf (in public and university libraries) – we can't do this at school* (GS Yr 10/11).

Vignette

One student made the comment that he *didn't use libraries* and that he did his information searching and finding online. This comment was met by some derision from others in the group who comment variously that relying on digital and online information was not effective because *you get a million hits* and *most of it is rubbish*. The first student replied that he *didn't just Google it.* He was then asked, *so what do you do then?* The first student responded *well you have to think about where you might find the information*, the *most likely places, like the National Library or newspaper databases or journal databases*. He added that the State Library had *a lot of history stuff.* Another student asked, *how do you know to do that?* The student replied, *they teach you that stuff at school, in the library* (Observation Notes 2006 CEFPI).

These foregoing examples demonstrate a kind of assumed resourcefulness in accommodating change related to evolving modes of information and communication technologies, through students' capacities to propose options and to act on these according to their needs. This resourcefulness extended to the inferred, but not explicated, identities of themselves as learners, operating across a number of library environments, negotiating alternative strategic access to information sources according to inquiry needs, and thus representing themselves as agents in their own learning. In their tactical

responses to various forms of technological barriers, learning with technology was conveyed as something of a subversive activity.

Public and university libraries: edifying and mystifying

Student experiences with public and university libraries emerged in the discussions as welcoming in some instances and alienating in others. Students exemplified and evaluated both satisfying and puzzling experiences with particular reference to structures, systems and aspects of the physical environment along with some productive interactions with public and university library staff and systems.

Some student experiences invited evaluation and comparison with school libraries in which university libraries emerged with advantages: *I like their organisation .. I find it easier to pinpoint what I want and what I'm looking for because they have such a big range* (GS Yr 10/11). However, these comments could also be regarded as statements which amalgamate beliefs, vision, values, desires and critique to serve to shape student perspectives about the ways libraries might be in design and organisational terms.

In noting that, *Council libraries are like big bookshops – you can get films and DVDs, stuff they don't have at school* (HS Yr 11), students' appreciative evaluations of aspects such as order and organisation, systems, structures and frameworks, and the significance of diverse resource collections, signal their physical connections with these libraries often enough for them to make judgements about these dimensions and their worth to library users. Thus some students are constructed through these discussions as independent, perceptive library users, aware of and able to negotiate varied library systems and processes.

For other students (GS Yr 7), engagement with the structure and organisation of some public and university libraries was unproductive and *strange* and they remained puzzled that their efforts – *I tried ....but I couldn't find the fiction for my age* – enabled them to unravel the organisational puzzle only partially. For some students way-finding even with signage proved to *be a bit of a mystery* as did finding the locations of the *younger fiction* and *the sort of adult section,* but not finding what they sought.

These experiences recall Foucault's (1997a) references to the libraries and museums of Western culture, which juxtapose multiple renditions of human experiences and are simultaneously accessible and impenetrable, demanding user understandings and capacity to interpret and engage both physically and intellectually with their *systems of opening and*

closing. Thus for some students libraries more broadly could be said to be complicit in practices of knowledge-power through their systems of organisation and access.

Matters of furniture, fittings and physical amenity figured in students' affective responses related to qualitative dimensions of public and university libraries, in which they specified an appreciation for spaciousness. *Bigger spaces* and *the shelves are not crowded*, for *good lighting* and ventilation, *couches and well built furniture, clean and not dusty* emerged as expressive-evaluative markers (MS Yr 7)*.* The mention that *(s)ome libraries have food – like in a cafe* is one of several comments made in the interviews linking libraries with the possibility of food, in something of a hopeful desire (MS Yr 7). The idea of the library-cafe signals a quality of the social relationship potential of libraries in the spirit of 'third places', those locales aside from home and work/school which acknowledge, symbolise and can enable multiple creative dimensions of life, to allow us to foster sociability and be 'more ourselves' (Oldenburg, 2001, p. 5).

Public council libraries were identified by younger students as sites of even greater personal freedom with fewer strictures on their time and choice of activity than were imposed at school. Again the students assigned value to the option for them to be independent agents in charge of their own time and activity, to *stay there for a long time,* to *sit around and read for a long time* with the added freedom that, in public libraries these choices were not hedged about by any imposed requirement to move elsewhere or to limit the time available so that, *you can go to a corner and read lots the whole time, you just sit there and enjoy the quiet* (MS Yr 7)*.*

The concept of the *corner* featured as both a material space and a symbol of the desire and possibility of semi-privacy for a period of time. In this, public libraries have the advantage, (t)*hey have sections for different ages, but you can go anywhere and no one tells you to stay in your own age* (MS Yr 7). Students' statements expressed their activities as *you can* experiences, implying that these were assumed, in-common experiences available to all students but inferring certain rules related to both public and school libraries which operated differentiated conditions or raisons-d'être for access and use.

From their engagements with public and university libraries students presented perspectives to indicate a considerable degree of consciousness of the psycho-social and experiential attributes of the spaces and places which contribute to or diminish libraries' attraction for them as users (Franz, 1998). Students noted those attributes which both

permit and limit their access and which stimulate or constrain the development of their capacities for familiar, competent use.

Sites of freedom and choice: ' if you feel like a corner'

Students' affective responses were a persistent theme in their representations, expectations and evaluations of school libraries and local council libraries. Students compared the behavioural expectations associated with their school library and the effects of spaces, furniture and fittings on their behaviour. Matters of privacy and surveillance were raised in relation to the arrangements of physical spaces and the use of fittings and materials such as glass.

Students evaluated their options for agency in school libraries through the practices and pursuits they preferred and selected. Their options allowed them to *go and escape,* and *to move around* in the spaces of the school library according to need or desire (GS Yr 11)*.* Compulsion and obligation were removed in the potential for students to *just focus on a book*, or *do homework*, without a need to *have to worry about what's around you* or have concerns about *attracting a lot of people,* and the belief that being able to do this was *sometimes important* (GS Yr 10/11).

The expressive value in the statement, *if you feel like a corner,* captured a sense of a desire for privacy, for time and space apart, to concentrate on *whatever you are reading* (GS Yr 10/11). This desire reflected a challenge of contemporary school life in which curriculum and learning programs focus heavily on collaborative and team activities. The spaces of schools are tailored to groups of various sizes and permit movement only within certain boundaries, in part as a governance requirement for student supervision and safety.

The idea that *a corner* symbolises and constitutes a space of freedom which allows students to create a distance between themselves and others, represents the school library as a place with spaces and potential to respond to individual needs and desires. Thus from the students' viewpoints the school library represented opportunities for individual expression in the *escape from what you were doing* and/or from the constraints of formal learning requirements (GS Yr 10/11).

Year 11 on privacy and surveillance

Tensions between privacy and surveillance raised in the discussion of Year 11 student groups, further emphasised students' desires for time and space for individual pursuits. Because (a) *classroom is just a square*, one student perceived that there was little opportunity to work individually and unobserved since, *wherever you go you are going to be seen by someone else,* and *you can't get by yourself in a class.* The school library was preferred because *you can go between the bookshelves or into a corner and not many people can see you there, and they won't come and annoy you* (GS Yr 11)*.*

For some students even the school library offered little privacy due to glass panels and windows sometimes used in the construction of walls and doors, (a)*ll the rooms (in the library) have glass – so it's hard to be private to work by yourself.* Students' sensitivity to the effects of the glass was expressed as a *distraction,* however this was compounded by an inference of surveillance implied in the use of these materials and affectively experienced by students as a feeling *as if you are being watched.* Opportunity and space for individual work was more likely to be found in public and university libraries, and this was achieved through personal anonymity as well as through the availability of appropriate spaces for individual work (HS Yr 11).

In these respects students were conscious of psycho-social dimensions of spaces and the effects for them. Students understood that spaces, configurations of spaces and the use of materials can influence our capacities to negotiate degrees of proximity with others and to meet our needs for privacy and security. The political dimensions of surveillance were inferred in the sense of being watched, although students did not isolate this as a mechanism of the configurations of spaces.

Chairs, couches, cushions

Students created relational connections with comfort afforded by couches, cushions, beanbags and chairs, which enhanced satisfying personal experiences through the furniture and fittings. These elements contributed to *friendlier* and more appealing physical environments which allowed them to *relax.* For one student the couch emerged as symbolic of the school – *this is a couch school* (GS Yr 7). School library settings were regarded as satisfying when they offered *bigger spaces* and where colour created a link

between the students' images of themselves and the amenity of the setting – *the colours and the furniture are sort of young* (HS Yr 11).

The school library was represented as symbolic of youth in its potential to *speak of young people* through furniture, fittings and colour. The students connected this youthful manifestation with their affective response to the school library setting, as one which stimulated a sense that *you feel like it was made for you because of the colours and things* (HS Yr 11). Not so satisfying were settings with colours which did not quite match their preferences or possibly their images of themselves, suggesting that (t)*hey could change the colours, some of them are pink* (MS Yr 5).

However for some students *(h)aving a couch in our classroom, it was like a different attitude. It caused (pause) distractions.* The location of a couch appeared to be significant in terms of its capacity to provoke particular kinds of behaviour, as if the couch created *a different attitude* and prompted thoughtless or immature conduct. Similarly, couches in the classroom had the potential to be *used irresponsibly* compared with couches in the school library, where *we wouldn't even dare to try it* because *we respect the teacher-librarian* (!) (GS). This distinction implied that both the school library and student regard for library staff created expectations of more careful and mature behaviour.

Students' representations of the cultural, symbolic, social, and experiential dimensions of school libraries point to a considerable depth in their understandings about school libraries in personal-relational terms and with respect to the broad value of school libraries to their learning, being and becoming. The analytical discussion of students' *small stories* continues with a focus on design and designing.

Designing

The semi-structured interview statement invited students to comment on how they understood that the libraries they visited came to be the way they were: *I am also interested in the other libraries you might have visited and in what you think about the spaces of the libraries at your school and in other places.*

 As noted in Appendix B3, the semi-structured interview statement was revisited during the discussion and refocused using questions such as the following, to develop ideas already shared about the spaces of the school library:

So, who do you think makes the decisions for how the library in the school will be? How the spaces of the library will be?

What would you like to say to the people who make the decisions [teachers, architects, builders] to let them know what you think about the spaces of the library?

Each of the student groups had experienced a new or refurbished library in their school context, and in almost all cases the interviews were conducted in the school library so that students were surrounded physically with the elements and qualities of the spaces. Table 8.2 below provides an overview of the key characteristics of students' discussions about matters of designing. Some student responses identified participants, processes and influences and other responses were concerned with speculating on who might be involved in making designing decisions. Students did not identify themselves as 'designers', however their responses constructed design capability in their evaluation of attributes and design outcomes of the spaces of school and public libraries and other educational spaces, and in their proposals and rationales for design options and changes.

Table 8.2 Students' data focus: designing processes, influences, and outcomes

	Designing processes	**Designing influences**	**Designing outcomes**
Primary Students	Questioning/speculation on processes of designers and educators		Examples/scenarios, Questioning
Secondary students	Speculation on processes of designers and educators	Speculation on influences on designers & educators	Examples/scenarios Anecdotes

Designing processes, participants and influences

Students' awareness of designing as an activity ranged from expressed knowledge about some processes and participants which they had observed, to speculation about possible designing processes and influences, and the potential for participation of particular people and work roles in designing activities. Students tended to conflate concepts of 'designing' and 'building', to suggest that these activities were of the same order, or possibly two sides of a coin.

Across the interviews, students' involvement in designing activity appeared to be limited to participation in *a competition to choose quotes for the wall – about reading and books and learning. We looked for some online and one of ours is up there* (HS Yr 11). There were no other indications that students' evaluative comment or opinion had been specifically sought by educators, designers / architects or education facility planners in preparation for any of the built-space projects with which the students were familiar, or that students had participated in formal or informal discussions related to their built-space preferences. This reflects something of the 'often quite limited' calibre of student participation in designing reported by Flutter and Rudduck (2006, p. 6).

One student's personal knowledge of facility designing in a school context was expressed in terms of *(w)e know there were a lot of people involved in the library here in making decisions* and *we know there were architects at this school to help the teachers* (GS Yr 10/11)*.* Two year 5 students emphasised that *the building is designed by architects and builders,* and that *they (teachers) know how the library operates but don't build the library.* Educator participation was limited to *probably the Principal and the teachers* and the possibility that *they (teachers) might do something* (MS Yr 5)*,* however this remained unspecified in terms of how the students understood educators' designing endeavours. Thus for some students architects and educators were acknowledged as participants, but the degrees of designing participation and relationships were tentatively expressed. For others, teachers were excluded from designing participation and assigned to knowing *how the library operates,* or to the vagueness of *might do something*. (MS Yr 5)*.*

In one instance, the practices of designing took on experiential- existential dimensions (Franz, 1998) as actions to *make the school end up as a vibrant school,* implying that attributes such as vibrancy would be manifest to observers across many aspects of school life. The reference to *architects helping teachers* to achieve vibrancy, implied that these attributes were expressed in the built spaces of the school by virtue of collaboration between architects and teachers, inferring some degree of relationships in designing dialogue (GS Yr 10/11).

Designing activity was represented as *a lot of people making decisions,* along with activities such as parents participating in designing interiors by *making cushions* and *building the deck out there* (MS Yr 5)*.* Concepts of purpose and function in the student comments constructed the school library as being *about reading and books and learning* and as having

a practical-functional dimensions (Franz, 1998) which required decisions about *how the library operates* (MS Yr 7)*.*

Designing outcomes

The transcript which follows records the comments of a group of Harrison Yr 11 students. The interview was conducted in the school library. Their conversation was accompanied by gestures as the students drew my attention to the particular physical space aspects they were discussing. The immediacy of their experiences of the spaces was evident in the relational and expressive value created through the 'you/I' commentary, and the affective and aesthetic responses they reported of their experiences in the spaces alone or with others.

The students in conversation evaluating the 'new' library:

> *The light is good – it makes it energetic.*
>
> *Our library speaks of young people. The colours and the furniture are sort of young – not like the old library that was brick inside with sort of old furniture. You feel like it was made for you because of the colours and things.*
>
> *The balconies are so good – we really appreciate them but we can't go out there without a teacher. It's good to be outside in the open air. We have some book discussions out there and last year we had our team break-up for netball out there.*
>
> *I love the windows out to the outside world – where I can sit and look up to see the street and towards the river and the hills. I feel very calm. It would be claustrophobic without the windows.*
>
> *Some of the table shapes are weird – it would be better to have them like a rectangle or a square – you would fit more people.* (HS Yr 11)

Similarly to the students' appraisals of their experiences in public and university libraries, these evaluative comments captured their affective and relational responses to a recently completed school library through their personal and social experiences. Students' evaluation and critique assigned to the spaces and places of the library, capacities to project qualities of energy, youth and calm. Students attributed the achievement of these qualities to aspects such as light, air, colour, furniture and visual connections with *the outside world* (HS Yr 11).

The school library was constituted as an entity which *speaks of young people*, suggesting that the spaces conformed to perceived images of themselves as young people, and that the spaces were considerate of this, *made for you because of the colours and things*. Students' recall and juxtaposition of the features of *the old library that was brick inside with sort of old furniture*, added weight to their positive evaluation of the energising effects of colour and of the *young* furniture in the new library (HS Yr 11).

The value of one student's connections to the physical world beyond the school emerged in comments about the calming effects achieved by the relationships between furniture placement and windows which allowed a view to *see the street and towards the river and the hills.* For this student, the calm afforded by such an outlook was highlighted in the contrast that *(i)t would be claustrophobic without the windows,* and the consequent, undesirable likely effects of such an absence. The value in the indoor-outdoor connection was further emphasised in the use of the *open air* balconies, even though safety and supervision concerns had thus far prevented students from using the balconies independently (HS Yr 11).

Students' comments connected the spaces and layouts of the school library with both individual and collective activities. For example, the spaces of the balconies enabled social and learning relationships through *book discussions* and a *break-up for netball,* and the interior spaces were seen to have been designed so that an individual could position themselves and their work in the library, in order to *sit and look up* to make a connection with the vistas of the outside world (HS Yr 11).

Changes to designing outcomes: what should be

Student expressive-evaluative recommendations for changes to the designing of school library spaces, the way things *should be*, related to aspects such as spaces, resources and ambience. Students' concerns emerged from their experiential and relational engagement with the spaces and their observations about the inhibiting effects of some spaces. References to spaces were concerned with size, relationship to activities and engagement with others and with particular learning resources.

Students' rationalised the need for larger school library spaces on the basis of including a *lot of people (who) can use the library at the one time* and that the size was *important* because this enabled the school library to be *used by groups and classes and also by people who are working by themselves* (GS Yr 11)*.* The value of spaciousness was emphasised by

comparison with classroom sizes which were seen to be compromised because *they try to cram too much into it,* suggesting that *they* (teachers?) overcrowded classrooms with unnamed objects even when these spaces were *a good size* (GS YR 10/11)*.* This discussion implied that students appreciated adequate, unhindered space in which to conduct their activities.

However students also offered suggestions about the range of 'objects' (resources, equipment, furniture) which would be appropriate to these activities and thus would be welcome in the spaces. In evaluative terms the students nominated *good quality* furniture and shelving, and reasoned that specific examples of bookshelves would be an appropriate height for students as, *low like these so young children can reach them.* This last reference indicates a degree of ergonomic awareness and need with respect to furniture and fittings on the part of those who will use them. The inclusion of comfort items – *beanbags, couches and cushions* – and digital learning resources – *computers and those whiteboards* – signal the preferred objects which would enhance students' learning and recreational experiences in the school library (MS Yr 5).

In a number of the discussions students mentioned air conditioning as a drawcard for their visits to the school library in lunch breaks. Temperature control was also a feature of public libraries and thus marked them as enjoyably different from those school libraries which were not air-conditioned. The contrast in the comment that *(t)he temperature should be cooler and warmer,* suggests that for this Year 5 student there is an ideal ambient temperature which would support comfort levels of heating and cooling in response to outside temperatures.

Summary

Students' *small stories* conveyed interpretations of their beliefs and philosophy, vision, values and desires about school libraries. Students' understandings were explored in the study in order to appreciate *who and what is valued* about school libraries and to gauge the potential and the opportunities for them, as the prime users of school libraries, to inform and influence creatively the designing of these spaces and places for learning.

School libraries were represented as multi-dimensional entities 'under construction', evolving and being shaped by a dynamic of influences including the philosophies, vision and values of school communities, the continuing diversity of learners and learning, and the

flow and flux of information and technological change. Students' statements represented school libraries through dimensions and attributes of culture, experiences and practices, conceptual and material organisation and social relationships and processes.

Through the accounts of their experiences, some students identified themselves as active agents, engaging with the knowledge and organisational systems of library environments in and beyond schools, in a trajectory of increasing independence and self-direction. However for certain students, the manipulative effects of social, organisational and physical dimensions rendered libraries as mystifying and thus less satisfying places and spaces for their learning.

For some students, school libraries were produced in discourses of creativity, through attributes which, in some respects, customised school libraries particularly for them as young people. In other respects, these spaces were seen to constrain the desired expression of their identities through the use of particular spatial configurations and materials, and in spatial design outcomes considered to be risky or unsafe unless they were under adult supervision.

Students' discussions can be related to discourses of change, education, learning, social relationships and spatiality, as connections to explain and evaluate the potential for them to participate in the designing of the spaces and places of their lives and work as learners. Through their experiential, relational and expressive language students demonstrated capacities for conceptualising, description, evaluation, questioning and critique. These capacities to think about and to contribute to discussion on matters of spaces and designing, and their familiarity with school libraries as prime users, suggest that students would be adept and creative participants in designing dialogues.

CHAPTER 9: DESIGNERS/ARCHITECTS' *small stories*

Introduction

Data from semi-structured interviews with three (3) designers / architects are the basis for the analytical discussion in this chapter. As noted in Chapter 6 'Gathering small stories: research design and ways of telling', designer / architect participants were invited to discuss aspects raised in the semi-structured interview statement:

> *In relation to the research project I am interested in how you see your role as a designer of learning spaces and in the experiences and influences you call upon as a designer of learning spaces. I am also interested in what you understand about school libraries and in how you imagine learners and their activities in relation to school libraries.*

The statement elements are ordered so that the discussion begins with the participants' area of experience. To maintain consistency across the analytical discussion, each of the analysis chapters is ordered commencing with the focus on libraries, learners and learning and followed by the designing focus.

As discussed in Chapter 6 *Gathering small stories*, participant data were analysed using the critical discourse analysis (CDA) explanatory critique framework (Fairclough, 2001a). The following analytical discussion unfolds in phases of description, interpretation and explanation to examine understandings, language and relationships, and to critique status quo issues and obstacles. The analytical discussion moves to positive critique with respect to venturing creative possibilities for addressing the issues raised by the designers / architects; to identify resources for creative influence, and to examine the potential within systems for openness to alternatives. The dialogic data are examined in most detail, with the inclusion of field notes where these coincide with matters raised in the semi-structured interviews.

An overview of participants is provided in Chapter 6, Table 6.1. The designer / architects participating in the project were:

> **DA1:** Director of an architectural practice specialising in school and community facilities. DA1 has a higher degree qualification in education, and is a member of the Council of Education Facility Planners International (CEFPI).

DA2: Director of an architectural practice specialising in school and community medical facilities. DA2 has project management experience, and is a member of CEFPI.

DA3: Director of an architectural practice specialising in school and community facilities. DA3 is a member of CEFPI.

Table 9.1 below indicates the focus and emphasis given by each of the designers/architects in the semi-structured interviews. To facilitate the flow of the discussion, participants' direct quotes are in *italics* and participant codes (DA1, DA2, DA3) are located at the end of paragraphs to enable the full statements to be referred to in the data transcripts in Appendices.

Table 9.1 Designers / architects, data focus: school libraries, learners, learning

Designers Architects	School Libraries	Learners & Learning
A [Director]	Beliefs/Philosophy, Practices	Beliefs/Philosophy, Practices
B [Director]	Examples from experience ? Libraries	Personal experiences anecdotes
C [Director]	Examples from experience	Limited references Personal experiences anecdotes

School libraries

As the foremost accredited designers of school facilities, the understandings and commentary of designers / architects have been pivotal for me in coming to terms with their understandings about school libraries, learners and learning, and whether and how these key aspects informed their designing processes and practices. Across the semi-structured interviews and the observations drawn from conference conversations and reference groups, the *small stories* of designers / architects understandings about school libraries clustered into three foci. They expressed what was considered to be actual (what is, from their experiences), what was seen as potential (what could be, according to the trends and events they observed) and what was considered as desirable or recommended (their suggested options, preferences or questions) related to futures for school libraries. Beliefs, philosophy and vision emerged in one of the interviews, but were not feature of the remaining interviews.

There was noticeable variation in the character of the discussion across the three (3) semi-structured interviews. For example, the interview with (DA1) suggested a personal investment in the telling of *small stories* across and beyond the range of the study aspects*.* These included wide ranging evaluative commentary on current school curricula, advocacy for changed approaches to the outreach and administration of schools and connections between schools and social and political agendas. Two of the interviews (DA2 & DA3) maintained a more distant stance, relying on general observations and childhood histories particularly in their discussions about school libraries, learners and learning.

Categorising school libraries in terms of purposes and activities, two of the three designers / architects (DA2, DA3) maintained an evaluative, experiential and relational distance from making statements of philosophy about, or vision for school libraries. The most significant commonality across the interviews related to the designers / architects consideration that school libraries were evolving and changing particularly with respect to the impacts and exigencies of the technologies of information and communication. Markers of historical, contemporary and projected future changes were also features of their discussions about change aspects related to school libraries.

In DA1's interview, figurative language of *centre* and *heart* was invoked to express a vision for the school library in the broad arena of school life and learning experiences. This particular discussion linked aspects of evolving and changing to technological, social and spatial dimensions; to relationships between learning, learners and the spaces of school libraries, and to ideas of place with reference to the key user groups of students, educators and school communities. In this case, a wide ranging discussion offered significant potential for establishing designing conversations between designers / architects, educators, students and community participants about ways to imagine school libraries in specific contexts.

Sites of reinvention

School libraries were represented as sites of *reinvention*, changing and evolving to give effect to a *transformational shift* in resources, access and operations. A persistent flow of change was conveyed by contrasting the ways that libraries, which *were once seen as peripheral, old fashioned places,* have moved through a course of *reinvention* to become *central, heart of the school*, *node point* and *repositories of whole lots of information.* The relational value of this shift was made evident in the link with the agency of librarians, *once*

seen as peripheral old fashioned people, but now seen to be actively engaged in activities of change, having *leapfrogged over everybody* to implement renewed roles as *information managers* (DA1)*.*

Expressive-evaluative emphasis emerged in the definitive tone of statements which advocated that the school library *needs to be very central,* and that *it's got to be in the heart of the school*, a prospect evaluated as *wonderful* and *terrific to see* (DA1). The repeated emphasis of *got to be,* suggested a conviction about the place of the school library in the life of the school and implied an advocacy for a continuation of this. The geographic metaphor of the *centre* and the biological reference of *the heart* suggested a belief in a sense of life-energy in the relationship between the library and the school. Through these references the library was represented as crucial to qualities of being and meaning in the wider world of the school

Information, communication and social spaces

The purposes of school libraries were evaluated as personally significant, *(f)or me*, *libraries as a source of information* , as *a place of communication,* and as *unstructured social places.* The classification of resource modes as *hard copies* of *fiction* and *non-fiction, ICT terminals* and *wireless laptops,* proposed access to a range of information forms. The use of the future tense in describing the concurrence of ICT information modes and books *still in hard copies* and *still valid* (DA1)*,* suggested a belief in and advocacy for the continuing coexistence of 'old' and 'new' media forms and a conviction that school libraries will retain these within the scope of valued information forms.

Persistence of fiction in book form was further substantiated in the rationale *so you can sit up in bed and read a book,* implying a belief that accustomed and familiar practices of fiction reading would also continue. Flexibility of access and use was suggested in the agency of school library users to manipulate portable information access tools according to need or desire, to *sit in a beanbag and work on a laptop and be hooked up wirelessly*, in order to take advantage of changing information access modes *, because so much of information comes through the internet* (DA1)*.*

School libraries were represented as sites of communication through a range of user activities, practices and processes. Relational value and social connection were created by linking a wide array of *other people from the library to other places, like other kids in other libraries in other schools or, other people within your own school, your teacher, your*

parents, your mates, through the use of information tools such as *the library internet, email system* and just *SMS-ing with your mobile phone.*

Social connection was restated through the evaluation of libraries as *unstructured social places,* citing a number of dimensions of appeal for users such as levels of physical comfort and amenity achieved through *easy chairs, beanbags,* and *a less structured environment.* This social assessment represented the school library as a site of freedom and choice, as an opportunity for *escape*, a place of desire, *where they feel good, where they like it.* These dimensions were proposed as in-common for adults and young people who would all seek places of freedom and comfort. The evaluative and relational discussion turned again to advocacy in promoting the further potential of the school library as a place that *can be* made even more desirable; so desirable that students will seek to be in the school library *even after hours and on weekends*, most particularly, *if you attach some food provision to it* (DA1)*.*

Access equity: a future for school libraries?

User agency in the use of digital media to connect a wide scope of participants was represented as a form of right on the part of the user and a form of responsibility in the equitable provision of resource access on the part of the school. Such access and agency was seen to enable a particular array of practices, such that *you should be able to work in teams in libraries, (y)ou should be able to talk in certain places in libraries and you should be able to communicate* (DA1)*.*

A potential future for school libraries was projected as part of wider community access to the resources of schools. This was supported by the rationale that governance of, and access to school libraries *ought to be* extended to become *much wider environments in the community.* This *much broader issue* articulated a philosophy in which school libraries were exemplified as symbolic of a *reconstituted* vision for education*, more than just a school facility* and thus accessible to a wider community. Open community access was further emphasised in the persuasive frame of *ought to be* and *should be,* constituting an evaluative schema for a comprehensive, visionary change in the character and function of schools and by association, of school libraries (DA1).

Referencing childhood experiences

By contrast with matters raised by DA1 in the foregoing discussion, the change-focused commentary offered by designers /architects DA2 and DA3 remained general and speculative through their sometimes guarded *small stories* referenced to recollections of childhood experiences. Information and communication technologies were identified as the single, specific marker of change for school libraries. In the second designer / architect interview, personal historical experience of *what was library like when I was at school*, was used to propose what a school library might now be like, as contrasted with the school libraries of these childhood memories. The notion of relying on past scenarios to emphasise the contrasts of change was regarded as a *natural tendency* (DA2). Classifying the school library solely in historical, personal experiential terms, without reference to contemporary renditions of school libraries, and without researched knowledge or personal user experiences with contemporary libraries, suggested a significant gap in the potential for imagining a school library from a standpoint of students and educators in current contexts (DA2).

In the third interview, childhood experiences were also used as a foundation classification in order to contrast perceived changes in contemporary school libraries. While this comment acknowledged that *it is very different from our day, or when I was at school*, so that by comparison with *the 60s and 70s for instance, (t)here's a lot more going on,* the discussion carried forward to offer only *the IT area* as evidence of change. Information and communication technologies also presented a degree of uncertainty, in the impression of *a week-to-week movable feast in the IT area*. The statement acknowledged that *it's important to stay in touch with that*, however it stopped short of detailing what 'staying in touch' meant or how this might be achieved (DA3).

This technology-focused change example was related directly to infrastructure costs, budget differences across schools and getting the technical matters of the *bones* of *cabling and all of that right* in each case (DA3). While this aspect of the discussion touched on the digital-online dimension of contemporary school libraries, there were no relational and evaluative connections, to move the discussion beyond the level of infrastructure to the possibilities of changing meanings for libraries more broadly, or for the impact of digital-online information media on pedagogical practices and consequent uses of school libraries by students and educators.

Speculation on the future of libraries was contrasted in ideas of stasis and change to leave the general prospect for libraries as tentative and open-ended. S*ometimes there's fairly fixed ideas about libraries,* suggested that DA3 had encountered others with immutable or enduring understandings about libraries which were perceived to be entrenched and resistant to change. Wondering *whether the whole library thing will change,* hinted at change significant enough to overturn *the whole library thing* (DA3). This calls to mind the 'endism' thinking critiqued by Brown and Duguid (2002, p. 17) as characteristic of information age predictions about the end of social organisations and institutions such as governments, universities and libraries. It could be suggested that declaring 'the end' to entities such as libraries classifies them as tentative, indeterminate and passing, removing the need to think about them deeply enough to consider their potential or to imagine evolving possibilities.

The statements about understandings of school libraries suggested that these two designer /architects were removed from personal engagement with libraries and were thus not well placed to draw on current experiences as users of libraries. This distance from the practices of library use implies a gap in the potential for these designers / architects to imagine school libraries creatively, from the perspectives of users or for current and future contexts. Such limitations could also influence their capacity to engage educators and students in discussions about the relationship among school libraries, learners, changing pedagogies and rapidly changing aspects such as information media and use.

Exemplars as models

Comments made during DA3's conversation about understandings of school libraries continued the 'disconnected observer' sense of distance. In this respect, DA3's small stories can be seen to constitute aspects of 'hypothetical tellings and deferrals of tellings' (Georgakopolu (2007, p. vii).

 Site visits to evaluate school libraries indicated familiarity with examples of new school libraries, but with tentative evaluative commentary. Some commentary was non-committal in its tone, *(w)e get to see a few*, moderated by the somewhat guarded critique that *(s)ome things could have been done differently there* , even though a the particular site mentioned was also regarded as *pretty impressive* . An example: *(we) did see that school in Melbourne, Coburg I think, no library in a new school. Their idea was online and dispersal of materials to points of need. They seemed pretty confident about that,* created a similar observer-

distance. The explanation for the *no library* decision, *(t)heir idea was online and dispersal of materials to points of need* , can be seen as non-committal, withheld or veiled in the observation that (t)*hey seemed pretty confident about that* (DA3)*.*

However indications for collaboration and communication emerged in the comment that, *I went with [a colleague architect] to see the new library*, and that *(w)e get to see a few (school libraries) through CEFPI conferences (Council of Education Facility Planners International)* (DA3). The explanation for the absence of a library in the Coburg school indicated that this designer / architect had accessed and retained information about this decision and that this was evaluated in some way among the options gathered and observations made during site visits to school libraries. The mention of participation in professional association activity (CEFPI) signalled a dimension of involvement in professional exchange specific to education facilities and a potential for openness to the school library design options noted in the discussion.

Learners and learning

Again there were significant variations across the designer / architects' interviews with respect to understandings about learners and learning. Matters of change featured as a key focus across the participants' discussions.

Learners, learning and teaching: evolving and changing

For DA1, the estimation that, *I don't think anything's changed with the learners since the stone age,* prefaced a view about human intelligence being a *constant,* moderated in contemporary times by changing and evolving understandings about *how people learn*. These evolving understandings were implied as a catalyst for responsive action in schools, such that *we're catering more now,* which implied flexibility within the change response, and required taking matters of context, *this environment,* into consideration. In *trying to individualise learning for each student,* flexibility of the change response extended to the diversity of learners (DA1). The equity values and beliefs underpinning this approach, expressed as collective 'we' statements, suggested that these understandings about learners and learning were in some ways shared. Although those with whom these understandings were held in common were not specified, it could be inferred that educators and possibly colleague designers / architects might be among the consensus.

Learners were represented as actively self-aware with respect to the contexts of their learning related to *the social times we're in, and economic times.* Learners were also considered to be conscious of their learning in terms of the processes of their learning and *more aware of how they learn and the alternatives for learning.* The significance of students' social-emotional responses to the places of their learning was connected to a proposed consciousness about *where they feel more comfortable learning as opposed to not comfortable learning* (DA1). These statements could be said to draw on education discourses which construct competent learners, who are independent, self-directed and reflective and able to make effective choices for their learning. Of significance to this project, these statements construct learners who are conscious of their environment and who have capacities to make judgements about the amenity of the places of their learning.

Theorising the education arena

Changing understandings about learning were indicated through a critique of aspects of the broader education arena in Australia particularly the perceived limitations of education structures, processes and practices. This evaluative account considered the tensions between the promulgation of philosophies such as individualising learning for students, *(h)aving recognised that every kid is different*, and the difficulties of implementing these philosophies in the context of *a system of mass education* (DA1).

Several levels of constraint were seen to permeate the scope of Australian school systems, *Catholic education or state government education, even private schools,* such that changes in implementation of individualised education philosophy were considered to be limited by categorisation and classification practices such as student age-group clustering and containerisation of learning *stratified into subject silos* (DA1). In particular, a relational connection was made between the perceived manipulative effects of assessment and assessment practices, on the overall character of learning experiences, and opportunities for students, *what is being taught* (curriculum) and the *how* learning and teaching are conducted.

The rationale and theorising in this discussion uses the language of education discourse and shares matters of a key concern to educators and education research in Australia, including that of *assessment driven curriculum* (DA1). Engagement with this scope of policy and professional dimensions indicates an awareness of the broader set of contextual issues influencing education in Australia.

Designers / architects' pedagogical knowledge

The extent and limitations of pedagogical knowledge was evident in historical *small stories* drawn from personal experiences of learning as a children, and the evaluation of the *project-based learning* experiences of their own children: *I was very sceptical about it, because I compared it to my own experience*. However personal historical experiences formed a kind of fall-back pedagogical knowledge position which was recognised as a *soft option to think about learners from the point of view of how I learnt* (DA2).

Such a position was also acknowledged as an effect of an *absence of really informed information*, so that it was, *quite a challenge to try and think about how learning is.* The discussion evaluated the observed mismatch of spaces and pedagogical practices, recognising that *all too often models (were) being developed which reflect pedagogies which give away the age of the designer.* Even given the awareness that *you do get a sense of much more project based educational approaches as opposed to the learning by rote educational practice,* this designer / architect disclaimed a capacity to venture further understandings about learners: *I'm not sure that I can elaborate much more on how I see learners, other than to say in a negative sense I guess, it's not the way it used to be and it's a mistake to just rely on old model*s (DA2). Hesitancy and a self-evaluated deficit position on pedagogical knowledge emphasised the withdrawal from further comment, as if a knowledge barrier inhibited experiential and relational engagement with learners and learning as a subject for discussion.

Being in an unequal position with respect to pedagogical knowledge was raised by several speakers in a Council of Education Facility Planners (2008) conference forum. Early in the forum, one architect ventured that he kept *hearing about pedagogies* and that most of it *was just confusing*, to the point where he would *glaze over* (Observation Notes 4.2, 2008). While there was an audience murmur following this remark, another participant proposed that *CEFPI* (Council of Education Facility Planners International) could be *a channel for this sort of stuff.*

Later in the forum, a third speaker, an architect, explained that she had *struggled with the definition and diversity of pedagogies and pedagogical approaches, working in the dark for too long.* Having made a decision to undertake *a higher degree qualification in education,* the architect reported that, *I am now beginning to understand the possibilities and am continuing to make the connections with the designing of good spaces for learning.* In the

wake of this outcome, the speaker challenged fellow architects, *(p)erhaps more of us should step out to engage formally and directly with these ideas* (Observation Notes 4.1, 2008).

These anecdotes illustrate the potential effects when discourse participants from different knowledge domains, fields of practice and discourses meet in collaborative endeavours: the dispositions of education meeting the dispositions of architecture (Bourdieu, 2005; Dovey, 2005). The language and meanings within pedagogies and pedagogical practices were expressed as struggles for meaning when attempting to apply these to the work of an architect (Observation Notes 4.1, 2008).

For one of the speakers it appeared that choosing to *glaze over* was also an effect of a struggle with language and meaning (Observation Notes 4.2). In the same ways, the language of architecture, its terminology, visual and graphic representations and the order of processes can be equally confounding for educators, producing unequal relations of power in the shared arenas of educational space designing (Bourdieu, 2005). The effects for these designers / architects differed in that one remained puzzled (DA2), one disengaged and a third confronted the confusion directly to venture personal agency through a process of learning in a new knowledge discipline.

(DA2) extended the discussion related to limited pedagogical knowledge to propose ways of coming to understand learners and learning: (o)*ne is to ask the kids, and get a sense of how the kids learn.* In this statement *getting a sense* implied an exploratory, experiential foray into the world of learners to gather in situ impressions of learners and the ways in which they learn. In this respect, the proposal of acquiring of pedagogical knowledge might be addressed by being in the proximity of learners to hear the voices of user experiences. Another proposal for researching pedagogical knowledge emerged in each of the semi-structured interviews, and was related to the potential to *explore through research and memberships of things like CEFPI help to identify the current thinking and pedagogy* (DA2).

Learning and teaching: scenarios and spaces

Exemplars of processes, models, and pedagogical practices were related to spaces designed to make possible *different learning scenarios*, and the achievement of different learning outcomes. These included the fit-for-purpose example of *a formal lecture theatre* suggested as *the most efficient way to impart knowledge to two hundred people at one point in time* with the explanation *that's knowledge as in information*. Student learning

preferences were expressed in terms of spaces, resource materials, furniture and fittings, so that *kids who prefer to sit in a bean bag in a very informal space, sucking on a bottle of Coke or something, reading a book or maybe watching a DVD* might be *catered for* as much as those who *like to work in groups* (DA1).

DA2's discussion drew attention to the impacts of the passage of time on school buildings related to changing patterns and practices of learning, so that *(y)ou really need to be looking at not just current models but models for the future,* meaning also that*, the building has to be flexible*. Consequently *the materials that are used and the technologies that are used have to be very adaptable.* These approaches were now prior considerations born out of experiences in designing school buildings where *the life building which might be 40 or 50 years* (DA2)*.*

The relational connection between learning and the designing of educational spaces thus became a pragmatic matter, exhibiting Franz's (2005) structural-instrumental understanding of designing: *I guess that's the thing I learnt about, that I've discovered about learners is how you learn now isn't going to be how you learn for the life of this building .* DA2 described these aspects as *probably the most telling thing.* However it could also be said that, in spite of being unwilling to express understandings about learners, there are other understandings which have emerged for this designer / architect through experiences of designing learning spaces.

Only one of the designer / architects drew on personal understandings and experiences of learners and learning to exemplify learners' relationships with school libraries. DA1's understandings reflected something of learners represented through inquiry learning approaches, and in much of the school library literature (ASLA/ALIA, 2010; Kuhlthau, 2010; Todd, 2010). Such learners were also represented as conscious of their environment, with capacities to make judgements about the amenity of the places of their learning and able to contribute to the designing of them.

For DA2 and DA3, school libraries were represented in uncertainties about purposes in learning and teaching and prospects for the future. While understandings about learners and learning were characterised by limited pedagogical knowledge, suggestions of ways to address this indicate awareness and motivation to tackle the recognised shortfall.

Designing

Introduction

The following discussion continues the data analysis from the designer/architects' semi-structured interviews. Across the semi-structured interviews the designers/architects explored matters concerned with designing processes and practices, influences on designing and outcomes of designing. They discussed current status-quo contexts and processes with respect to the designing of the built spaces of schools, including school libraries. The three (3) participants speculated on the potential for changing policy and administrative requirements to influence processes, participation and outcomes.

Table 9.2 below indicates the focus and emphasis given by each of the designers/architects in the semi-structured interviews. Each participant referred to designing activity related to school libraries in the discussion, but frequently referred to educational spaces more broadly. Given the different approaches taken by each participant, the opening section of the analysis examines some of these *small stories* independently, to preserve their individuality and to uncover those aspects which distinguish them and those which are in common.

Table 9.2 Data overview designers / architects: designing processes, influences, outcomes

Designers Architects	Designing processes	Influences on designing	Outcomes of designing
DA1[Director]	Status Quo Practices, Relationships SQ Partnerships, Scenarios Process & collab proposals	Personal philosophy & experiences	Examples/scenarios Proposals
DA2 [Director]	SQ Practices, Relationships SQ Partnerships, Scenarios Process & collab proposals	Personal philosophy& experiences	Status quo practices
DA3 [Director]	SQ Practices, designing preferences SQ Partnerships	Personal philosophy & experiences	Status quo practices

Three designing approaches

'So it's like getting from a tune in your head to writing a bit of music that everyone can play on the piano' (DA1)

This discussion opened with a statement that (*t*)*here are fairly defined stages in the design process, which you probably know*, as if it was assumed that I was familiar with and understood *the stages* and might not need to have them explained further. Thus the backdrop of the status quo network of policies and practices (those already in place in the school system), was an assumed context for school facility designing. However, a mix of creative, consultative, procedural and administrative stages in the processes of designing was detailed, along with a mix of colloquial and professional-in vivo language (Charmaz, 2006) to communicate these processes and practices. Those also engaged through the designing process were referred to at different points as *people*, *clients*, and *stakeholders.*

The impact of wider policy and administrative contexts was made clear in the evaluative contrast of Australian and *American* designing scenarios. Australian national policies, standards, guidelines and procedural routines were advanced as the start-point for a cascade of precipitate activity. The constraints of this designing and building were constituted in pressured timelines when, *(y)ou know, the minister makes an announcement, and you've got to get on the train*. Designer/architects and schools were then required to *go through the stages*, working to standards and guidelines of *space schedules*, *so many kids, that means so many dunnies and so many this, that and the others.* This pressured pace of activity was contrasted with the American model which allowed for *eighteen months to two years of intensive community involvement before they, the architect puts anything to paper*. Colloquial 'in vivo' language suggested close experiential and relational engagement with the processes described and a sense of familiarity and agency in the expected practices once, *the minister makes an announcement.*

Designing processes were represented in figurative terms as stages in a process, *like coming down a funnel,* with some refining at each stage. Stages involved getting *certain input from people who are interested*, allowing the accredited designer to *put down the first sketches, the schematic design*, *dimensioning off areas* and *looking for more input all the time*. The process of alternating consultation and creative activity between the accredited designer and the *client* continued to a point at which *documentation* was prepared to *translate those design drawings that builders can read and use for pricing.* The

preparation of detailed drawings included further *client input* related to *floor conditions, paint colours, a lot of dimensioning, the way things go together,* and the *tendering stage* signalled the end of consultations with clients.

As a set of stages in a process, these activities of designing constituted a particular order of things, bounded by points at which the activity was marked by a *sign off in order to proceed,* because the designer/architect needed to know, *if you're barking up the wrong tree because there's no point in keeping going.* This approach was substantiated on the basis that *you've got to have the client's input at the start and through the process.* The position of the *client* as a participant in the designing process was further emphasised on the basis that *you can't design in a vacuum,* and that without the collaboration of the client, the work of the designer/architect was substantially *meaningless.* At this point in the discussion the client was positioned as responsive rather than a proactive, as if awaiting the provocation of the designer/architect in order to participate.

The material activity of designing was represented in the experiential classification of designing stages, processes and participants, and the detail communicated through the use of specific professional terms for practices of designing such as *schematic drawings* and *dimensioning*. Administrative milestones were constituted in *signing off* and *tendering.* However the colloquial *barking up the wrong tree* might also constitute a milestone of sorts, if the effect was to send the designer back to the drawing board, as it were. The qualities and value of social relationships emerged in the use of both formal and informal language (professional and colloquial invivo) to communicate the social relationships and activities of designing. The use of figurative language, *a tune in your head,* served to indicate an underlying positive, evaluative understanding of the worth of dealing with designing in particular ways (Fairclough, 2001a).

The use of metaphor of writing music to represent of the processes of designing, as *getting from a tune in your head to writing a bit of music that everyone can play on the piano,* suggested a belief that designing is both a personal and social process and that dimensions of designing activity are a form of language (*a bit of music*), which can be communicated, translated, understood and performed. The onus of creation, translation and communication appeared to be assigned to the designer/architect, since the creative participation of others was not detailed. Notwithstanding the figurative analogy which can be seen to imply active participation of *everyone*, clients appeared to be cast in a responsive rather than a creative role. This suggested that the designing process and its

outcomes (*the music*) are a creative experience for designers / architects and a more responsive one for users.

'The ideal is somewhere halfway between' (DA2)

A close experiential-evaluative focus on *clients* and on the relationships between designers/architects and clients was maintained in this discussion. The term 'client' was used to represent school-based participants including administrators and teachers. Scenarios, with specific examples *from one end of the spectrum to the other* were used to exemplify the diversity of client experiences, and the consequent response required of designer/architects (*our role*).

While indicating that *I don't want to sound patronising*, clients at *one end of the spectrum* were represented as *relatively naïve in terms of what they're doing.* These clients were perceived to approach the designer/architect with the view that *'you're the architect you should know what a library or a resource centre requires, give us one'.* This stance assumed the designer/architect to *understand how they're going to use it,* which constituted *an unfair expectation.*

Clients at the *other end of the spectrum,* were represented as those who have *really thought through what they want* in both qualitative terms, *the sorts of things they want to achieve in that space, and how they want it to feel and look,* and in quantitative terms *numbers of students, area, how that area breaks up.* However, those who *come with a brief* and who have *figured it all out* were also seen to position the designer/architect as *almost a draughtsman,* reduced *to joining the dots, and you've been told where the dots are going to be.*

Designing with naive and inexperienced clients who had not made clear connections between their *educational philosophy* and *how they're going to use it* (the school library), was evaluated as *actually really interesting* and *sort of scary, but it's exciting.* This scenario was rationalised as an opportunity to *engender a high degree of collaboration and ownership of the outcome* through *having the dialogue to tease those things out.* Consequently, such a circumstance obliged the designer/architect to *develop a very clear understanding of the ethos of the school* and how the library might *fit into their curriculum.*

Considering these poles of possibility in relation to designing partnerships with clients, *the ideal* was *somewhere halfway between those two.* This option was substantiated on the

basis that a designing relationships would thus be well informed with educators who had *developed a sense of knowing how they want to go about doing what they do* and *how the resource information centre is going to plug into their school life.* An *ideal* partnership was thus defined as one in which educators had considered these matters but *haven't quite figured out the details* so that *you get to work on that together.*

One complicating factor in designing relationships was classified as a *knowledge vacuum* in some schools with respect to bringing educator expertise to bear on school library designing endeavours. This was seen to be most evident in schools where, *often they don't get other staff on board within the organisation who can inform the process,* with the result that *it's not even as if we can tap into knowledge within the school .* The knowledge vacuum was exemplified particularly in new schools where thinking *through their ethos of how they actually want to operate* had not been undertaken. In some schools the absence of educators in designing activity involved direct exclusion, *sometimes we're told we won't need to talk to the librarian.*

Thus the diverse and sometimes messy circumstances of designing relationships and activities were represented in DA2's critique of client capacities, their relative (un)preparedness for designing activity and the evaluation of client assumptions and expectations. The discussion also indicated positive value, *exciting* and *involved in a school*, in approaching designing in particular ways, preferred in this case by the designer / architect. While the language included productive relationship terminology, *developing dialogue, engender a high degree of collaboration,* and *ownership of the outcome,* the discussion also positioned both educators and designers/architects in unequal relations of power from different standpoints and signalled competing discourses of expertise (Fairclough, 2001a).

In this discussion for example, designers/ architects were represented as disempowered in creative designing terms (possibly in the short-term) when educators offered comprehensive input, so as to relegate designers/architects to *joining the dots.* Educators were represented as disempowered when they were absent from designing processes either by direct exclusion or by omission as a consequence of limited knowledge about, or by perceived inadequate reflection on the connections among learners, learning and the designing of educational spaces.

As has been noted earlier, there is a further complication in the status quo practices of educational space designing, hitched to the constant of governance guidelines which are almost silent on educator and student participation in activities of designing (Commonwealth of Australia,2010a; Commonwealth of Australia, 2010b). A disturbing and puzzling aspect of the Designer/Architect experiences expressed in the semi-structured interviews is the potential for systematic exclusion of educators in school and school system interpretations of designing processes for educational spaces. These practices of exclusion emerge in the directions given by unnamed project directors to designers/architects that they will not need to speak to educators in the course of their architectural designing activity. In these terms the prime users of educational spaces are excluded from processes of designing by both omission and commission.

'I'm not really an expert' DA3

This designer / architect maintained a degree of distance from school library designing processes and practices, through the sometimes passive experiential recounting of practices in response to the semi-structured interview statement. *Not something we do every year,* and *I'm not really an expert,* was further moderated by, *there's usually a team of us,* as if there was reluctance or hesitancy to take responsibility for even *the most recent one* (which) *seemed to go fairly well* (DA3)*.*

Procedural and administrative aspects of status quo processes currently in place were conveyed as the *standard approach for the Independents* [independent schools]. Details of governance and implementation of the *standard approach* were subsumed in a scoping statement that *each state has its own BGA authority* (DA3), as if the acronym spanned the comprehensive meaning of policies and processes related to designing school facilities for the Independent sector. This may also indicate an assumption that I, as the interviewer, understood BGA (Block Grant Authority) policies and processes and did not need them to be detailed further.

The discussion juxtaposed current and future prospects about libraries. The view that *sometimes there's fairly fixed ideas about libraries,* was contrasted with some doubt about future library directions in that, *you do wonder whether the whole library thing will change* (DA3)*.* While these statements reflected something of the themes and theses of change prevailing in the literature, particularly regarding impacts of digital information and communication technologies on libraries, the discussion did not expand on the dimensions

of stasis and change raised in the statement. No further comment was offered about what might compromise or change the designing or design of school libraries or the prospective outcomes of such influences.

Others involved in designing processes were categorised variously as *clients*, *teachers* and *library staff.* Preferences were expressed about designing relationships which included wanting to be *directly involved with clients* as if to substantiate the choice that *we don't build for the State* [government schools], *at least up until now,* because collaboration was *not the way it works with DET apparently.* This choice was further validated in that *you can do the template thing but this is not a good model for young architects.* This contrastive rationale suggested an underlying preferred evaluative schema for a designing approach or philosophy which involved clients and which was embodied in the choice to reject a less satisfying *model* of practice, *at least up until now* (DA3)*.*

References made to partnerships and participants reflected the unpredictability in both designing processes and relationships which have been observed in school facilities projects (Elliott Burns, 2003b). Referring to the section of the interview statement which drew attention to learners and learning in relation to educational spaces, DA3 proposed that *(w)ell, we can get the teachers in for that,* a statement that was immediately moderated by, *although sometimes we've been told not to speak with the teachers, at least initially.* This again raised the gate-keeping influence by (un-named) others involved in education facility projects, if not a deliberate exclusion of those who would use such facilities most closely, in this instance teachers, and students who remained unmentioned in the discussion. The unpredictability of who participates in school designing activity was compounded in the indication that *library staff* were more likely to be involved, *we often speak to during the project at different times* (DA3)*.*

DA3's discussion addressed matters of designing in the first instance in relation to system and school governance. This start point suggested that processes of designing the educational spaces of schools were assumed to be part of a network of practices of system focused structures and conditions.

Influences on designing

This following discussion brings together influences on designing expressed across the three (3) discussions with respect to evaluations of particular system influences, the

significance of designing relationships involving discursive relationships and for DA2, a reflection on personal philosophy and ethical practices.

System influences

Although Australian government and school system policies and accountability contexts were raised in the preceding section it is worth noting that designers/architects identified a number of associated system circumstances as coercive influences on designing activity in school settings. A key consideration was expressed as the need to understand the educative and socialising *purpose of schools* and consequent need for diverse spaces for learning designed to enable the learning of *skills that they need to take with them into the world of work* (DA1). The layers and divisions of contemporary schooling were represented as barriers to designing for learning diversity, and these aspects challenged those designers who wondered how to *cope with assessment driven approaches in terms of building,* courtesy of national curriculum policies (DA1). These perspectives accorded with a *wonder whether the whole library thing will change* (DA3), and further reflected the uncertainties raised by school system representatives about shifting cultures and practices of learning:

> It's quite tricky to talk about what 21st century learning might look like when the pathway to get there is still a little murky (Sutton, 2009, p. 17)

Working within current structures and processes to negotiate ways of operating to meet diverse project conditions also featured in the designer/architects' discussions. For example, procedural matters emanating from policy and accountability conditions were seen as influential on the quality of school buildings. This related particularly to the cycle of tendering and procurement, wherein *it's a quality and time and cost constraints influence on what you're trying to achieve.* Desired outcomes were seen to be impacted directly by *different procurement processes which achieve a better quality result than others* combined with the constraints of *frugal budgets* which also influenced *the whole process of delivering buildings* (DA2)*.*

Perceived advantages in status quo designing conditions for some Australian states (Victoria and Queensland) were evaluated to indicate that *architects have had quite a good input into school design* in these states, enabling a move beyond post-war *cookie cutter* design. This influence was considered to enable *a different focus and ideas and so you get great variety and diversity* as well as *innovation from people who are prepared to push the bubble,* in spite of system constraints and requirements of the *date schedules and*

prescriptive things we have to do. In other Australian states with centralised government architect systems, no desirable alternatives were perceived beyond, *do just the same old again* (DA1)*.*

However any perceived advantages within current systems were seen to be threatened by anticipated changes, *I would very much suspect that it's on its way*, which would involve increasingly government-directed designing and building systems and processes such as the *public/private partnership* (PPP) *model of dealing with public infrastructure.* This constituted a *fear, in a design sense,* that proposals for such changes *would not be rejected.* One potential impact of PPP was perceived to be that *stakeholders having an input into design, won't happen.* Thus participation of those most closely concerned with the use of schools and libraries would become hostage to *(e)conomies of scale, build eight of the same, at a lower price*. While managing aspects such as facility maintenance might be more straightforward in PPP model, the template approach assumed that *we all think we know what goes on in every one*, and that the casualty would be effective *educational design* (DA1)*.*

Thus within current structures, there was a juggling-act of negotiating constraints to serve particular agendas. The language of *delivering buildings* has the effect of packaging the complexities of designing activity in a way which masks diverse circumstances and obscures the participants, purposes and processes of designing schools in specific contexts.

Designing relationships

Each of the designers/architects raised matters of relationships with *clients.* Overall the identity of 'the client' was not clearly defined and could be said to slide across the scope of those likely to be involved in designing relationships, including school systems as clients. These relationships were exemplified in discursive negotiations of design briefs, in school development and master planning decision-making, in the selection of procurement processes and financial arrangements. In one case the opportunity of *being directly involved with clients* was a rationale for working solely with schools in the Independent sector (DA3). For another, the reach of relationships beyond the school to *community organisations* and *local government* represented a broader and desirable field of participant involvement in designing schools (DA1).

Long term planning and long term relationships were evaluated as a key opportunity to *focus on the ultimate goal of the school's development* such that *relationships drive pretty*

much everything. A particular caution was related to the value of master planning activities with schools, so that *the temptation* was avoided, of undertaking specific projects *without really considering the long term effects* of where an individual project on *fits into the big picture.* In these respects the discursive relationships with schools were inferred as conversations over time and through successive stages in building programs, to constitute a form of designing in dialogue.

Master planning was identified as *something that often schools assume is going to work out in the long run,* but which could be *a major influence on the design of an individual school.* Designing was thus represented as a relational process beyond individual projects. One dimension of the building of relationships was represented as embodied in the buildings themselves: *(o)ur relationships with our clients are important,* in that, *we try to have, to ensure that the buildings that we build actually encourage relationships as well* (DA2)*.*

Personal philosophy and ethics

Although accountability in practices of designing was raised by each of the designers/architects, DA2 pursued a more lengthy discussion about the influence of ethical practices in working with schools *to reinforce the reasons for the work*. These practices signalled an underpinning set of principles or discourse of practice ethos which was *influenced by the fact that clients have a long term interest in the ability of buildings to be robust and meet long term needs and be flexible.* This approach was substantiated in the rationale that, *we don't work for developers or people who might have a tendency to build buildings and flick them up,* as a way of ensuring that, *we try to be good stewards of our client's resources.* The constraints and realities within this ethical framework were explicated as *(f)rugal budgets that have to be met and are able to be met in a way that's meeting the needs through architecture,* balanced with the perceived satisfactions of *the holistic approach of being able to be involved from the beginning to the end.*

Outcomes of designing

Two of the designers/architects advocated changed approaches to designing which emerged from their philosophies and practices. Contrasts can be seen with the approach taken by some educator participants wherein their focus was on post-occupancy experiences of buildings and spaces which either met or failed to meet user needs.

Places and spaces of schools

The influence of the spaces of schools in this discussion included the aesthetic, social and emotional dimensions of students' experiences of the spaces and places of schools. For one of the designer / architects, experiential-existential dimensions of spaces emerged through a focus on the amenity, human dimensions and memory-related experiences students might carry with them from their experiences with the physical spaces of schools. Students' potentially negative experiences were cited as a catalyst for change in the designing of schools, reasoning that schools *could be one of the worst places they go, particularly the toilet and the eating.* Such experiences did not *augur well for them wanting to go back for lifelong learning* which made it likely that *their memories of education are going to be pretty coloured* (DA1)*.*

Responsibility for the sometimes *far too institutional* and *far too segregated* features of school environments, was a result of expressions of designing which achieved an *almost prison like functionality and appearance.* This discussion critiqued *a lot of the places we design for students,* as *far too austere* and suggested that, *we could up the standard of schooling in the broader sense.* Making *libraries and whole school precincts as nice places to go* would improve the experience of *what it's like to be at school*, *what it feels like* (DA1)*.*

In calling on experiences related to health and sanitation, which may evoke personal, even visceral responses, this discussion emphasised aspects of human living which could be regarded as basic needs. The juxtaposition of negative-positive examples in the discussion emphasised the evaluative judgements made about particular experiences of schools for students, and the potential for these to have long-lasting impacts. While the rendition of a number of undesirable experiences was a focus of the discussion, the corrective response was condensed as an action to *up the standard* to change students' experiences of being and becoming in the place of the school and thereby influence their affective responses. The contrast thus served to accentuate the desirability of changing negative situations (Schon, 1995; Fairclough, 2001a; Rogers et al, 2005).

Student participation

Potential for students to participate as contributors in the making and remaking of educational spaces emerged in two of the designers/architects' discussions. Student participation was substantiated on the basis that *as designers we don't have to design right*

down to the last table and chair. Students could contribute to the changing of spaces because *this is going to be your space, put something of yourself into it,* in furnishings and fittings, *so it's yours* and *you feel some ownership to it.* In statements which had the effect of addressing students directly, *this is going to be your space*, the discussion emphasised the social relationships of designing which offered students a potentially open place in the designing process (DA1).

Recommendations for student participation began, in one case, with *ask the kids, and get a sense of how the kids learn.* Reflecting on the idea of schools as communities of learners, the discussion proposed that *we can design for that, to strengthen that feeling of community and the diversity of spaces* so that various *learning scenarios* are enabled in different spaces. The expressive and relational language of possibility, *we don't have to*, *this is going to be*, *ask the kids* and *we can*, are further cues to the speaker's emphasis on the social relationships in activities of designing (DA2).

Educator and community participation

The scope of prospective participants in designing activity for educational spaces described a wide arc in and beyond the school in this discussion. Suggested participants included *the teachers certainly*, *the principal and the school council because it's made up mostly of parents.* This group was expanded to involve *community organisations who might have an interest in using the facilities.* The inclusion of *local government* was based on a conviction that *I think wide consultation is important* and justified according to the belief that *(p)eople have got to be able to say they had the opportunity to have an input into these resources* (DA1)*.*

The recommendation for the involvement of community organisations and local government aligned with equity discourses in international forums concerned with the reconstitution of schools as community-centred spaces and with the right of community access to publicly funded resources particularly those of information and communication technologies (OECD, 2001).

Summary

The scope of understandings about school libraries, learners and learning varied to a considerable extent across the designer / architects' *small stories*, which may reflect their

background experiences and their opportunities to engage directly with libraries and with ideas about learning and teaching and education more broadly. While the information and communications technologies were an in-common feature of change pertaining to school libraries, the meaning of these changes and their future implications also varied across the discussions. Limitations in pedagogical knowledge and understandings about relationships among learners, learning and school libraries were the most differentiating elements across the discussions.

Relations of power can be seen to produce assumed, status quo processes through the implementation of policies, standards and the accountability requirements of governments and systems. In these respects, discourses of constraint appear to outweigh discourses of creativity as influential in the designing of school libraries and other school learning spaces. These influences are potentially reproduced through the designing and project direction work of those involved in designing the educational spaces of schools. Thus status quo processes constrain opportunities for the involvement of the users of educational spaces, and work to confine participation to reactive responses or in some cases to mediate against participation.

Knowledge and experience gaps could be said to constitute discursive barriers in designing relationships as participants from different fields of practice meet in, or indeed are absent from shared designing endeavours. The implications for communication and for designing outcomes may be considerable, if for example, designers / architects assume, misunderstand, overlook or actively ignore elements which are of significance for educators and students in the processes of designing. Knowledge and experience gaps could also be said to constitute voids in understandings to inhibit capacities to imagine the designed outcomes of school libraries from a standpoint of those most closely associated with these endeavours, spaces and places. The variations in pedagogical knowledge suggests that for designers / architects there is unrealised potential for building knowledge about libraries, learners and learning to productively inform processes of designing.

CHAPTER 10: EDUCATION FACILITY PLANNERS': *small stories*

Introduction

Data from semi-structured interviews with three (3) education facility planners are referenced in the analytical discussion in this chapter. An overview of participants in the study is in Chapter 6, Table 6.1. The education facility planners interviewed for the study are:

> **EFP1:** *Education Officer: School Planning and Building* was employed by an independent school system. EFP1 has a background in education.

> **EFP2:** *Building Project Manager* was employed by an independent school system. EFP2 has a background in building construction and construction project management.

> **EFP3:** *Business Manager* was employed by an independent secondary school. EFP3 has a background in accountancy and financial project management.

As noted in Chapter 6 'Gathering small stories: research design and ways of telling', and detailed in Appendix B3, the education facility planners were invited to discuss aspects raised in the semi-structured interview statement:

> *In relation to the research project I am interested in how you see your role as a designer of learning spaces and in the experiences and influences you call upon as a designer of learning spaces. I am also interested in what you understand about school libraries and in how you imagine learners and their activities in relation to school libraries.*

As with the previous data chapters, the analytical discussion unfolds in phases of description, interpretation and explanation to examine understandings, language and relationships, and to critique status quo issues and obstacles (Fairclough, 2001a). The analytical discussion moves to positive critique with respect to venturing creative possibilities for addressing the issues raised by the education facility planners; to identify resources for creative influence, and to examine the potential within systems for openness to alternatives. The dialogic data are examined in most detail, with the inclusion of field notes where these coincide with matters raised in the semi-structured interviews.

Table 10.1 below indicates the focus and emphasis given by each of the education facility planners. To facilitate the flow of the discussion, participants' direct quotes are in *italics* and participant codes (EFP1, EFP2, EFP3) are located in relation to direct quotes, or at the end of sentences or paragraphs, to reference the data transcripts in Appendices.

Table 10.1 Data overview Education Facility Planners: school libraries, learners, learning

Ed Facility Planners	School Libraries	Learners & Learning
EFP1 Educator	Beliefs/Philosophy, Experiences, Practices, Examples/Scenarios, Reflection, Evaluation, Advocacy	Beliefs/Philosophy, Practices Experiences, Examples/Scenarios, Evaluation
EFP2 Project Mgr	Observations, School focus Limited libraries discussion	Beliefs/Philosophy Observations, Experiences
EFP3 Finance Officer	Disclaimed capacity to comment	Disclaimed capacity to comment on either learners or learning

Variations in the character of the discussions across the education facility planner group (EFP) may be partly accounted for by the variations in the work roles each undertakes, even-though these work roles cluster under the one umbrella of education facility planner. With respect to these variations the opening section of the analytical discussion about libraries, learners and learning deals separately with each of the participant interviews.

The language used by EFP1 and EFP2 could be said to constitute hybrid forms as a consequence of straddling two fields of practice. For example, EFP1 had worked as an educator and had taken up a role in the area of *School Planning and Building* as an education advisor to new school projects. In these respects his *small stories* exhibit a focus on the practices of learning and teaching and a facility in the language of education which could be said to attach to the dispositions of education (Bourdieu, 2005), as well as a threshold familiarity with the school system language of planning and building.

EFP2's role as *Building Project Manager* included recent work in the designing of secondary school facilities for the curriculum area of Design Studies, which entailed EFP2 becoming familiar with the Design Studies curriculum. In these respects his *small stories* constitute a hybrid of school system project management language and some familiarity with education language.

EFP3's *Business Manager* role in an independent secondary school included building facility management in the overall school program and the financial management of a multi-

million dollar school library building program, through which he was a member of Reference Committee for the project. However, his *small stories* of libraries, learners and learning could be said to constitute 'refusals to tell' (Geogakopulu, 2007, p. vii) on the basis of disclaiming expertise in the field of education and choosing to comment only on management matters related to the library project at the school.

Libraries, Learners and learning

Running a close second (EFP1)

Understandings about libraries, learners and learning were expressed in terms of beliefs and philosophy; in renditions of experiences, practices and exemplars, most often through description, reflection, evaluation and advocacy. As noted in the introduction, EFP1's educational background created a familiar zone from which to speak about libraries, learners and learning.

As *symbolic of community culture* and sites of *enculturation of students*, school libraries were represented as entities of considerable influence in schools. With respect to symbolic potential, school libraries were evaluated as *second only* to the *school entry* and *reception area* in their capacity to signal the school's values to the community. A *welcoming entry* and *expressions of school culture* were emphasised and evaluated as *absolutely top of the list to convincing parents that this is a place of confidence and that they* (the educators?) *know where they're going*. In addition, social-relational and evaluative influence was seen to be ingrained in the opportunity to *drill that culture at a deeper level and specialise in aspects of that culture*. Figurative, qualitative descriptors of *central to the operations of a school,* and *a place of display and statement* further emphasised the school library's influential capacity.

School libraries were represented as *second only to the classroom where you can pull that culture together,* and *second only* as a *de facto gathering space for different purposes within the school for display and initiatives*. In this discussion, ideas emerged of the built spaces of school libraries as cultural statements with semiotic power and as socially cohesive catalysts for expressions of community. The repeated evaluative classification of *second only,* constructed school libraries within a hierarchy in terms of cultural, symbolic and practical influence.

In terms of learners and learning, the school library was commended as a model site, *where the epitome of the best learning examples should be in the school*, and as *a place of greatest display in terms of what's happening in the whole community and not just in their own little window box in the classroom.* The idea and image of *resource market* was translated to a physical built-space schema. This was imagined in a concentric, circular arrangement of central staff space with inner encircling library and outer encircling classrooms would ensure that *resources are constantly seen every single day and that's the only way most teachers access them, because they have to fall over them.* In these terms the built-space schema was also positioned as a solution to perceived difficulties with the use of resource materials by teachers.

Such a configuration was seen to promote *equity across the site, so they can't just position it (the library) at one edge of the site, and that means parents as well as students and staff.* The *central resource* location of a school library was also considered to signify its accessibility in physical and equity terms and in terms of *future possibilities*. Libraries emerged as equity enabling, warehouse, collection and dispersal facilities which *will always have a need to coordinate the storage of once-only resources like data projectors, so there's access for everyone.* The emphatic statement that *equity has been settled,* was used to extend the idea of access equity to resources through after-hours use by *the learning community*, in particular *for families* with *a three year old computer,* and *unreliable internet access.*

School libraries and teacher-librarian roles were characterised as *being transformed.* These transformative effects constituted *the biggest evolution in our schools I believe,* which had been wrought largely by information and communications technologies. School libraries were represented as vanguard IT sites in schools, providing a conduit for both the entry and *dispersal* of computers which *were first in libraries before they were anywhere else in the school, the classic database management tool.* The evolving of school libraries from *keeper of the books to knowledge management* was predicted to continue, with the *merging of libraries and technology centres* to create information centres of virtual, material and practical knowledge dimensions. In these terms school libraries are positioned to absorb and to produce transformative effects as agents in the experiences of users and their learning.

A set of ideal conditions for learning was based on the *modelling of research strategies and inquiry learning with the students so that the TL becomes a second curriculum designer.* The

material activity of learning was constructed as *kids' learning cycle* of support, *constant feedback and gratification or self actualisation,* and the learning of *cooperative behaviours to be able to move between unsupervised, or non directed supervised activities increasing learner independence.* These perspectives created relational and experiential connections, investing school libraries and teacher-librarians with influence and agency in the learning programs of students. The statements indicate an underlying philosophy of learning and teaching, along with dimensions of pedagogical certainty about the ways learning experiences might be designed. References to processes of inquiry learning, support for learners and developing learner independence draw on discourses of education more broadly and in particular on inquiry learning research and the school library literature (Todd, 2005; Kuhlthau, Maniotes & Caspari, 2007).

Understandings that school libraries were both sites of and catalysts for change, stimulated proposals for commensurate changes in designing and built-space configurations. Provocations for these material changes were attached to system and policy dimensions in which *this building is becoming, within block grants, a large multi-purpose building*. This implied that there were already moves within Commonwealth Block Grants Authority (BGA) guidelines to consider school libraries as more generalised spaces. This statement was expanded in proposals for ways to adapt current configurations to *move to libraries where the external walls can move so that they can facilitate the indoor stage area of a performing arts area.* In these proposals, some current structures would have the capacity to adapt, in that *(y)ou can basically back off the end of the building if you shape it right and lead out into the open and you can integrate your indoor and outdoor facilities*.

EFP1's discussion represented school libraries and evolving entities with agency in student learning, within discourses of education as changing landscapes of learning. These understandings were used to substantiate commensurate options for spatial responsiveness in designing of school library spaces.

Of archive and innovation (EFP2)

In this discussion, understanding about libraries, learners and learning were expressed in terms of personal observations, experiences, speculations and beliefs, and some of these were exemplified in a practice scenario example. Thus the focus on school libraries was limited to a rendition of features and to an experiential account of an inventive approach taken by one school to a school library facility expansion.

School libraries were defined in terms of features described as *traditional.* These included *books, audio,* or *you know, visual probably in the sixties or seventies*. One material activity of libraries was considered to be the element of *display*, of *making a feature out of the archive*, through *displays of rare books, sculptures and paintings.* Activities associated with school libraries included *people reading stories*, and *the tacit learning involved in building spaces like libraries and shopping centres*. Early in the discussion flows of change in relation to school libraries were represented in the transition to *television,* which was *always associated with the library.* In these terms libraries were represented as versions of storehouses, with a passive archival quality, and their material activity was represented as display or showcase. Using Franz's (1998) *conceptions* of spaces, these definitions conveyed libraries in quantitative terms as containers for objects, subjects and events.

Learners were*, without a doubt the learners are children in schools in fairly traditional modes,* who were *in the general proximity of the building*, and *were basically a human being, actually learning.* EFP2 speculated that there was *quite possibly some connection* with a wider group of *learners being community members using our facility out of hours.* Learners' experiences and learning preferences were recognised in the *great differences in how people learn*, which were related to understandings about learning developed through exploring ideas of *learning as languages.*

These understandings about learning were drawn from *books on design, where they talk about three languages, natural language and mathematical language and graphic language.* However, as *an observer of myself and how I've learned, you know, and just seeing myself in learning situations over the years.* Self-evaluation of learning style resulted in the classification of *a kinaesthetic learner first of all, having been a tradesperson, most of my life*. This *first of all* classification was moderated by other personal experiences in which, *I have done tertiary studies and you know, I know how I like to study*, and with examples of others who were *great learners in my experience* who *encouraged me to know what you can do if you've got a passion about a subject.*

A design project was used as an example to demonstrate the ways in which the school library and dimensions of learning had been *brought together. I've seen libraries expand to include the kinaesthetic learner,* through an *innovation centre* designed to *provide learning feedback loops for experiments with food, science and wood, I was told.* EFP2 noted that this version of a *junior years technology centre, heralds a watershed in that you potentially are doing art, science and technology in a hands on way in association with the library*

resource, representing *another style of learning hitherto I don't think it's been included much in libraries.* The educational design brief for the innovation was judged as *great* and *interesting*, but it was also *hard* (EFP2). This vignette creates an experiential contrast of the library as *innovation centre* with the earlier evaluative rendition of library as *archive and showcase.* The flow of change for libraries becomes leaps-and-bounds through the juxtaposition of dichotomous versions of meaning and practice. However it could be said that the innovation centre may also exhibit qualities of the showcase.

These perspectives about libraries, learners and learning were quite often expressed by EFP2 with a tentative quality in the use of *you know,* as if to check that the listener understood the explanations offered or as if the ideas were in development. While the expression of more traditional perspectives was acknowledged, EFP2 drew on personal experiences of exposure to learning approaches. This aspect of the discussion referred to others who were seen to be model learners, and was referenced to personal research undertaken to *learn about learning*, as avenues to inform his reflections and observations. Learning emerged as a personal journey, and ideas of school libraries attached to largely historical meanings with one contrasting contemporary example. The dynamic information environments, the active learning, social and processes and constructivist pedagogical approaches of the discourses of education and specifically of the school library literature, appeared to be somewhat removed from EFP2's discussion (ASLA, ALIA, 2010).

'I'm really not the best person' (EFP3)

As noted at the outset of this chapter, there were variations in the make-up of the education facility planners' discussions which may be partly accounted for in variations of practices and expectations which constituted their work roles in their particular situations. Recalling that EFP3 was a *Business Manager* in an independent secondary school, and that practices of the education facility planning in this instance were combined with financial management responsibilities. This hybrid form of activity involved financial leadership and project oversight of the school library building project.

The semi structured interview statement invited the expression of understandings about school libraries. EFP3's initial response to the statement was, *I'm not the person to talk to about that. You will need to talk to others about that*. As interviewer, I acknowledged that, *Yes I am aware that you offer particular expertise in the finance area, but I wonder if you would be prepared to talk a little about your perceptions, your understandings about*

libraries (interviewer). I hoped that this prompt would encourage observations about school libraries with respect to the newly completed Harrison College library. EFP3 replied, *(n)o I can talk about the part I played in the committee and in other ways.*

The second aspect of the interview statement focused on learners and learning. EFP3 again positioned himself at a distance from this aspect and conveyed his unpreparedness or unwillingness to advance a perspective, *(a)s I said, I'm really not the person to ask about that. We had plenty of teachers involved in the discussions.* These statements can be seen to maintain an experiential, relational and expressive-evaluative distance from these aspects of the discussion. Reflecting on the scope of *small story* renditions outlined by Georgakopulu's (2007, p. vii), this distancing can be seen to constitute a *refusal to tell* justified by a rationale of disclaiming expertise, *I'm really not the best person to ask about* education matters because *we had plenty of teachers involved in the discussion.*

This segment of the analytical discussion has considered the ways in which the language of each education facility planner operated to construct their material activity, social relations and processes, and mental phemomena of beliefs and values about school libraries, learners and learning. The discussion has referenced some of the discourse perspectives within which aspects of the participants' realities were expressed, and noted the discourse perspectives which appear to be aside from their realities. The discussion of the analysis moves to consider the participants' approaches to design and designing.

Designing

Three designing approaches

As noted in the introduction to this chapter, each of these participants undertook the work of education facility planning according to the particular focus of their individual work roles and responsibilities. With respect to these variations, the analytical discussion deals separately with each participant interview.

Table 10.2 below indicates the focus and emphasis given by each of the education facility planners in discussing matters of designing processes, designing influences and designing outcomes. EFP1 and EFP2 discussed designing activity with reference to learning and teaching spaces more broadly, but with few references to school libraries as examples of learning spaces. EFP3's discussion related only to the newly constructed library at Harrison College. To facilitate the flow of the discussion, participants' direct quotes are in *italics* and

participant codes (EFP1, EFP2, EFP3) are located at the end of sentences or paragraphs to reference the data transcripts in Appendices (DVD Transcript Record).

Table 10.2 Data overview Education facility planners: designing processes, influences, outcomes

Ed Facility Planners	Designing processes	Designing influences	Designing outcomes
EFP1 Educator	School System focus Status quo practices Report, Reflection	Beliefs/Philosophy Practices Examples/Scenarios, Research	School System focus Status quo evaluation
EFP2 Project Manager	School System focus Status quo practices	Experiences, Research Observation	Status quo practices Innovation example
EFP3 Finance Manager	Status quo project Problem examples Project schedule	Status quo projects	Design features focus Design problem examples

'I'm just one of the cogs in the wheel' (EFP1)

Knowledge and experience as an educator characterised EFP1's activity as an education facility planner with respect to the school system expectations of the work of that position, and the educational dimensions referenced in the discussions. For this education facility planner, designing appeared to be strongly focused on a particular framing of the work-role, which from his perspective, operated within a dynamic of relationships, processes and constraints. Renditions and examples of designing activity were expressed in experiential and relational terms and often evaluated in categorical, non-negotiable terms. This approach was repeated across the interview and served to emphasise a taken-for-granted relational positioning of the role with respect to broader system activity and also in relation to other work-roles in the area of school building and planning both within and external to the school system.

Positioning of the EFP role in relation to other work roles assumed some significance in the discussion. The point-in-time location of *somewhere in between demographics and the appointment of the principal*, created both time and task-bound parameters. The colloquial rendition of *just one of the cogs in the wheel*, inferred a less that influential position, self-identified as if expressing a lack of authority in the organisation. However the EFP role could also be seen as much more influential in the implied reliance on a particular *cog* for the operation of a system or process. As a *facilitator, motivator and support person* the EFP positioned himself in relational influence with others (EFP1).

This position of influence was further emphasised in the figurative descriptions of *conduit,* and *convenor of conversations* to suggest a strongly directive role in discursive interactions through which, *I've got to massage everything so it comes out the right way.* These zones of authority could be said to run counter to the self-evaluation of *just one of the cogs* (EFP1)*.* Thus the EFP role was defined early in the interview in terms of how the role was positioned rather than through material activities of designing, and further defined by the influence of that position in relation to wider operations of the organisation and to groups of people.

The EFP role was categorised in distilled terms of, *(m)y priority is to get the right shaped spaces for the right purpose,* implying an underlying formula or bottom line. The work role was evaluated as potentially *highly influential*, but this capacity to influence was seen to be limited by *the extent of your own knowledge and your research and your relationships*. Boundaries and constraints emerged in the evaluation of the limitation that, *we come to the architectural aspects I don't have any official role in master planning apart from informing it.* However *no official role apart from informing it,* may serve to mask more significant (unofficial) influence that the statement at first indicates*.* In another respect, the role was also seen to be *evolving and dynamic,* and thus open to some interpretation in that, *you have to create some of the work yourself*.

Processes and practices

Status quo processes and practices (those already in place in the school system) were comprehensively detailed in this aspect of the discussion. These processes could be seen as taken-for-granted, in that EFP1 accounted for these in systematic accounts of 'the way things are, and the ways things are done around here' (Elliott Burns, 2008). The statements of process were systematic in the experiential and relational sequences of events, in the rationales for particular processes and in the relational position of the EFP in undertaking activities such as educational design briefs with or on behalf of the school system or individual school communities. The language of the discussion was often colloquial, using *invivo* terms (Birks & Mills, 2011; Charmaz, 2006), which conveyed an ease and familiarity with the processes, and with speaking about them in an accustomed way. In these terms, *(s)o we design a school in effect, off the ground*, began with looking *at all the relationships,* and *the first layer of that relationship is the spirituality of the site*.

This approach was supported by the rationale that *it's much easier to hang your hat on something than not to hang your hat on something,* so therefore, *we hang our hat on the spirituality.* A next-point in the process further established the combination of rationale and process *(w)e'll use that as the mantra or the motto for the school* (EFP1). A form of middle-man agency, acting between the school system and the school community is inferred in the evaluative pursuit of, *I see if that is data driven from the local community*, with the result that *I convince leadership that that is the right way to go, so I've got to sell all that.*

Continuing the sequential process, EFP1 outlined the development of *vision statement* using *summary statements of survey data, that many, many, people filled in,* and the examining of, *what was the essence of that data. Mission statements* were based on *academically this is what we expect, culturally this is what we hope, the student care, this is what we hope. For the organisation, this is what we hope.* Subsequently these data and mission statements were used so that, *we can develop objectives, goals or KPIs or whatever the renewal plans, for principals to pick up and run. So I'm in charge of that developing process* (EFP1).

The systematic and categoric expression of this process implied a non-negotiable sequence, a seemingly well trodden path of data gathering and documentation, constituting a status quo of processes. To this point in EFP1's discussion the complexities of the processes are caught up in the methodical logic of the statements, and other people in the process are subsumed in the *many, many* people of the survey. S*o I'm in charge of that*, operated to draw an emphatic line under the process and to emphasise it's taken-for-grantedness.

Relationships

Relationships with the, with everyone up the process and down the process is absolutely crucial, The importance of the quality of these relationships from the EFP work-role position was explained in relational, cause-effect terms, to indicate that paying attention to these relationships was *crucial,* because, *(o)therwise you don't carry credibility you just get written off particularly by the, those who are more functionally orientated, as in the builders*. In these respects the directive work activity of the EFP could be seen as dependent on forms of respect (*credibility)* which emerged from a capacity to communicate with *everyone up the process and down the process.*

Work roles and relationships were also classified and characterised in distilled, essential terms, dividing responsibilities and creating demarcations between them. Directive responsibilities were conveyed in broad terms of having to *massage everything so it comes out the right way*. Builders on the other hand, *just want to be told what to do.* This was substantiated on the basis that, *while they might have their own creative ideas at the start,* for the builders, *essentially theirs is the functional role to get the dollars and the space matched up* (EFP1). The further distilling of builders' responsibilities as *their first priority is to build the right spaces for the right price,* (EFP1) introduced the kinds of formulaic renditions of taken-for-granted processes of designing which were referred to in the educators' interviews of as, m^2= enrolment =\$.

Consultants, were evaluated as *usually by nature fairly creative because they are generally not engineers, they are generally architects.* However relationships with both architects and builders emerged as directive and supervisory in relation to projects in progress, specifically where matters of designing were perceived to need on-going adjustment. While *essentially you've got to trust the architect to deliver the goods as well, you know,* there were circumstances when intervention in the project was seen to be necessary (EFP1).

Using an exemplar scenario, EFP1 described a supervisory circumstance where there was a need *run an audit over it according to the patents and say listen, you're eighty percent right, probably another twenty percent we need to find, so why don't we put a kink in that room down there and that'll give us a cave area for the kids. You're down on cave areas around the school, you know* (EFP1). It can be suggested that the colloquial informality of the language in this statement infers more layered meanings than might be evident at first. In this scenario, relationships were mediated through euphemistic references to *the patents,* to an unexplained *eighty-percent twenty-percent* formula or rule, and in the reference to *cave areas* and *cave areas around the school*.

In the light of the discussion in the following section, it seems reasonable to suggest that these elements referred in part, to certain overt or inferred designing expectations, and in part to the designing approaches in the commercial publication, 'Language of School Design' (Nair & Fielding, 2005; Nair, Fielding & Lackney, 2009). *Cave spaces, campfire spaces* and *watering-hole spaces* are key features in the Nair & Fielding texts, which develop these ideas as *patterns* of learning space design, in the manner of Christopher Alexander's *pattern language* (Alexander et al, 1977). In these respects connections were made between aspects of system policies and processes, the influence exerted on these by

influential designing approaches and publications, and the consequent impact on designing relationships, as these matters were brought to bear in negotiations with designers or builders about learning spaces under construction.

Designing influences, outcomes, advocacy

EFP1 related designing influences directly to practice examples and scenarios and connected these in some instances with advocacy for change. Specific and repeated references were made to editions of the publication of 'Language of School Design' (Nair & Fielding, 2005; Nair, Fielding & Lackney, 2009). The comprehensive use of these publications was substantiated on the basis that (*r*)*esearch in practice, success breeds success*, (*s*)*o, the reason for taking this pattern language forward is we've got success.*

In practical terms the implementation of the designing approaches espoused in 'The Language of School Design' were credited to a colleague project manager who had, *out-thought most of the curriculum people because he's been able to connect learning theory with building*. In addition it was noted that the project manager had achieved, *the credibility of those who approve the shape of the building*. The project manager's venture into theory-in practice was thus perceived to be productive, worthwhile and as a kind of trump-card through which *most of the curriculum people* had been challenged and *out-thought.*

This developing scenario of perceived success and credibility, (*respect for Project Manager's work*)*,* was attributed to a theory-in-practice exemplar of learning space designing. The exemplar was also described, as *an avenue to push my agenda, and that is I have to connect education briefs,* with *the post occupancy evaluation.* EFP1 observed that planning for learning space designing and post-occupancy evaluation, *had nothing in common between one and the other from what has gone before in the system.* EFP1 judged the opportunity to be, *a way, a conduit to connect the two.* EFP1's influence was thus represented as a combination of relational opportunity in ascertaining a gap in overall designing processes, and capitalising on a potential solution for a work role dilemma.

Another prospect out of the scenario example was that, *if I can get the builders on board in between, we then have a cyclical event which will continuously inform and improve building practices in the system.* In the connections between learning, the designing of educational spaces and the evaluation of learning space effectiveness, EFP1 described a set of relational designing elements. The interrelationship of these elements conveyed understandings of

designing as *cyclic* processes to *inform and improve*, and subsequently to be generalised *in the (school) system*.

EFP1's discussion expanded to focus on the connections between learners, pedagogical practices and the spaces of learning designed to enable educational change. Moves to *project based learning particularly in the middle school*, made pedagogical connections between *traditional subject areas*, particularly in design studies and technical artisan curricula/subject areas. This integration of study areas was considered more likely to be enabled in new kinds of educational spaces. The pedagogy-space connection was realized in the example of *MYTECHS, middle years technology centres, where, all these facilities, instead of being dispersed across the campus, all on the peripheral,* were now *actually centralised.* The built spaces of the MYTECHS were designed, *like a shopping centre, a marketplace.*

MYTECHS were seen to challenge traditional pedagogical practices, *(y)ou can't work in that marketplace in traditional ways,* so that the technology centres were positioned as agents of change through a perceived capacity to inhibit teachers' traditional practices, and to enable more contemporary approaches to learning and teaching. EFP1 substantiated this capacity for change impetus using the designing of learning spaces, as *conduit to cover the process and not only drive the process in our new schools* but also through retrofitting, as ways of effecting pedagogical change in established schools, to *backwardly integrate into our existing schools*. Changing pedagogical practices through educational space designing was emphasised as a particular challenge for teachers, *to make sure they understand why they are built the way they are.* EFP1 indicated that teachers needed to understand that the new built spaces *should be driving, facilitating, flexible enough for them to have multiple ways of teaching.* This was further emphasised in the evaluative certainty of *but they do eliminate some of the more traditional methods*.

The expressive-evaluation of the potential pedagogy-space change effects in terms of, *you can't work*, and, *drive the process,* serves to emphasise understandings about the coercive power of built spaces to enable and inhibit the ways in which people live and work in spaces (Jamieson et al, 2000; Jamieson, 2007). Other power-plays were evident in the positioning of educators who did not appear in EFP1's discussion as partners in designing processes to any great extent. In a form of deficit-discourse, educators were represented as *out-thought* and somewhat 'behind the game' with respect to proactive designing of educational spaces and as needing to be coached in the ways in which spaces, seemingly

built without educator consultation and participation, were intended to be used for learning and teaching.

This approach may operate as a variation of the *parachute principle*, raised in Chapter 1 of this thesis, wherein template spaces, however well intended, are designed without the involvement of educators and are *parachuted* into school sites. Subsequently educators and students are *parachuted* into these spaces to take their chances or do their best to adapt.

In CDA terms, EFP1 positioned himself as an active agent in the network of practices within which educational space designing was undertaken and reproduced as systematic process in the school system. The renditions of status quo practices of educational space designing can be seen as constituted in 'the habitualised ways, tied to particular times and places, in which people apply resources (material and symbolic) to act together in the world' (Chouliaraki & Fairclough, 1999, p. 21). EFP1 represented his activities as influential in relation to the school system and to groups and individuals. Students were represented as recipients of designed spaces, but remained unmentioned as potential designers of learning spaces. Educators emerged as relatively disempowered in matters of learning space designing, and as ill prepared and overlooked with respect to finding a place in designing activities within current structures and processes.

'Client representative' (EFP2)

EFP2 addressed designing processes and outcomes in relation to his work-role in terms of status quo practices within the school system. Designing influences were related to experiences, observations and personal research across a history of work roles in the building and construction industry, and in more recent work in the designing and construction of schools. EFP2's discussion about designing activity was related more to the wider scope of educational spaces rather than to school libraries.

EFP2 expressed a preference for *client representative* as a work role descriptor over the official work-role title of *project manager* and justified this preference on the basis that, *it's like I have been servicing owners for my whole life in construction, in design teams, in one way or another, design and delivery you know, teams.* These relational experiential connections throughout a lengthy work history substantiated the role descriptor preference, *I find it easy to be a client rep because I know from all these experiences what the clients want, I think*.

However the potential for influence through the work-role was expressed in conditional terms, *(w)e have some influence in the design team, as a, I think depends, this is where you can exercise your individual whatever, beliefs or you know, experiences in how you see that representation for the client.* The relational dimensions of the *client representative* descriptor were thus moderated to become more tentative in the certainty of *I know*, and the uncertainty of *I think,* and more fluid in the proviso that the influence of these work-role renditions depended upon *how you see that representation for the client.*

Clarification of the meaning of *client* served to highlight the potential for discursive discord in understandings about 'clients' and 'users' of the built space projects of schools, and about whose needs are to be considered as significant in designing endeavours. Relational clarifications in this discussion defined and differentiated *clients*, *users* and *people with various claims on use*. Levels of status were attached to the definition of client: *(t)he client is the owner, the owner is [school system],* followed by clients associated with *various levels of views.* The status of individuals and groups was further rationalised on the basis that, *you have obviously, the most profound user is the student, and then there's other people with various claims on use, you know, like teachers/librarians or teachers in the case of resource centres* (EFP2)*. In these explanations, assigning of priority to the school system as *client*, framed the priority responsibilities of this education facility planner's work-role as a *client representative.*

These clarifications and definitions also served to categorise individuals and groups discursively, in terms of relevance with respect to the designing of education spaces. Categorising students as *most profound users* and educators as *other people with various claims on use,* positioned these groups relationally, but hierarchically of less importance than *owners/clients*, assigning them to a periphery through the accounts of designing processes outlined in the discussion. Educators and students remained unmentioned as potential designing participants.

Framing and evaluation of responsibilities and purposes were expressed in statements which distilled these aspects as, *the delivery of the provision is what I'm most concerned with.* This focus was repeated in specifically limiting responsibilities in which, *we are constrained as I said by delivering a building, so that's what my job is about. It's about built environment.* The experiential reiteration of, *my role as, I see as you know, trying to make the actual delivery through the design and construction phase occur,* served to categorise

particular *phases* of designing and the *delivery of the provision* within a wider network of designing activities and practices. (EFP2).

The invivo expression *delivery of the provision* can be seen to mask designing activity and complexity and to render participants and processes less visible. In practice, matters of policy and process governance can be seen to converge with the material, technical and creative matters of designing, building and construction, and with matters of users, identities, pedagogies and spaces. However, this complexity is subsumed in the network of practices expressed as *delivery of the provision*.

Processes and practices: design to the dollar (EFP2)

Distilling of *the provision* as *square metres for dollars*, further represented designing activity as a formula or equation referenced to policy conditions and processes. The impact of national (Australian government) and system (Block Grants Authority) policies was emphasised in the connection of *square metres for dollars,* through the explanation that, *(s)quare metres are set by Canberra and the dollars are effectively set by the BGA so that'll be a dollar rate for building a so called library resource centre.* The effects of these conditions were compacted into the synopsis that *(s)o, you know, there's just very strict formulas* (EFP2)*.* The colloquial rendition of the dollar-space relationships conveyed a sense that designing the spaces of schools was largely a form of business deal, sustained and reproduced through policies and practices in which the users of spaces and participants in designing were absorbed in the flow of financial transaction.

The ways in which these aspects shaped the built spaces of schools was constituted in a tight-loose blend of practices, confined by policy, but open to interpretation: *Exactly how that's configured and it goes in there is in part precedent, in part tradition, in part you know, novelty and innovation and so long as you don't move from the total square metres allotted or from the dollars.* Even within the constraints of, *theoretically you have to design to the dollars,* it was considered that, *you can almost do you know, anything you like, so my role as, I see as you know, trying to make the actual delivery through the design and construction phase occur* (EFP2).

The MYTECH junior years' technology centre discussed earlier in this chapter served to illustrate the tight-loose combination of precedent and innovation raised in the discussion. Thus, in these foregoing respects, the designing of educational spaces can be understood as produced in competing discourses of constraint and creativity.

'For the overall expenditure, this is not the best outcome' (EFP3)

EFP3 confined the discussion of designing processes and outcomes to the new library at Harrison College. In this respect the discussion addressed status quo practices of designing in relation to a specific project example, concentrated on an evaluation of participation, processes and outcomes of the project. Recalling that EFP3 had disclaimed expertise in commenting on matters of libraries, learners and learning, the comments on the designing elements do convey some views about the spaces and their relevance to the functioning of the school library.

EFP3 began with an evaluation of Reference Committee participation in the project and of the specific contributions of educators. *We had a committee and some sub-groups for particular aspects,* conveyed something of the collaborative dimension of the project. Contributions of educators were acknowledged in that *(t)here was plenty of expertise for learning and teaching.* The evaluation that, *sometimes there was too much,* was explained as, *some aspects of the research took a long time to bring to the committee,* inferring that educators' research timelines delayed progress to some extent.

The expressive-evaluative aspects of the discussion operated as a form of technical post-occupancy evaluation, which categorised design features, assessed matters of quality and proposed solutions to perceived design issues. Design features were juxtaposed and contrasted to produce upside-downside and problem-solution effects in the evaluation discussion. Features that had been *added since the opening, the digital screen for example*, were evaluated as having *improved the information for students and teachers, particularly up to the minute record of areas of the library you can have access*.

Particular aspects such as natural light were described as a *big feature, a big thing at the time,* which had, *caused problems,* requiring the solution that, *we need filter blinds on some windows,* and a rationale that, *because there is too much light – glare, in fact, which is a problem with the computer use.* Similarly, the example of information and technology infrastructure began with the original decision of *a mix of cabling and wireless.* The decision to undertake this option, *took a lot of work*, and was made in the *hope that future adjustments are possible using the approach we have taken*.

Other aspects of *(t)he infrastructure could also be rethought.* Certain *spaces are wasted – like the café space, this is not used for what it is intended and the balconies have a limited use.* In the overall assessment, the library was seen to be limited by perceived difficulties

with *the connections to other buildings in the school,* and the absence of *a really logical or welcoming access from the ground floor to the library. It is very indirect.* These matters were seen to be *complicated by the building being for a number of purposes,* which made the library appear *like an administration building with a library as a sort of annexe.* These limitations made it *not straightforward to find your way there,* and as a consequence the project was evaluated as, *(f)or the overall expenditure, this is not the best outcome*.

In the work-role of business manager EFP3 was a member of the Reference Committee for the library project at Harrison College. The discussion conveyed an experiential-relational familiarity with the matters being evaluated. However the systematic critique of participation and project outcomes, served to distance EFP3's committee involvement from the design decisions which were made at the time, while conveying agency *(we)* in the implementation of post-occupancy decisions regarded as solutions, for example in the installation of the blinds.

Understanding 'client' and 'post-occupancy evaluation'

At this point it is noteworthy that the concepts of 'client' and 'post-occupancy evaluation' may be open to differing interpretations, particularly in understandings between educators and accredited designers. Recalling that EFP2 defined and differentiated, *clients*, *users* and *people with various claims on use,* emphasising that in his view, the client was the owner/the school system.   It is also worth recalling that this interpretation differs significantly from the idea of a client implied in the educators' interviews. Educators referred to *ignoring the reason we're here when we design all of this,* (GE1) to imply that the key people for consideration in the designing of learning spaces were students. Notions of client were also exemplified in the contrast with the kind of dialogue which might be expected, *if I was designing a house my architect would have to listen to me and I would get what I wanted* (GE2), and the implied absence of this relationship with the people who will live and work in the spaces being designed.

In addition, concepts and distinctions of 'client' and 'user' can relate to designers' / architects' formal and informal contact with school populations through discursive channels such as contracts, negotiations, committees and conversations. These contacts were moderated by certain permissions through which school executives regulated contact between teachers/educators and design professionals. This was sometimes a matter of the tension between wanting to be *directly involved with clients,* while in other circumstances

*we've been told not to speak with the teachers (*DA3). A client-user vacuum was noted in situations where, *they don't get other staff on board within the organisation who can inform the process,* or alternatively, *sometimes we're told we won't need to talk to the librarian* (DA2)*.*

Similar inconsistencies and confusion can also attach to the meaning, purposes, potential and outcomes of 'post-occupancy evaluation' which was undertaken more customarily as an auditing procedure rather than as a form of research. EFP1 noted the matter of school system practices of post-occupancy evaluation which bore no relationship to the lead-up processes of planning for learning space designing. In this scenario, foundation planning for design projects, including educational design briefs, was not also used as evaluative tools for post-occupancy evaluation. However, for educators the unsatisfying effects of system and school policy and governance practices were attached to accredited designers' assumptions that a built space project was completed on the *delivery of the building* (ATL).

These unsatisfying responses to perceived post-occupancy design matters were made clear by educators in that, *part of the frustration too, is that you know, that the buildings are built – a huge dollar investment and yet there is no money for blinds* (GE2)*.* In these discussions some designing decisions were conveyed as significant influences on teachers work and student learning, and as constraints on the human dimensions of the built spaces of classrooms. However, it seems that in many circumstances post-occupancy budgets or funding contingencies were not available to redress them. In addition, these approaches *did not even contemplate* a *responsive approach to post occupancy evaluation* in order to *review what's going on in a brand new part of the school or consider needs in the next budget* (ATL).

While EFP1 cited the implementation of the 'learning space patterns' (Nair & Fielding, 2005; Nair, Fielding & Lackney, 2009) as a way to link planning with post-occupancy evaluation, it seems that a history of post-occupancy evaluation in practice had failed to make this link, and had been more concerned with an evaluation exercise on the basis of 'what not to do next time'. Through their detailed recounts of design faults (GE2), and proposals for solutions, educators appeared to expect that post-occupancy evaluation implied a capacity to evaluate and redress design inefficiencies and problems as part of design projects.

Summary

The variations in language and approach taken by the three (3) participants could be said to emerge from the different dispositional foci taken by each participant, even from within the same field of practice (see Bourdieu discussions in Chapters 2 and 3). These differences can also be related to the asymmetries discussed by Mayes (2010, p. 194), which operate at *levels of participation, interaction, institutional know-how, knowledge, and rights of access to knowledge*. Mayes (2010) suggests that asymmetries can be seen to indicate, for example, gaps or silences across participant groups with respect to knowledge about particular matters (such as libraries, learners and learning). Such asymmetries can be understood as dimensions of power which arise through interactions (Heritage, 1997, as cited in Mayes, 2010).

Thus school libraries, learners and learning were produced in the education facility planners' *small stories*, through the diversity of their knowledge and experiences. In these respects, and with reference to the understandings of DA2 and DA3, knowledge and experience gaps may constitute voids in designing interactions, with the effect that design projects are uninformed or under informed about key matters. This is not assisted by the absence from designing activity of those for whom the spaces and places are of critical importance to their learning and work.

Again, educational space designing can be seen as located within discourses of constraint, characterised by differing understandings about designing as knowledge and processes, designing participation and designing participants, and restrictions on responses to designing outcomes**.** It could also be suggested that in particular conditions, the potential fluidity of some system conditions presents opportunities to explore and unravel creative possibilities and to imagine potential for creative influence (Harvey, 1996).

CHAPTER 11: A CONVERSATION WITH THE SITUATION

Dimensions of the story

This research story began and has continued as one of *enthusiasms, puzzles and connections* (Chambers, 1980). As a researcher, my entry point to the study followed many years of enthusiasm associated with school libraries: my own, those of educator colleagues, those of students in primary and secondary schools and those of teacher-educators undertaking post graduate study in teacher-librarianship. Added to this was the enthusiasm, sometimes of a different order, of the accredited designers / architects and education facility planners involved in school library designing projects

Questions arose for me out of these experiences, about *who and what is valued* in the scope, participation, influences and research foundations of school library designing practices and processes. Thus the chief concern of the study has been to investigate these matters as they were raised in the literature, and most particularly as they emerged in the *small stories* of the *voices of experience*, of those who have close and vested interests in school libraries. Thus the study has engaged those with a long-term interest, through the voices of educators and students who interact daily with school libraries, and those with a short-term interest with long-acting effects, in the voices of accredited designers / architects and education facility planners, formally engaged in the designing of new and renewed school libraries.

In conjunction with informing theories, the literature and the *small stories* of participants' understandings and experiences, the research questions and the study objectives set out a creative process of discovery to *unravel complexities* of understandings about libraries, to *focus* on the impacts of framing contexts and practices and on the influences of those with interests in the designing of school libraries. The prospect, implications and impact of the study are in identifying and *venturing* ways in which the processes and practices of school library designing are open to *creative possibilities* (Boyce, 2006) and the potential for *voices of experience* to exert *creative influence* (Harvey, 1996).

In these terms the 'ethnographic sensibility' (Pader, 2006, p. 163) and quality of the study might be evaluated by the degree to which readers are able to see a similar cultural picture to that communicated by the researcher (Glesne, 2006). My hope has been that readers of the study might recognise the integration of the knowledges which have contributed to the

study. The local knowledge of the research participants, the expert knowledge from the literature and the researcher's knowledge, as these meet the readers' own knowledge.

Ways of telling

The study has aimed to convey an 'interpretive portrayal of the studied world' (Charmaz, 2003, p. 314), through a focus on the designing of school libraries as a social problem with a semiotic aspect using the data analytical processes of critical discourse analysis through Bhaskar's framework of explanatory critique (Fairclough, 2001a). The study has identified dimensions of what is problematic and how it is problematic through an examination of who and what appears to be valued in relation to school library designing, of who is included and who is excluded in taken-for-granted designing processes and practices.

Through participant's statements and language the data analytical discussion has examined the circumstances and obstacles related to the problem of school library designing, and considered what might be, what could change, with respect to the functioning of the problem in sustaining existing social arrangements. The analysis has incorporated positive critique in terms of possible ways to address the obstacles, particularly with respect to discursive opportunities, and has taken opportunities to reflect critically on the effectiveness of the analysis as undertaken by a participant observer (Fairclough, 2001a, p.125).

Of particular value in the study has been the foregrounding of the kinds of language linked to groups, professions and identities, for example as a language dimension of professional dispositions (habitus) in fields such as architecture and education (Chouliaraki & Fairclough, 1999, p. 116-118; Bourdieu, 2005, p. 47), and the potential impact on moments of designing. In this respect I have sought discursive opportunities for participants to act together, engaging in dialogue, not in order to suppress difference in false compromise/consensus, but to engage and emerge 'as voices in common on particular issues' (Chouliaraki & Fairclough, 1999, p. 6), on the basis of which designing participants may act to *make and remake their lives* (Calhoun, 1995 as cited in Fairclough, 1999, p. 4).

Pervasive across the study, in the research literature and in the participant data have been themes of change. Discourses of change represent libraries, including school libraries as evolving entities shaped by multiple influences; by historical and contemporary dimensions

of culture, tradition and ethos; subject to the diverse projects and purposes of human activity; and more recently, caught in the burgeoning flow of digital and online information and media, to become yet other versions of themselves. Discourses can work to objectify and convey information as fact; to rhetorically project particular views and justify policies and strategies; to constitute and reproduce particular relations of power and to generate imaginary representations of possible futures (Fairclough, 2009, p. 321).

The scope of stories

As noted early in this thesis, libraries have been understood as evolving and influential ideas in the social, cultural and political lives of people across time. The historical vignettes of Chapter 2 'Intermezzo voices', demonstrate the ways in which libraries across time have been used to facilitate social and political purposes and projects. However the current literature, commentary and research data supports the potential of a continuing significance for diverse library-guises as continually emerging sites for innovating and reworking human experience; as 'things' - **'*the thing and the space it inscribes and produces …. Differentiated perceptually and conceptually… distinct, repeatable in principle … located in space only because time is implicated*'** (Grosz, 2001, p. 170).

Similarly pervasive in matters of change related to school libraries, learners and learning in the study has been the dynamic of the pedagogy-technology nexus, which emerges as a dominant source, impetus and vehicle being brought to bear on learning and teaching in schools. As noted in Chapter 5 'Stories of influence', Fairclough (2009) points to the status of normalisation which is achieved as technologies of information and communication are projected, in government, economic, education and popular media discourses, as the preferred globally connecting, universally beneficial catalysts for learning, teaching, communicating and belonging in the world at national, regional and personal levels. Some courage is needed to continue to question and evaluate these assumptions, balanced with the ways in which living and learning in the world and the worlds of schools is so mediated by the pedagogy-technology dynamic.

While the impacts of this aspect on the spaces and places of school libraries is raised repeatedly in the literature and in the participant discussions, manifestations of change in the physical and virtual dimensions of school libraries can be seen as works in progress as part of *focusing*, *venturing* and *working our way* towards creative possibilities of designing to deal with such persistent incursions and realities. On this basis it seems reasonable to

suggest that ideas of the template or generic model of a school library would deny the potential for the being and becoming of school libraries as responsive and creative places for learners in diverse communities and learning in diverse contexts.

The study participants told the most pertinent stories to indicate the potential for creative possibility and creative influence. Educators' *small stories* represented school libraries as multi-dimensional synergies of learners, learning and social relationships as well as spaces, places and material dimensions. These understandings were connected to discourses of learning constituted in collaborative, individual, formal and informal activity, and closely coupled with the work of teacher librarians through discourses of professional knowledge and pedagogical practice. Discursive opportunities and relationships achieved key significance in educators' discussions as pivots for designing possibilities and limitations.

Designing was constituted and diversely expressed, in terms of vision, leadership, relationships and communication. In some situations, discourses of constraint were evident in competing knowledge, diverse understandings about experience/expertise and roles. On occasions these were influenced by established policy and status quo processes, to produce communication difficulties and to inhibit designing relationships, and to require resourceful responses or sometimes resignation to less desired options. In other circumstances, discourses of creativity connected the dispositions of education and architecture in negotiated, productive designing engagement between educators, communities and designers. Educators' rich pedagogical knowledge and *small story* experiences as dweller-designers of school libraries, signals their considerable capacities to inform designing activity in company with school communities and accredited designers.

For student participants, school libraries were constituted in dimensions and attributes of culture, experiences and practices, conceptual and material organisation and social relationships and processes. In some *small stories*, school libraries were designed in discourses of creativity, such that the spaces were understood as specific to them and customised particularly for them, as young people. In other respects, school libraries were seen to constrain the desired expression of their identities through the use of particular spatial configurations and materials, and in spatial design outcomes which kept them under surveillance.

Students' discussions can be connected to discourses of change, education, learning, social relationships and spatiality, as ways to explain and evaluate the potential for them to

participate in the designing of the spaces and places of their lives and work as learners. Students' *small stories* demonstrated capacities for conceptualising, description, evaluation, questioning and critique. Their capacities to reflect on matters of learning spaces and designing, and their familiarity with school libraries as prime users, suggest that students would be adept and creative participants in designing dialogues. This finding is significant with respect to the unrealised potential for student contribution to designing activity.

Only one (1) of the three (3) designers / architects was able to draw on discourses of learning and teaching to exemplify learners' relationships with school libraries and to reflect on broader matters of learning and teaching. In the remaining discussions, the designers / architects' limited pedagogical knowledge and partial understandings about relationships among learners, learning and school libraries were the most significant limiting elements. In this regard knowledge and experience gaps could be said to constitute voids in understandings to inhibit capacities to imagine the designed outcomes of school libraries from a standpoint of those most closely associated with these endeavours, spaces and places. Knowledge and experience gaps could also constitute discursive barriers in designing relationships as participants from different fields of practice meet in, or indeed are absent from shared designing endeavours.

In the designers / architects' discussions, discourses of constraint appear to predominate as influential in the designing of school libraries and other school learning spaces. Relations of power can be seen to produce, and to reproduce, status quo processes through the implementation of policies, standards and the accountability requirements of governments and school systems. Thus status quo processes work to constrain opportunities for the involvement of the users of educational spaces, and to confine participation to reactive responses or in some cases to mediate actively against participation.

In a similar unfolding, only one (1) of the three (3) education facility planners was able to draw on discourses and experiences of education to convey resonant understandings of school libraries, learners and learning. The remaining educational facility planner discussions resisted comment or were limited to illustrative scenarios of recent experience to connect these dimensions. These variations in pedagogical knowledge suggest that for education facility planners there is unrealised potential for building knowledge about libraries, learners and learning to productively inform processes of designing. This potential may be more fully realised, for example, in accredited professional programs which offer

strong opportunities for education facility planners to develop stronger interdisciplinary knowledge.

For the education facility planners much of their designing activity appeared to be framed within discourses of constraint, characterised by system and governance processes, and by particular understandings about designing roles and participation. However, some windows of possibility were noted in their discussion for creative opportunities within the limitations of policy and system processes.

In these respects competing discourses of creativity and constraint could be suggested as catalysts for creative tension. Even within current conditions, the potential fluidity of some system conditions characterised in certain participants' *small stories*, presents opportunities to explore and unravel creative possibilities and to imagine potential for creative influence (Harvey, 1996).

Considering limitations

As indicated in Chapter 6, 'Gathering small stories', one of the limitations of the study can be linked to the participant-observer *flaneur* status of the researcher, in that I share a field of professional practice with one of the participant groups in the study. It could be said that I have undertaken the 'fine art of hanging out' (Pader, 2006, p. 163), with educators and students much more intensely than I have done with designers / architects and education facility planners. In this respect, the *habitus* and professional dispositions of education (Bourdieu, 2005, p. 43), may thus have limited my depths of understanding of the field of practice and professional dispositions of the accredited designers in the study, educational facility planners and designers / architects. While I have attempted to maintain Pader's (2006) *ethnographic sensibility* in the process, it may be for accredited designer readers to make that appraisal.

A flow-on effect of this circumstance may be most evident in applying the CDA framework of explanatory critique to the participant data, from the point of view of my more vernacular understandings and experiences related to fields of designing and architecture, and my more formally accredited educator understandings and experiences in the field of education. Consequently the data analytical discussion related to the educational facility planners and designers / architects may not fully appreciate the complexities and nuances of their perspectives and experiences. Similarly, my long association with the field of

education may lead to over-sensitivity to the complexities and nuances of educators' and students' perspectives and experiences.

Another potential limitation emerges in the semi-structured interview data gathering. While the semi-structured interview statement was structured to welcome the *voices of experience* across the study groups, this openness may have also resulted in a missed opportunity for richer dimensions in some aspects of the data. As a result of the pilot study, the statements for the adult participants were adjusted to introduce their areas of familiar 'expertise' in the opening sentence, which proved to be helpful in opening up the discussions. For the student participants, the statement about libraries was exemplified using a story analogy to encourage students to imagine talking about libraries to someone with no experience of them. A similar approach to the aspect of designing may have resulted in more productive discussions about designing from the student perspectives.

As noted in Chapter 6, 'Gathering small stories', study participants were volunteers who responded to invitations issued through school principals and in conjunction with the professional associations: the Council of Education Facility Planners International and the School Library Association of Queensland. Educator and student participant groups included a mix of genders, with the educator participant gender profile being one male to between three (3) and four (4) females in each group. This is broadly similar to the gender profile of the teaching profession in primary and secondary schools in Australia (DEEWR, 2007). In the group of accredited designers, the gender profile was one female to six male participants. It could be a matter for further study to explore the impact of gender on dimensions of the accredited designing professions. Of particular research interest would be the investigation of power relations and aspects of communication related to professional dispositions in fields of practice, and the implications for designing educational spaces in collaboration with user participants (Bourdieu, 2005).

The study set out to *question the often unquestioned* with respect to *voices of user experience,* of educators and students who are most often absent as participants in education facility designing projects, including school libraries, and to address wider contexts within which processes and practices of designing take place. The study recognises the scope of commonality and diversity in understandings across participant groups, about school libraries, learners, learning, design and designing. On these foundations the study has opened pathways of creative possibility, ways of thinking and suggested approaches, but does not propose template or model approaches to designing.

Thus it is hoped that within these limitations, readers of the study are able to recognise and appreciate the knowledges which have contributed to the study. The knowledge conveyed through the *participants' voices of experience*, the expert knowledge from the literature, the researcher's knowledge through the *creative processes of discovery*, and thus to consider the ways in which these may meet their own knowledge to create opportunities for creative influence (Pader, 2006, p. 163). While the foregoing matters may be regarded as shortcomings of the study, my approach to continued openness to possibilities is addressed in following sections to establish what I regard to be the strengths and knowledge-generative features of the study.

Considering strengths

I consider that a foundation strength of the study has been the use of Tom Heath's (1989) *creative processes of discovery* as a conceptualising framework. As discussed in the opening chapter, Heath (1989; 2010) represents our approaches to designing as working to *unravel complexity, feel our way,* and *work our way gradually.* This broad contextual process is achieved in creative, strategic and tactical processes of *focusing*, *imagining*, *venturing* and *backtracking*.

Heath's (1989; 2010) underpinning thesis of *creative processes of discovery*, is the foundation of the designing heuristic, VAST (Values, Activities, Sites/Systems, Technologies), which is reviewed in the Chapter 3: 'Story starters' literature discussion, and is referenced as a designing approach in a number of other discussions (Heath,1989; 2010). I am privileged in this dissertation to introduce Tom Heath's designing approach, in what I believe to be the first occasion it has been used in such a way. I have advocated the potential of the VAST heuristic as an example of ways to enter users' worlds of values, attitudes and customs as a foundation for the designing of spaces and places for learning. In this respect, Tom Heath's work gave impetus to a further strength of the study in the opportunity to foreground the voices of experience of those most closely associated with the use and the designing of school libraries, the educators, students, designers / architects and education facility planners, and to establish the potential of VAST as a participative, collaborative, principle-based designing approach.

In Chapter 5, 'Stories of influence', I discussed the potential risks in quantitative, causal-connection research studies, which can define learners, learning, pedagogies and educational spaces in very limited ways, and render students in particular, almost invisible

when reduced to the sum of their test results in English and mathematics. Qualitative methodology approaches and mixed method research designs can be seen to increase complexity. Qualitative methods with rich data possibilities can allow the unfolding of 'the stories that occupants tell' and open the potential to consider schools as more multi dimensional than causal connection studies may allow (Uline et al, 2009, p. 400).

Thus the research design, qualitative methodology, the ethnographic approach, the semi-structured interview and observation data gathering methods, has assumed schools to be socially complex entities; to be sites of multiplicity with respect to the social and cultural dimensions of educator and student relationships and interactions. School libraries can also be understood as sites which concentrate this multiplicity in physical and digital spaces through aspects such as networks of pedagogical practices, frameworks of curriculum and the formal and informal learning contexts and experiences of students. Engaging with these matters in these foregoing methodological and critical data analytical ways, as *creative processes of discovery* , has been an opportunity to *work towards understandings* of *who and what is valued here* and to use these emerging understandings to *imagine* and *venture* the implications for the study.

As noted at the outset of the thesis, ideas of *creative influence* assume that moments of designing permeate the social processes of lives and work such that the loci of agency and influence can be pervasive in situations and circumstances. My assertion has been that across the scope and at the cusps of participant capacities, vernacular, accredited, novice or experienced, are likely opportunities for agency. These notions have been assisted in understanding the potential of agency, influence, and in Foucault's terms, power, as *capillary action* of micro-power operating through the social and spatial practices of institutions and relationships, constructing subjects and producing human agency (Foucault, 1997c). The biological image of *capillary* implies sites and actions of interchange and agency across and between systems and individuals at micro level.

Matters of agency can also be understood in terms of asymmetries operating at *levels of participation, interaction, institutional know-how, knowledge, and rights of access to knowledge* (Mayes, 2010, p. 194). Asymmetries can be seen to indicate, for example, gaps or silences across participant groups with respect to knowledge about particular matters (such as libraries, learners and learning and matters of space, place and designing). Asymmetries can also be understood as dimensions of power which arise through

interactions, for example in discursive engagements between educators and designers as they interact in designing activity (Heritage, 1997, as cited in Mayes, 2010).

Through interactions across participant groups, asymmetries of knowledge and institutional know-how for example, may signal the distinctive *habitus* or professional dispositions of architecture or education, and through the language of these *systems of disposition*, discursive encounters may work to influence designing encounters (Bourdieu, 2005, p.43). While the concept of *habitus* indicates systematicity of practice and long-lasting, somewhat durable schema of disposition, there are likelihoods of openness in this *embodied sensibility that leads to structured improvisation* (Calhoun, 2000, p. 712, as cited in Hillier & Rooksby, 2005, p. 22).

With these aspects in mind, leverage for creative influence may be presented in moments of tension and contradiction, in social practices which exclude, and in user-designer relationships. Agency and influence are assumed in the circumstances and actions of those most closely concerned with a particular context or circumstance (Harvey, 1996). Thus the study suggests opportunities for creative influence on school library designing through the *voices of experiences* in participant discussions, field experiences and observations and through the works-in-progress in the tertiary academy and in professional associations.

The reviews of the literature and the data analytical discussion have enabled a critique of ways in which language operates to construct material activity, social relations and processes and to signal the discourse perspectives within which these have been expressed (Chouliaraki & Fairclough, 1999). Discourses of education, architecture, technology and change for example, are referenced across the literature and throughout the participants' *small stories,* along with discourses associated with school system policy and status quo processes.

As part of designing activities, participants in the study nominated occasions of dialogue, conversation, discussion, negotiation, consensus approaches and listening as stimuli for productive, participative designing relationships and outcomes, to signal that designing was constituted in discourses of creativity. In other circumstances these dimensions were notable for their absence and discordant, negative effects, to indicate that designing was also constituted in discourses of constraint. In relation to these situations and experiences study participants evaluated the character and influence of dialogue on the progress and

outcomes of projects and on their understandings about what could or should occur to create more productive, participative possibilities.

With these discursive tensions in mind, the following discussion considers prospects for the study. Using Yeatman's proactive version of 'discursive interventions' (1990, p. 165, as cited in Taylor, 2004, p. 445), these creative possibilities suggest the opening up of a number of opportunities for creative influence on processes of school library designing. For the purpose of the closing discussion and in full acknowledgement of Anna Yeatman's approach, these ventures are designated as 'discursive opportunities'.

Discursive opportunities : participant agency in designing processes

A key matter in the application of Bhaskar's CDA framework of explanatory critique is the consideration of the obstacles and the possibilities for change, even within current structural/organisational conditions (Fairclough, 2001a). As discussed in Chapter 6, 'Gathering small stories', and within this consideration is the potential for mounting a challenge to taken-for-granted practices, to discern resources for change and to examine the possibilities within systems made versatile through openness to alternatives (Chouliaraki & Fairclough, 1999).

An example of a clue, and potential cue, for creative possibility and creative influence for educator-architect partnerships, even in current conditions, arises in the Block Grant Authority guidelines (DEEWR, 2010a, unpaged). As noted in Chapter 4 'School library stories' the document advances one reference to educator participation in the designing of educational spaces:

> Schools must not be prevented from having direct access to professional advice
> (consultants), independently of the builder or project manager, about the
> implications of design, materials and construction choices (Commonwealth of
> Australia, 2010a).

Considering the weight of technical, administrative, governance and accountability dimensions of the BGA documentation, and the void in philosophical or values foundations about or guidance for the reference of educators, designers/architects or project managers, the statement opens the kinds of possibilities referred to by Yeatman (1990, p.165, as cited in Taylor, 2004, p. 445). Anna Yeatman suggests that bureaucratic discourse may not exercise the oppressive or controlling effects often implied through the

impersonal styles in which much bureaucratic documentation is written (Taylor, 2004, p. 445). This notion opens discursive possibilities for designing participants when considering the above statement. Discursive potential is suggested in 'school by school' opportunities for energising designing dialogue between architects and educators, and for the refining of the discourse on school architecture through individual projects and in publications about projects in the professional literature (De Gregori, 2007).

These dimensions give rise to the exploration of discursive opportunities in dialogic, interrogative designing approaches which invite the participation of students, educators and other school library users, and accredited design professionals. The presage of digital and online technologies as portents and prospects, and the policy and procedural constraints of governments and school systems, can be seen to create diversions for the human dimensions of built spaces for learning and teaching. This seems most evident in policy and governance approaches, in the research literature, in the professional commentary and in aspects of the project data where there is potential for dominance of practical-functional and structural-instrumental approaches to designing, over the experiential-existential design needs of those most closely involved, living and working in the learning spaces of schools (Franz, 1998).

In these respects the interrogation of possible spaces for learning and for their designing, seems more likely to imply, or to be founded on, functional and structural questions about 'what do you want to do here?' Such a focus on designing gives priority to the practical and instrumental matters of activity and 'doing' without the benefit of understandings about matters of identity, being and becoming of the particular groups directly concerned as 'users' in design projects. Thus experiential-existential questions of, 'who are you?', 'how are you? , 'what does/might this place mean to/for you?' and 'how would you like to live and work here?' remain inferred or assumed, but most often unexplored as foundations for designing approaches in relation to specific groups and individuals.

Designing approaches which grow out of users' needs and desires may be more difficult courses of action in contexts where status quo approaches are ingrained, assumed and unquestioned. However a number of the educators and each of the designers / architects mentioned degrees of involvement or potential involvement with users in designing endeavours. Approaches such as consensus designing (Day & Parnell, 2003) and the VAST heuristic (Heath, 1989; 2010), begin from the position of users' needs and contexts, promoting discursive engagement with designing circumstances and inviting users to 'come

as you are' with your values, contexts and desires. As exploratory and interrogative examples of designing these approaches offer opportunities to involve users and accredited designers more closely in designing activity even in current conditions.

The earlier discussion of asymmetries at *levels of participation, interaction, institutional know-how, knowledge, and rights of access to knowledge* (Mayes, 2010, p. 194), suggests responses to address potential knowledge and experience gaps as ways to bridge disciplinary-related understandings between the fields of practice of education and architecture, around matters of school library designing. Newton and Fisher's (2009) glossary of terms addresses one possibility with respect to terminology –as-discourse in designing contexts. However discursive opportunities of a deeper order would involve more concentrated opportunities for dialogue between accredited designers and educators, bringing to bear a diversity of specialised cultural, social, conceptual and linguistic resources in designing dialogue.

Pursuant to these possibilities, the unit of study 'Designing spaces for learning' in the Master of Education at Queensland University of Technology (QUT), demonstrates an opportunity for discursive positioning of educators to motivate and inspire their own learning space designing participation. The study program concentrates on knowledge and experience building with educators, for whom there has been no prospect in pre-service and post-graduate programs, to consider matters of space, place and designing related to the influence of educational spaces on student learning and on their own pedagogical practices. In these respects the unit of study acts to stimulate educators' understandings and to apply these within the contexts of their conceptual and professional work. Tertiary providers and developers of education courses may wish to consider ways to respond to a challenge to include a learning space designing focus for inclusion in pre-service and post-graduate courses as ways to address the 'capacity building' suggested by Parnell, Cave and Torrington (2008, p. 218),

Allied discursive opportunities through interdisciplinary research would usefully involve connections between professional association such as the Australian School Library Association (ASLA), the Australian Library and Information Association (ALIA) and the Council of Education Facility Planners International (CEFPI). Each of these organisations maintains groups at state and national level in Australia, each conducts professional forums and each could partner in research programs with the tertiary academy. Without a lengthy history in learning space designing research, but with key programs in progress, Australian

educators and architects are well placed to engage in long-term, in-situ, cycles of research, implementation and reflection, similar to the Australian Research Council funded Smart Green Schools Project and in the Learning Environments Action Research Network (LEARN) led by the University of Melbourne. Such research offers further opportunities for the 'capacity building' commended by Parnell, Cave and Torrington (2008, p. 218)**.**

And another *thing*

Elizabeth Grosz explores *the thing* as a 'resource for the subject's being and doing', and as among the dynamically emergent entities which we discover in and make of the world. In these terms, and through this study, I propose that there are prospects for creative possibility and creative influence in the emergent entities of school libraries, in the making of school libraries and other educational spaces by those with close interests and affiliation with them. Through human agency and responsiveness, in consideration of users and their contexts, and in creative processes of discovery, to evolve ideas of school libraries and allied spaces for learning and teaching as 'question … provocation … incitement … enigma … promise … a consequence or product of life and its practical needs … an intersection of space and time' (Grosz, 2001, pp. 168-169).

REFERENCES

Abram, S. (2007). Wireless libraries and wireless communities: why? In D. Kresch (Ed.). The whole digital library handbook (pp. 289-293). Chicago, Il: American Library Association.

Agnew, J. (2005). Space: place. In P. Cloke & R. Johnston (Eds.), *Spaces of geographical thought* (pp. 81-96). London: Sage.

Alexander, C., Ishikawa, S., & Silverstein, M. (1977). *A pattern language: towns, buildings, construction*. New York: Oxford.

Alexander, C. (1979). *The timeless way of building*. New York: Oxford.

Armstrong, H. (2003). *Conceptual journeys: an intercultural exploration of place*. Unpublished manuscript, Brisbane: Queensland University of Technology Brisbane.

Arnstein, S. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, 5(4). 216-224.

Ashworth, J. (2001). Knowledge and digital information [Electronic version]. *Journal of Strategic Information Systems, 12*(4), 331-337.

ALA. (2004). *American Library Association Statement on Freedom to Read*. Retrieved 16 April 2009, from http://www.ala.org/ala/aboutala/offices/oif/statementspols/ftrstatement/freedomreadstatement.cfm

ASLA/ALIA. (1993). *Learning for the future: developing information services in Australian schools*. Carlton South, Victoria: Curriculum Corporation, Australian School Library Association, Australian Library and Information Association.

ASLA/ALIA. (2001). *Learning for the future: developing information services in schools* (2nd ed). Carlton South, Victoria: Curriculum Corporation, Australian School Library Association, Australian Library and Information Association.

ASLA/ALIA. (2006). *Standards of professional excellence for teacher-librarians*. Australian School Library Association, Australian Library and Information Association. Retrieved 4 August, 2010 from http://www.asla.org.au/policy/standards.htm

ASLA/ALIA. (2010a). *Australian school libraries research project (Stage 1)*. Australian School Library Association, Australian Library and Information Association, Edith Cowan University. Retrieved 12 January, 2011 from http://www.chs.ecu.edu.au/portals/ASLRP/members.php.

ASLA/ALIA. (2010b). *Learning in a changing world* [Series]. Camberwell, Victoria: ACER Press.

Asselin, M. & Dorion, R. (2008). Towards a transformative pedagogy for school libraries 2.0. *School Libraries Worldwide*, 14(2), 1–18.

Bachelard, G. (1997). The poetics of space. In N. Leach (Ed.), *Rethinking architecture: a reader in cultural theory* (pp. 86-97). London: Routledge.

Barker, R., & Gump, P. (1964). *Big school, small school*. Palo Alto, CA: Stanford University Press.

Battles, M. (2003). *Library: an unquiet history*. New York: W. W. Norton.

Baudet, C. (2004). In Designing learning spaces, R. Elliott Burns (Ed)*. ASLA Online 1 Constructing Communities of Learning and Literacy*. Hobart: Australian School Library Association.

Bauman, Z. (2000). Time and space reunited. Time and society, 9, 171-185.

Bauman, Z, (2005). Education in liquid modernity. *The Review of Education, Pedagogy and Cultural Studies*, 27, 303-317.

Bhaskar, R. (1986). *Scientific realism and human emancipation*. London: Verso.

Birks, M. & Mills, J. (2011). *Grounded theory: a practical guide*. London: Sage.

Bissell, J. (2004). *Teachers' construction and use of space.* Unpublished doctoral dissertation. Lubbock, TX: Texas Technology University College of Architecture.

Blincoe, J. (2008). *The age and condition of Texas high schools as related to student academic achievement.* Unpublished doctoral dissertation. Austin: University of Texas

Boaden, S., & Clement, C. (2009). Beyond co-location to convergence: designing and managing new model library spaces and services to reflect trends in convergence and integration. *Libraries as spaces and places IFLA Conference Papers*. Turin: International Federation of Library Associations Pre Conference. Retrieved 15 August, 2010 from http://www.ifla2009.it/online/wp-content/uploads/2009/06/Final.Boaden.pdf

Boese, S., & Shaw, J. (2005). *New York state school facilities and student health, achievement and attendance: a data analysis report.* Healthy Schools Network. Retrieved 30 May, 2010 from http://www.healthyschools.org/

Bolan, K. (2009). *Teen spaces: the step by step library makeover*. Chicago: American Library Association.

Boone, M. (2002). Library design – the architect's view. A discussion with Tom Findley. *Library Hi Tech*, 20(3), 388-392.

Boone, M. (2003). Monastery to marketplace: a paradigm shift. *Library Hi-Tech*, 21(3), 358-366.

Bourdieu, P. (2005). Habitus (2nd ed.). In J. R. Hillier & E. Rooksby (Eds.), *Habitus: a sense of place* (pp. 27-34). Aldershot: Ashgate.

Boyce, S. (2003). Spatial readings: the geopolitics of libraries, literacies and communications. In S. La Marca (Ed.), *Effective learning spaces: inspiration for school library design* (pp. 21-36). Melbourne, Victoria: School Library Association of Victoria.

Boyce, S. (2008). A response: possibilities and politics of EBP. *Synergy*, 6(2), 5-8.

Boyce, S. (2006). Literacy spaces – library design. In C. Kapitzke and B. Bruce (Eds.), (2006). *Libr@ries: changing information space and practice* (pp.17 – 36). London: Lawrence Erlbaum Associates.

Brenner, W. (2000). Information resources [Electronic version]. *School Planning and Management, 39*(7), unpaged.

Brindley, L. (2006). Redefining the library [Electronic version]. *Library Hi-Tech.* 24(4), 484-495.

Brisbane Catholic Education. (1985). *Role statement for teacher-librarians*. Unpublished manuscript, Brisbane, Australia: Brisbane Catholic Education.

Brisbane Catholic Education. (1999). *Role statement for teacher-librarians*. Unpublished manuscript, Brisbane, Australia: Brisbane Catholic Education.

Brown, C. (2002). *Interior design for libraries: drawing on function and appeal*. Chicago: American Library Association.

Brown, J., & Duguid, P. (2002). *The social life of information*. Boston: Harvard Business School Press.

Buckley, J., Schneider, M., & Shang, Y. (2004). *Los Angeles unified school district school facilities and academic performance*. Washington, DC: National Clearninghouse for Educational Facilities.

Buckley, J., Schneider, M., & Shang, Y. (2005). Fix it and they might stay: school facility quality and teacher retention in Washington DC. *Teachers College Press*, 107, pp. 1107 – 1123.

Bugher, K., (2006). *Design considerations for school library media centers*. Madison, WI: Wisconsin Department of Public Instruction.

Burbules, N. (2006). Digital libraries as virtual spaces. In K. Kapitzke & B. Bruce. (Eds.), *Libraries: changing information space and practice* (pp. 3-15. Mahwah, NJ: Lawrence Erlbaum Associates.

Buschman, J. & Leckie, G. (Eds.). (2007). *The library as place*. Westport, CT: Libraries Unlimited.

Buttimer, A., & Seamon. D. (Ed.), (1980). *The human experience of space and place*. London: Croom Helm.

Calhoun, C. (1995). *Critical social theory: culture, history and the challenge of difference*. Oxford: Blackwell.

Carr, D. (2006). *A place not a place: Reflection and possibility in museums and libraries*. Oxford: Rowman & Littlefield.

Carspecken, P. (1996). *Critical ethnography in educational research: a theoretical and practical guide*. New York: Routledge.

Castells, M. (1996). *The rise of the networked society* (Vol. 1). Oxford: Blackwell.

Chambers, A. (1985). *Booktalk: occasional writing on literature for children*. London: The Bodley Head.

Chaplin, S. (2003). Heterotopia deserta: Las Vegas and other spaces. In A. Cuthbert (Ed.), *Designing cities: critical readings in urban design* (pp. 340-355). Malden, MA: Blackwell.

Charmaz, K. (2003). Qualitative interviewing and grounded theory analysis. In J. Holstein and J. Gubrium (Eds.), (pp. 311-329). *Inside interviewing: new lenses, new concerns.* Thousand Oaks, CA: Sage.

Charmaz, K. (2006). *Constructing grounded theory: a practical guide through qualitative analysis*. London: Sage.

Chism, NVN. (2006). Challenging traditional assumptions and rethinking learning spaces. In D. Oblinger (Ed.), *Learning spaces* (pp. 2.1 – 2.12). Boulder: Educause
www.educause.edu/learningspaces

Chouliaraki, L., & Fairclough, N. (1999). *Discourse in late modernity*. Edinburgh: Edinburgh University Press.

Cleveland, B. (2009). Equitable pedagogical spaces: teaching and learning environments that support personalisation of the learning experience. *Critical and Creative Thinking: The Australasian Journal of Philosophy in Education*, 17(2), 59-76.

Clyde, L. A. (2003). Evidence-based practice in school librarianship: evaluating the research evidence. *Access, 17*(4), 26-29.

Coleman, A. S., T. (2004). Digital libraries and user needs: negotiating the future [Electronic version]. *Journal of digital information, 5*(3).

Comber, C., & Wall, D. (2001). The classroom environment: a framework for learning. In C. Paetcher, R. Edwards, R. Harrison, & P. Twining (Eds.), *Learning, space and identity* (pp. 87-101). London: Sage.

Combes, B. (2008). Australian School Libraries Research Project: A snapshot of Australian school libraries, Report 1. *Australian School Library Research Project*, ASLA, ALIA & ECU. Retrieved 18 January, 2011, from
http://www.chs.ecu.edu.au/portals/ASLRP/publications.php

Commonwealth of Australia. (2010). *Inquiry into school libraries and teacher-librarians in Australian schools.* Retrieved 20 November, 2010. from
http://www.aph.gov.au/house/committee/ee/schoollibraries/index.htm

Commonwealth Schools Commission. (1977). *Books and beyond: guidelines for library resource facilities and services*. Canberra: Schools Commission.

Commonwealth Schools Commission. (2nd. Ed.). (1979). *Books and beyond: guidelines for library resource facilities and services*. Canberra: Schools Commission.

Commonwealth Secondary Schools Libraries Committee. (1969). *Standards for secondary school libraries: a preliminary statement*. Canberra: Australian Government Publishing Service.

Commonwealth Secondary Schools Libraries Committee. (1971). *Standards for secondary school libraries*. Canberra: Australian Government Publishing Service.

Commonwealth Secondary Schools Libraries Committee. (1974). *Guidelines for library services in primary schools*. Canberra: Australian Government Publishing Service.

Cooper, J., Massey, G., & Salisbury. M. (2010). *Resourceful partnerships: Teacher-librarianship in Queensland*. Mt Gravatt, QLD: School Library Association of Queensland.

Curriculum Corporation. (2006). *The learning spaces framework*. Canberra: Ministerial Council on Education, Employment, Training and Youth Affairs. Retrieved 6 December, 2008 from http://www.curriculum.edu.au/verve/_resources/ICT_LearningOnlineWorld-LearningSpacesFWork.pdf

Curry, M. (1998). *Digital places*. London: Routledge.

Curry, A., & Schwaiger, U. (1999). The balance between anarchy and control: planning library space for teenagers [Electronic version]. *School Libraries in Canada, 19*(1).

Cuttance, P. (2001). *School innovation: pathway to knowledge.* Retrieved 31 March, 2002, from http://www.dest.gov.au/sc.publications/2001/innovation/summary.htm

Day, C., with Parnell, R. (2003). *Consensus design: socially inclusive process*. Oxford: Architectural Press.

Day, C., with Midbjer, A. (2007). *Environment and children: passive lessons from the everyday environment*. Oxford: Architectural Press.

De Certeau, M. (1984). *The practice of everyday life*. Translated by Steven Rendall. Berkeley: University of California Press.

De Gregori, A. (2007). *Learning environments: redefining the discourse on school architecture*. Unpublished doctoral dissertation [Electronic version]. Retrieved 14 November, 2010 from http://archives.njit.edu/vol01/etd/2000s/2007/njit-etd2007-034/njit-etd2007-034.pdf

DEA. (2001). *About productive pedagogies.* Brisbane: Department of Education and the Arts. Retrieved 20 May, 2003, from http://www.qld.gov.au/corporate/newbasics/html/about_pp.html

DEEWR. (2007). *Staff in Australia's schools*. Canberra: Department of Education, Employment and Workplace Relations. Retrieved 5 July 2011 http://www.dest.gov.au/NR/rdonlyres/1246540B-6D4A-4734-85FB-0C2C2D6D7F13/19904/SiASsurveydatareport2007.pdf

DEEWR. (2008). *Strategic plan to guide the implementation of the Digital Education Revolution initiative and related initiatives*. Canberra: Department of Education Employment and Workplace Relations. Retrieved 21 August, 2010 from

http://www.deewr.gov.au/Schooling/DigitalEducationRevolution/Documents/DERStrategic
Plan.pdf

DEEWR. (2009). *Building the Education Revolution*. Canberra: Department of Education
Employment and Workplace Relations. Retrieved 15 January, 2011 from
http://www.deewr.gov.au/schooling/BuildingTheEducationRevolution/Pages/default.aspx/

DEEWR. (2010a). *Administrative arrangements for Block Grant Authorities (BGAs) 2009-
2012*. Canberra: Department of Education Employment and Workplace Relations. Retrieved
15 January, 2011 from
http://www.deewr.gov.au/Schooling/Funding/CapitalGrantsProgram/Pages/Administrative
ArrangementsforBlockGrantAuthorities.aspx

DEEWR. (2010b). *Administrative guidelines for Commonwealth programs*. Canberra:
Department of Education Employment and Workplace Relations. Retrieved 15 January,
2011   from
http://www.deewr.gov.au/Schooling/Programs/Pages/SchoolsAssistanceAct2008.aspx

DEEWR. (2010c). *Building the educational revolution implementation taskforce interim
report*. Canberra: Department of Education Employment and Workplace Relations.
Retrieved 22 September, 2010 from
http://www.deewr.gov.au/Department/Documents/BERIT_Interim_Report_06082010.pdf

Delors, J. (1997). *Learning, the treasure within: Report of the International Commission on
Education in the 21st Century*. Paris: UNESCO.

Denzin, N. (2000). The art and politics of interpretation. In N. Denzin, & Lincoln, Y. (Eds.),
Handbook of qualitative research. Thousand Oaks, CA: Sage.

Denzin, N., & Lincoln, Y. (2000). *Handbook of qualitative research*. Thousand Oaks, CA:
Sage.

Denzin, N., & Lincoln, Y. (Eds.), (2003). *Strategies of qualitative enquiry*. Thousand Oaks,
CA.: Sage.

Department of Education (Qld). (2005). *Professional standards for teachers: guidelines for
professional practice*. Brisbane: Queensland Government.

DEST. (1993). *In the middle: schooling for young adolescents*. Canberra: Department of
Education Science and Training. Retrieved 22 April, 2011, from
http://www.dest.gov.au/NR/rdonlyres/4BBF6A98-9ABC-4172-8DA2-
50AEF0174EEC/3851/93_03.pdf

 DEST. (2000). *Learning for the knowledge society: an education and training action plan for
the information economy.* Canberra: Department of Education Science and Training.
Retrieved 22 April, 2011 from
http://www.dest.gov.au/sectors/school_education/publications_resources/profiles/learnin
g_for_the_knowledge_society.htm .

DEST. (2001). *School innovation: pathway to the knowledge society*. Canberra: Department
of Education Science and Training. Retrieved 22 April, 2011, from

http://www.dest.gov.au/sectors/school_education/publications_resources/school_innovat
ion/

DEST. (2003). *Young people, schools and innovation: towards an action plan for the school sector*. Canberra: Department of Education Science and Training. Retrieved 22 April, 2011, from
http://www.dest.gov.au/sectors/school_education/publications_resources/profiles/young
_people_schools_and_innovation.htm

DETYA. (2001). *School innovation: pathway to the knowledge society*. Canberra: Department of Education Training and Youth Affairs. Retrieved 9 April, 2003 from
http://www.detya.gov.au/schools/Publications/2001/innovation/summary.htm

Dodge, M., & Kitchin, R. (2001). *Mapping cyberspace*. London: Routledge.

Dovey, K. (1999). *Framing places: mediating power in built form*. New York: Routledge.

Dovey, K. (2005). The silent complicity of architecture. In J. Hillier, & E. Rooksby, (Eds.), *Habitus: a sense of place* (2nd ed.),(pp. 241-280). Aldershot: Ashgate.

Dudek, M. (2005). *Children's spaces*. Oxford: Architectural Press.

Duran-Narucki, V. (2008). School building condition, school attendance, and academic achievement in New York public schools: a mediation model. *Journal of Environmental Psychology,* 28(3), 278-286.

Earthman, G., & Lemasters, L. (1977). The impact of school buildings on student achievement and behaviour. *PEB Exchange* (30), 11-15.

Earthman, G. & Lemasters, L. (2009). Teacher attitudes about classroom conditions. *Journal of Educational Administration*, 47(3), pp. 323 – 335.

Easton, E., & Oberg, D. (1990). Designing school libraries. *The Canadian School Executive,* 10(4), 27-28.

Edgerton, E., McKechnie, J., McEwan, S. (2010). *Building better schools: methodological concerns and the need for evidence*. Lausanne: Comportements.

Education Queensland (2001). *The why, what, how and when of rich tasks.* Department of Education. Retrieved 20 May, 2003, from
http://education.qld.gov.au/corporate/newbasics/pdfs/richtasksbklet.pdf

Elliott, A., & Ray, L. (Ed.). (2003). *Key contemporary social theorists*. Malden, MA: Blackwell.

Elliott Burns, R. (1998). *Educational/architectural brief for the designing of school libraries*. Unpublished manuscript, Brisbane, Australia: Brisbane Catholic Education.

Elliott Burns, R. (2003a). Space, place and design conversations. *ASLA Eighteenth National Conference proceedings*. Hobart, Tasmania: Australian School Library Association.

Elliott Burns, R. (2003b). Space, place, design and the school library. *Access, 17*(2), 23-26.

Elliott Burns, R. (2005). Designing spaces for learning: perspectives of a *flaneuse* [Electronic version]. *Blurring the Boundaries-Sharpening the Focus: A Curriculum Conference for Practitioners Conference Proceedings*. Sunshine Coast, Queensland: Australian Curriculum Association conference.

Elliott Burns, R. (2006). *Concepts and practices of designing.* In CLN603 Designing spaces for learning. Unpublished course materials. Brisbane: Queensland University of Technology.

Elliott Burns, R. (2008). Designing learning spaces for (partially) online lives: recombinant architecture. *ASLA Online III Conference 2008 – Conference proceedings*. Australian School Library Association.

Elliott Burns, R. (2009a). School library design: Unpublished interview transcript.

Elliott Burns, R. (2009b). *School library design: an interview with Raylee Elliott Burns.* Retrieved 10 September, 2009, from http://www.schoollibrarymanagement.com/school_library_design1.html

Erikson, R. and Markuson, C. (2007). *Designing a school library media center for the future* (2nd ed.). Chicago: American Library Association.

Evans, G., & Maxwell, L. (1997). Chronic noise exposure and reading deficits: the mediating effects of language acquisition. *Environment and Behaviour, 29*(5), 638-656.

Fairclough, N. (2001a). Critical discourse analysis as a method in social scientific research. In R. Wodak, & Meyer, M. (Eds.), *Methods of critical discourse analysis* (pp. 121 - 138). London: Sage.

Fairclough, N. (2001b). *Language and power* (2 ed.). Edinburgh: Pearson.

Fairclough, N. (2003). *Analysing discourse: textual analysis for social research*. London: Routledge.

Fairclough, N. (2009). Language and globalization. *Semiotica*, 173(1/4), 317-342.

Fenton, S. (1999). Architectural follies. *School Library Journal, 45*(2).

Fielding, R. (2004). *Design patterns for high performance schools*. Unpublished manuscript, Brisbane, Australia.

Filardo, M. & Vincent, J. (2010). *Research on the impact of school facilities on students and teachers: a summary of studies published since 2000*. Scottsdale, AZ: Council of Education Facility Planners International.

Fisher, K. (2001). *The impact of school infrastructure on student outcomes and behaviour* [Electronic source]. Retrieved March 31, 2002, from http://www.dest.gov.au/schools/publications/2001/digest/building.html

Fisher, K. (2003). Designing for learning in the knowledge age. *Educare News, 2003* (June), 15-17.

Fisher, K. (2004a). Placemaking practice: transforming classrooms from the inside out - the critical role of spatial literacy [Electronic version]. *Facility Design and Learning: has the*

paradigm changed? *4ᵗʰ National CEFPI Conference Proceedings*. Sydney: Council of Education Facility Planners International.

Fisher, K. (2004b). Revoicing classrooms. *Forum* 46 (1), p. 36-38.

Flutter, J. (2006). This place could help you learn: student participation in creating better school environments. *Educational Review*, 58(2), 183-193.

Flutter, J. & Rudduck, J. (2006). Student voice and the architecture of change: mapping the territory. Retrieved 12 October, 2010, from http://www.educ.cam.ac.uk/research/projects/studentvoice/index.html

Foucault, M. (1997a). Of other places: utopias and heterotopias. In N. Leach (Ed.), *Rethinking architecture: a reader in cultural theory* (pp. 350 - 355). London: Routledge.

Foucault, M. (1997b). Panopticism (extract). In N. Leach (Ed.), *Rethinking architecture: a reader in cultural theory* (pp. 356 - 366). London: Routledge.

Foucault, M. (1997c). Space, knowledge and power (interview with Paul Rabinow). In N. Leach (Ed.), *Rethinking architecture: a reader in cultural theory* (pp. 367 - 380). London: Routledge.

Foucault, M. (2002). *The order of things: an archaeology of the human sciences (Fr 1966)*. London: Routledge.

Franz, J. (1998). *A phenomenographic study of design in the interior design context.* Unpublished doctoral dissertation. Brisbane: Queensland University of Technology.

Franz, J. (2005). *Conceptions of space*. Unpublished lecture notes CLN603 Designing spaces for learning. Queensland University of Technology.

Frith, K. & Whitehouse, D. (2009). Designing learning spaces that work: a case for the importance of history. *History of Education Review*, 38(2) pp. 94-108.

Gandini, L., Hill, L., Cadwell, L., & Schwall, C. (2004). *In the spirit of the studio: learning from the atelier of Reggio Emilia*. New York: Teachers College Press.

Gerard, D. (1978). *Libraries in society: a reader*. London: K. G. Sauer.

Georgakopoulu, A. (2007). *Small stories, interaction and identities*. Amsterdam: John Benjamins.

Gislason, N. (2010). Architectural design and the learning environment: a framework for school design research. *Learning Environment Research*, 13, 127-145.

Glesne, C. (2006). *Becoming qualitative researchers: an introduction*. Boston, MA: Pearson Allyn & Bacon.

Goatly, A. (1997). *The language of metaphors*. London, New York: Routledge.

Goatly, A. (2006). Ideology and metaphor. *English Today* 22(3), 25-39 Cambridge University Press.

Gobo, G., Gubrium., & Silverman, D. (2004). *Qualitative Research Practice*. London: Sage.

Goetz, J., & Le Compte, M. (1984). *Ethnography and qualitative design in educational research*. London: Academic Press.

Gore, J. (2001). Disciplining bodies: on continuity of power relations in pedagogy. In C. Paetcher, Edwards, R., Harrison, R., & Twining, P. (Ed.), *Learning, space and identity* (pp. 167-181). London: Sage.

Graham, C. (2005). *Furniture for libraries*. Cerritos, CA.: Libris Design.

Grana, R., Black, D., Sun, P., Rohrbach, L., Gunning, M., & Sussman, S. (2010). School disrepair and substance use among regular and alternative high school students. *Journal of School Health*, 80(8), pp. 387 – 393.

Gross, R., & Borgman, C. (1995). The incredible vanishing library [Electronic version]. *American Libraries,* 26(9), 900-902.

Grosz, E. (2001). *Architecture from the outside: essays on virtual and real space*. London: MIT Press.

Groundwater-Smith, S. (2004). Transforming learning: transforming places and spaces for learning [Electronic version]*. Facility Design and Learning: has the paradigm changed? – Conference proceedings*. Sydney: 4th National CEFPI Conference.

Guba, E., & Lincoln, Y. (1994). Competing paradigms in qualitative research. In N. Denzin, & Y. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105 - 117). Thousand Oaks, CA: Sage.

Gubruim, J., & Holstein, J. (2nd ed). (2003). Analysing interpretive practice. In N. Denzin, & Y. Lincoln (Eds.). *Strategies of qualitative enquiry* (pp. 214-248). Thousand Oaks, CA: Sage.

Harris, C. (2006). The end of libraries. Retrieved 4 June, 2008, from Informancy http://schoolof.info/infomancy/?p=259

Hart, R. (1987). Children's participation in planning and design. In C. Weinstein & T. David (Eds.), *Spaces for children: the built environment and child development*. New York: Plenum Press.

Hart, R. (1997). *Children's participation*. London: UNICEF.

Harvey, D. (1996). *Justice, nature and the geography of difference*. Cambridge, MA.: Blackwell.

Hay, L. (2005). Student learning through Australian school libraries. Part 1: A statistical analysis of student perceptions [Electronic version]. *Synergy* 3(2), 17-30.

Hay, L. (2006). School libraries as flexible and dynamic learning laboratories ... that's what Aussie kids want [Electronic version]. *SCAN* 25(2), 19-27.

Hay, L. (2010). Shift happens. It's time to rethink, rebuild and rebrand. *Access* 24(4), 5-10.

Haycock, K. & Haycock, C. (Eds.). (1984). *Kids and libraries: selections from Emergency Librarian*. Vancouver: Dyad Services.

Haycock, K. (2011). Connecting British Columbia (Canada) school libraries and student achievement: a comparison of higher and lower performing schools with similar overall funding. *School Libraries Worldwide*, 17(1), 37-50.

Heath, T. (1989). *What do designers do?* Unpublished manuscript, Brisbane, Australia.

Heath, T. (2010.) *Learning architecture, teaching architecture: a guide for the perplexed*. Brisbane, Australia: Denarius Design Books.

Henderson, R. (2005a). *The social and discursive construction of itinerant farmworkers' children as literacy learners*. Unpublished doctoral dissertation. Townsville: James Cook University.

Henderson, R. (2005b). A Faircloughian approach to CDA: principled eclecticism or a method searching for a theory. *Melbourne Studies in Education*, 46(2), 9-24.

Heritage, J. (1997). Conversation analysis and institutional talk: analysing data. In D. Silverman (Ed.), *Qualitative research: theory, method and practice* (pp. 161-182). London: Sage.

Higgins, S., Hall, E., Wall, K., Woolner, P., McCaughey, C. (2005). *The impact of school environments: a literature review*. Retrieved April 27, 2008, from The Design Council http://www.design-council.org.uk/

Hillier, J., & Rooksby, E. (Ed.). (2002). *Habitus: a sense of place*. Aldershot: Ashgate.

Horne-Martin, S. (2002). The classroom environment and its effects on the practice of teachers. Journal of Environmental Psychology. 22(1-2), 139-156.

Horne-Martin, S. (2006). The classroom environment and children's performance – is there a relationship? In C. Spencer and M. Blades (Eds.), Children and their environments. Cambridge: Cambridge University Press.

Hughes, H. (2009). *International students using online information resources to learn*. Unpublished doctoral dissertation. Brisbane: Queensland University of Technology.

Hughes, S. (2006). *The relationship between school design variables and student achievement in a large urban Texas school district*. Unpublished doctoral dissertation. Austin, TX: Baylor University.

James, S. (2002). The library: a sense of place. *Scottish Libraries, 89*, 9 - 13.

Jamieson, P., Fisher, K., Gilding, T., Taylor, P., & Trevitt, A. (2000). Place and space in the design of new learning environments. *Higher Education Research & Development, 19*(2), 219 - 236.

Jamieson, P. (2007). *Creating new generation learning environments on the university campus.* Retrieved 20 January 2011 from http://www.woodsbagot.com/en/Documents/Public_Research/WB5307_U21_FA-7_final.pdf

Janesick, V. (2001). Intuition and creativity: a pas de deux for qualitative researchers [Electronic version]. *Qualitative Inquiry 7*(5), 531 - 540.

Janesick, V. (2003). The choreography of qualitative research. In H. Denzin, & Lincoln, Y. (Eds.), *Strategies of qualitative research*. Thousand Oaks, CA: Sage.

Johnson, D. (1998). *Some design considerations when building or remodelling a media centre*. Retrieved January 31, 2002, from
http://www.dougjohnson.com/dougwri/checklist.html

Jonassen, D. (1999). *Learning with technology: a constructivist perspective*. Upper Saddle River, NJ: Merrill.

Kapitzke, C., & Bruce, B (Eds.), (2006). *Libr@ries: changing information space and practice*. London: Lawrence Erlbaum Associates.

Kern, M., & Ch'in Shih-huang Emperor of China, 259-210 B.C & American Oriental Society (2000). *The stele inscriptions of Ch'in Shih-huang : text and ritual in early Chinese imperial representation.* New Haven, CT: American Oriental Society.

Kincheloe, K. (2001). Describing the bricolage: conceptualising new rigor in qualitative research [Electronic version]. *Qualitative Inquiry, 7*(6), 679 - 692.

Kincheloe, J., & McLaren, P. (1994). Re-thinking critical theory and qualitative research. In N. Denzin and Y. Lincoln (Eds.), *Handbook of qualitative research*, pp. 138-157. Thousand Oaks, CA: Sage

King, A. (2004). *Spaces of global cultures: architecture, urbanism, identity*. London: Routledge.

King, P. (2004). *Private dwelling: contemplating the use of housing*. Abingdon, Oxfordshire: Routledge.

Kovecses, Z. (2010). *Metaphor a practical introduction* [Electronic resource]. Oxford: Oxford University Press.

Kranich, N. (2007). Keeping it open. In D. Kresch (Ed.), *The whole digital library handbook* (pp. 378-387). Chicago, Il: American Library Association.

Krashen, S. (1995). School libraries, public libraries and the NAEP reading scores [Electronic version]. *School Library Media Quarterly 23*(4), 234-237.

Kresch, D. (Ed). (2007). *The whole digital library handbook*. Chicago. Il: American Library Association.

Kubler, G. (1962). *The shape of time.* New Haven: Yale University Press.

Kuhlthau, C. (1993). Implementing a process approach to information skills: a study identifying indicators of success in library media programs [Electronic version]. *School Library Media Quarterly 22*(1), 11-18.

Kuhlthau, C. (1999). Student learning in the library. *School Libraries Worldwide, 5*(2), 80-96.

Kuhlthau, C. (2010). Guided Enquiry: School libraries in the 21st century [Electronic version]. *School Libraries Worldwide* 16(1).

Kuhlthau, C. Maniotes, L., & Caspari, A. (2007). *Guided inquiry: learning in the 21st century*. Westport, CT: Libraries Unlimited.

Kumar, R., O.Malley, P., & Johnston, L. (2008). Association between physical environment of secondary schools and student problem behaviour: a national study 200-2003. *Environment and Behaviour*, 40(4), 455-486.

Kvale, S. (2002). The social construction of validity. In N. K. Denzin & Y. S. Lincoln, *The qualitative inquiry reader* (pp. 299-326). Thousand Oaks, Calif: Sage.

La Marca, S. (Ed.). (2003). *Effective learning spaces: inspiration for school library design*. Melbourne, Australia: School Library Association of Victoria.

La Marca, S. (2010). *Designing the learning environment*. Camberwell, Victoria: ACER Press.

Lackney, J. (1996). *Quality school environments: a multiple case study of the diagnosis, design and management of environmental quality in five elementary schools in the Baltimore City Public Schools from an action research perspective.* Unpublished doctoral dissertation. Milwaukee, WI: University of Wisconsin.

Lackney, J. (2001). *Thirty-three educational design principles for schools and community learning centres*. Retrieved May 24, 2010, from http://schoolstudio.typepad.com/

Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago: University of Chicago Press.

Lankshear, C., Snyder, I., & Green, B. (2000). *Teachers and techno-literacy: managing literacy, technology and learning in schools*. St Leonards, Australia: Allen & Unwin.

Lave, J. & Wenger. (1993). *Situated learning: legitimate peripheral participation*. New York: Cambridge University Press.

Lawson, B. (1997). *How designers think: the design process demystified*. Oxford: Architectural Press.

Lawson, B. (2001). *The language of space*. Oxford: Architectural Press.

Lefebvre, H. (1991). *The production of space* (D. Nicholson-Smith, trans.). Oxford: Blackwell.

Lemasters, L., Earthman, G. (2011). *Study of the relationship between air-conditioned classrooms and student achievement*. Scottsdale, AZ: Council of Education Facility Planners.

Lerner, F. (2009). *The story of libraries: from the invention of libraries to the computer age*. New York: Continuum.

Lewis, M. (2000). *Where children learn: facility conditions and student performance in the Milwaukee public schools*. Scottsdale, AZ: Council of Education Facility Planners International.

Limberg, L. (1999). Model school libraries: tools of threats? Reflections on a development project in Sweden [Electronic version]. *School Libraries Worldwide, 5*(1).

Limberg, L., Alexandersson, M. (2003). The school library as a space for learning. *School Libraries Worldwide*, 9(1), 1-15.

Lingard, B., Taylor, S., & Rawolle, S. (2005). Bourdieu and the study of educational policy: an introduction. *Journal of Education Policy*, 20(6), 663-669.

Lippincott, J. (2006). Linking the information commons to learning. In *Learning spaces*, pp. 7.1-7.18. Boulder: Educause www.educause.edu/learningspaces

Lonsdale, M. (2003). *Impact of school libraries on student achievement: a review of the research: a report for the Australian School Library Association*. Melbourne: Australian Council for Educational Research.

Luke, A., & Kapitzke, C. (1999). Literacies and libraries - archives and cybraries [Electronic Version]. *Pedagogy, Culture and Society, 7*(3), 467 - 491.

Lupton, M. (2004). *The learning connection: information literacy and the student experience.* Blackwood, S. Aust: Auslib Press.

Lupton, M. (2008). *Information literacy and learning*. Blackwood, S. Aust: Auslib Press.

Mallan, K., Lundin, R., Elliott Burns, R., Massey, G., & Russell, A. (2002). *Performing Hybridity: impact of new technologies on the role of teacher-librarians*. Brisbane: Queensland University of Technology, Centre for Language, Literacy and Diversity.

Mallan, K., Elliott Burns, R., & Russell, A. (2002). *Designing spaces for learning* Unpublished Proposal for a Unit of Study in a Masters Program. Brisbane: Queensland University of Technology.

Manguel, A. (1996). *A history of reading*. London: HarperCollins.

Mansourian, Y. (2008). Exploratory nature of, and uncertainty tolerance in, qualitative research. *New Library World*, 109 (5/6), 273-286.

Mardis, M. (Ed.). (2003). *Developing digital libraries for K-12 education*. Syracuse, NY: ERIC Clearinghouse on Information Technology.

Markus, T., & Cameron, D. (2002). *The words between the spaces: buildings and language*. London, New York: Routledge.

Marshall, C., & Rossman, G. (1999). *Designing qualitative research* (3rd ed.). Thousand Oaks, CA: Sage.

Massey, D. (2004). *Foreword*. *Forum* 46 (1), pp. 1-2.

Massey, D. (2010). Is the world getting larger or smaller? Open democracy: free thinking for the world. Retrieved 11 December 2010 from http://www.opendemocracy.net/

Maxwell, L. (1999). *School building renovation and student performance: one district's experience*. Scottsdale, AZ.: Council of Education Facility Planners International.

Maxwell, N. (2006*). Sacred stacks*. Chicago: American Library Association.

Mayes, P. (2101). The discursive constructions of identity and power in the critical classroom: implications for applied critical theories. *Discourse & Society*, 21(2), 189-210.

McCarthy, R. (1999). *Designing better libraries: selecting and working with building professionals*. Fort Atkinson, WI: Highsmith Press.

MCEETYA. (2008). The learning spaces framework *The Learning Spaces Framework*
Canberra: Ministerial Council on Education, Employment, Training and Youth Affairs.
Retrieved 28 November, 2010 from
http://www.curriculum.edu.au/verve/_resources/ICT_LearningOnlineWorld-
LearningSpacesFWork.pdf

McGregor, J. (2004a). Spatiality and the place of the material in schools [Electronic version]. *Pedagogy, Culture and Society, 12*(3), 347-372.

McGregor, J. (2004b). Editorial: Space and schools. *Forum* 46(1), 2-5.

Menin, S. (2003). *Constructing place: mind and matter*. London: Routledge.

Milkie, M. & Warner, K. (2011). Classroom learning environments and the mental health of first grade children. *Journal of Health and Social Behavior*, 52(1), 14 - 22.

Mitchell, D. (2000). *Cultural geography: a critical introduction*. Malden, MA: Blackwell.

Mitchell, W. (1996). *City of bits: space place and the Infobahn*. Cambridge, MA: MIT Press.

Mitchell, W. (2000). *e-topia: urban life, Jim - but not as we know it*. Cambridge, MA: MIT Press.

Mitchell, W. (2003). Emerging digital neighbourhoods. In P. Neal (Ed.). *Urban villages and the making of communities* pp.65-84. Spon Press: London.

Morgan, J. (2000). Critical pedagogy: the spaces that make the difference [Electronic version]. *Pedagogy, Culture and Society, 8*(3), 273 - 289.

Nair, P. and Fielding, R. (2005). *The language of school design: design patterns for 21st century schools*. DesignShare: http://www.designshare.com/

Nair, P. and Fielding, R. (2010). (2nd Ed). *The language of school design: design patterns for 21st century schools*. DesignShare: http://www.designshare.com/

New Media Consortium. (2010). *2010 Horizon report*. Retrieved March 21, 2011 from http://wp.nmc.org/horizon2010/

Newton, C. (2009). Disciplinary dilemmas: Learning spaces as discussion between designers and educators. *Critical and Creative Thinking: The Australasian Journal of Philosophy in Education*, 17(2), 7-27.

Newton, C., & K. Fisher. (Eds). (2009). *Take 8, Learning spaces: the transformation of educational spaces for the 21st century*. Canberra: Australian Institute of Architects.

Nixon, H., Comber, B., Cormack, P. (2008). River literacies: researching in contradictory spaces of cross disciplinarity and normativity [Electronic version]. *English Teaching Practice and Critique,* 6(3), 92-111. Retrieved 17 January 2011 from http://edlinked.soe.waikato.ac.nz/research/files/etpc/files/2007v6n3art6.pdf

NOIE. (1998). *A strategic framework for the information economy*. Retrieved January 31, 2004,from http://noie.gov.au/projects/information_economy_strategic_framework/dec98_strategy.htm

Oberg, D. (1999). School libraries: inviting places for learning [Electronic version]. *School Libraries in Canada, 19*(1), 4 - 7.

Oblinger, D. (Ed.). (2006). *Learning spaces* [Electronic version]. Boulder: Educause www.educause.edu/learningspaces

O'Connell, J. & Groom, D. (2010a). *Connect, communicate, collaborate*. Camberwell, Victoria: ACER Press.

O'Connell, J. & Groom, D. (2010b). *Virtual worlds*. Camberwell, Victoria: ACER Press.

OECD. (2001a). *Designs for learning: 55 exemplary educational facilities*. Geneva: Organisation for Economic Cooperation and Development.

OECD. (2001b). *School libraries and resource centres*. Paris: Organisation for Economic Cooperation and Development.

OECD. (2006a). *21st century learning environments.* Geneva: Organisation for Economic Cooperation and Development. Retrieved 22 April, 2011, from http://www.oecd.org/document/0/0,3343,en_2649_39263294_36423232_1_1_1_1,00.html

OECD. (2006b). *Schooling for tomorrow.* Geneva: Organisation for Economic Cooperation and Development. Retrieved 22 April, 2011, from http://www.oecd.org/document/6/0,3746,en_2649_35845581_31420934_1_1_1_1,00.html

OECD. (2006c). *PEB Compendium of Exemplary Educational Facilities.* Geneva: Organisation for Economic Cooperation and Development. Retrieved 22 April, 2011, from http://www.oecd.org/document/38/0,3746,en_2649_39263294_43865254_1_1_1_1,00.html

O'Farrell, C. (2005). *Michel Foucault*. London: Sage.

Oldenburg, R. (2001). (Ed.). *Celebrating the third place: inspiring stories about the 'great good places' at the heart of our communities*. New York: Marlowe.

Oliver, C. & Lippman, P. (2007). Examining space and place in learning environments [Electronic version]. *ConnectEd Conference Proceedings*. Sydney, New South Wales: International Conference on Design Education.

O'Malley, P., Johnston, L. & Kumar, R. (2008). Association between physical environment of secondary schools and student problem behaviour: a national study, 2000-2003. *Environment and Behavior*, 40 (4), 455 – 486.

Orgill, B. & Chandler, D. (2011). *The BER taskforce seminar*. Brisbane: Association of Consulting Architects, Council of Education Facility Planners.

Pader, E. (2006). Seeing with an ethnographic sensibility. In Yanow, D., & Schwartz-Shea, P. (Eds.), *Interpretation and method: empirical research methods and the interpretive turn*, (pp. 161-175). New York, London: M. E. Sharpe.

Paetcher, C. (2004). Spatialising power relations in education [Electronic version]. *Pedagogy, Culture and Society, 12*(3), 467-473.

Paethcer, C., Edwards, R., Harrison, R., Twining, P. (Eds.). (2001). *Learning, space and identity* [Electronic version]. London: Paul Chapman.

Parnell, R., Cave, V., & Torrington, J. (2008). School design: opportunities through collaboration. *CoDesign: International Journal of CoCreation in Design and the Arts,* 4(4), 211-224).

Picus, L., Marion, S., Calvo, N., & Glenn, W. (2005). Understanding the relationship between student achievement and the quality of educational facilities: evidence from Wyoming. *Peabody Journal of Education*, 80(3), 71-95.

PEW Internet in American Life Project (2010). Retrieved 27 April, 2011 from http://www.pewinternet.org/

Popkewitz, T., & Fendler, L. (1999). *Changing terrains of knowledge and politics*. New York: Routledge.

Prensky, M. (2001). Digital natives, digital immigrants [Electronic version]. *On the Horizon*, 9(5), 1-6.

Pulay, A. (2010). *Awareness of daylighting on student learning in an educational facility*. Unpublished doctoral dissertation. Lincoln, NA: University of Nebraska.

Radcliffe, D., Wilson, H., Powell, D., & Tibbetts, B. (2008). *Designing next-generation spaces of learning: collaboration at the pedagogy-space-technology nexus*. ALTC Priority Project # 627. Brisbane: University of Queensland.

Relph, E. (1976). *Place and placelessness*. London: Pion.

Rinaldi, C. (2006). *In dialogue with Reggio Emilia: listening, researching, learning*. London, New York: Routledge.

Roberts, L., Edgerton, J. & Peter, T. (2008). The importance of place: facility conditions and learning outcomes. *Education Canada*, 48(3), 48-51.

Rogers, R., Malancharuvil-Berkes, E., Mosley, M., Hui, D., & and Joseph, G. (2005). Critical discourse analysis in education: a review of the literature [Electronic version]. *Review of Educational Research, 75*(3), 365-416.

Sannwald, W. (2001). *Checklist of library building design considerations* (4 ed.). Chicago, Ill: American Library Association.

Sanoff, H. (2005). A visioning process for designing responsive schools. *National Clearninghouse for Educational Facilities*. Retrieved 17 August, 2010 from http://www.ncef.org/pubs/sanoffvision.pdf

SanSouci, S., Guerra, L., & Campbell, D. (2010). Characterization of classroom noise and noise control techniques and their effects on speech comprehension while learning. *Journal of Acoustical Society of America*, 127(3), 2028-2038.

Schneider, M. (2003). *Linking school facility conditions to teacher satisfaction and success.* Washington DC: National Clearinghouse for Educational Facilities.

Schon, D. (1995). *The reflective practitioner: how professionals think in action*. Aldershot, England: Arena.

Schools Commission. (1979). *Books and beyond: guidelines for library resource facilities and services*. Canberra: Commonwealth Schools Commission (Australia).

Schwartz, A. (2002). Rebirth of a notion [Electronic version]. *The Wilson Quarterly, 26(*2), 20-30.

Seale, C. (2004). The quality of qualitative research. In G. Gobo, J. Gubrium & D. Silverman (Eds.), *Qualitative research practice*, (pp. 379-388). London: Sage.

Sen, S. (2004). Small stories of the planet. In J. Schultz (Ed.), Our global face: inside the Australian diaspora. [Electronic version]. *Griffith Review*, 6, Summer, 238.

Shah, S. (2001). Records of achievement: tracing the contours of learner identity. In C. Paetcher, R. Edwards, R. Harrison, & P. Twining (Eds.), *Learning, space and identity* (pp. 155-166). London: Sage.

Shier, H. (2001). Pathways to participation: openings, opportunities and obligations: a new model for enhancing children's participation in decision-making in line with article 12.1 of the United Nations Convention on the Rights of the Child. *Children & Society*, 15(2), 107-117.

Shulman (2005). Signature pedagogies in the professions. *Daedalus*, 134(3), 52-59.

Simonsen, K. (2005). Bodies, sensations, space and time: the contribution from Henri Lefebvre [Electronic version]. *Geografiska Annaler, 87 B*(1), 1 - 14.

Skoutas, E. (2009). Spaces for learning: a teacher's perspective. *Critical and Creative Thinking: The Australasian Journal of Philosophy in Education*, 17(2), 93-103.

Smith, K. and Flannery, J. (2007). *Library design*. Kempen, Germany: teNeues

Soja, E. (1989). *Postmodern geographies*. London: Verso.

Stevenson, K. (2001). *The relationship of school facilities conditions to selected student academic outcomes: a study of South Carolina public schools*. Columbia, SC: Education Oversight Committee.

Sutton, L. (2009). Educational transformation. In C. Newton & K. Fisher (Eds.), *Take 8 Learning spaces: the transformation of educational spaces for the 21st century*. Manuka, ACT, Australia: Australian Institute of Architects.

Tanner, K. (1999). *A design assessment scale for elementary schools*. Retrieved 14 March, 2003, from http://www.designshare.com/index.php/articles/a-design-assessment-scale-for-elementary-schools/

Tanner, K. (2008). Explaining relationships among student outcomes and the school's physical environment. *Journal of Advanced Academics*, 19(3), 444-471.

Taylor, S., & Singh, P. (2005). The logic of equity practice in Queensland State Education – 2010. *Journal of Education Policy*, 20(6), 725-740.

Taylor, S. (2004). Researching educational policy and change in 'new times': using critical discourse analysis. *Journal of Education Policy,* 19(4), 433-451.

Thomas, H. (2010). Learning spaces, learning environments and the dis'placement' of learning. *British Journal of Educational Technology*, 41(3), 502-511.

Thomas, P., & Newman, M. (2008). Student participation in school design: one school's approach to student engagement in the BSF process. *CoDesign,* 4(4), 237-251.

Todd, R. (2001). A sustainable future for teacher-librarians: inquiry learning, actions and evidence. *Orana* (November), 10-20.

Todd, R., Kuhlthau, C. & Ohio Educational Library Media Association (OELMA). (2004). *Student learning through Ohio school libraries research project.* Retrieved 16 March 2009, from http://www.oelma.org/OhioResearchStudy.htm

Todd, R. (2005). *School librarians and educational leadership: productive pedagogy for the information age school*. Hong Kong: Conference of the International Association of School Libraries.

Todd, R., Kuhlthau, C., & Heinstrom, J. (2005). *School library impact measure (SLIM): a toolkit and handbook for tracking and assessing student learning outcomes of guided enquiry through the school library*. Retrieved November 21, 2006, from http://cissl.scils.rutgers.edu/imls/SLIM_toolkit.pdf

Todd, R. (2008). Youth and their virtual networked worlds: research findings and implications for school libraries [Electronic version]. *School Libraries Worldwide* 14(2), 19-34.

Todd, R. (2010a). *Curriculum integration*. Camberwell, Victoria: ACER Press.

Todd, R. (2010b). School libraries now more than ever: Submission 163. In *Inquiry into school libraries and teacher-librarians in Australian schools.* Retrieved 12 May, 2011, from http://www.aph.gov.au/house/committee/ee/schoollibraries/index.htm

Toomey, R. (2001). *Information and communication technology for teaching and learning*. Canberra, Australia: Department of Education Science and Training.

Tuan, Y-F. (1974). *Topophilia: a study of environmental perception, attitudes and values*. Englewood Cliffs, NJ: Prentice Hall.

Tuan, Y. (1977). *Space and place*. London: Edward Arnold.

Uline, C., Tschannen-Moran, M., & Wolsey, T. (2009). The walls still speak: the stories occupants tell. *Journal of Educational Administration*, 47(3), 400-426.

UNESCO. (2010). *Education for sustainable development.* Retrieved 22 April, 2011, from http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-development/

Upitis, R. (2004). School architecture and complexity and education. *Complicity: An International Journal of Complexity*, 1(1), 19-38. Retrieved June 9, 2010, from http://www.complexityandeducation.ualberta.ca/COMPLICITY1/CJ_School.htm .

Valentine, G. (2004). *Public space and the culture of childhood*. Aldershot: Hants, UK.

Wall, J., & Ryan, S. (2010). *Resourcing for curriculum innovation*. Camberwell, Victoria: ACER Press.

Watson, L. (2007). Building the future of learning. *European Journal of Education*, 42(2), 255-263.

Wisconsin Department of Public Instruction. (2002, updated 2011). *Design considerations for school library media centers*. Retrieved January 30, 2002, from http://www.dpi.state.wi.us/dpi/dltc/imt/designlmc.html

Webb, T. (2000). *Building Libraries for the 21st century: the shape of information*. Jefferson, NC: McFarland.

Weiner, S. (2007). Growing pains. In D. Kresch (Ed.), *The whole digital library handbook* (pp. 161-171). Chicago, Ill: American Library Association.

Weinstein, C. (1979). The physical environment of the school: A review of the research. *Review of Educational Research, 49*(4), 577-610.

Whitby, G. (2004). Reframing schooling in the digital age: delivering on strategic intent [Electronic version]. *Facility Design and Learning: has the paradigm changed? 4th National CEFPI Conference Proceedings*. Sydney: 4th National Council of Education Facility Planners International.

White, E. (2001). *The flaneur: a stroll through the paradoxes of Paris*. London: Bloomsbury.

Wodak, R. (2006). Dilemmas of discourse. [Electronic version]. *Language in Society*, 35(4), 595-611.

Wodak, R., & Meyer, M. (Eds). (2001). *Methods of critical discourse analysis* (2nd ed). London: Sage.

Wodak, R., & Meyer, M. (Eds). (2009). *Methods of critical discourse analysis*. London: Sage.

Woolner, P., Hall, E., Higgins, S., McCaughey, C., & Wall, K. (2007). A sound foundation? What we know about the impact of environments on learning and the implications for Building Schools for the Future (Electronic version). *Oxford Review of Education*. 33 (1), pp. 47 – 70.

Woodward, J. (2000). *Countdown to a new library: managing the building project*. Chicago, Ill: American Library Association.

Yanow, D., & Schwartz-Shea, P. (2006). (Eds.). *Interpretation and method: empirical research methods and the interpretive turn*. New York, London: M. E. Sharpe.

Yanow, D. (2006). How built spaces mean. In Yanow, D., & Schwartz-Shea, P. (2006). (Eds.). *Interpretation and method: empirical research methods and the interpretive turn*, (pp. 349-366). New York, London: M. E. Sharpe.

Zeisel, J. (1984). *Inquiry by design: tools for environment-behaviour research*. Cambridge, England: Cambridge University Press.

Zweizig, D. (1984). *Public libraries and excellence: the public libraries response to a nation at risk*. Washington, DC: Office of Educational Research and Improvement.

APPENDICES

Appendix A

Invitation to Participate in a Doctoral Research Project

Raylee Elliott Burns
Doctoral Candidate
QUT Brisbane

Dear Colleagues,

I am undertaking a data gathering phase in my Doctor of Philosophy project which is concerned with the designing of learning spaces, most particularly with the designing of school libraries.

The perspectives and experiences of teacher-librarians will be most pertinent and valuable to the project.

Teacher-librarians in the Brisbane area are warmly invited to participate in a 45-60 minute semi-structured focus group interview to be held at:

Queensland University of Technology
Kelvin Grove Campus
Victoria Park Road, Kelvin Grove

Two interview session times are available:

- 10 am Saturday 5th November, 2005
- 10am Saturday 12th November, 2005

Interviews will be audio-recorded with the permission of participants.

If you would be prepared to contribute your perspectives and experiences to this project – please email me by Saturday 29th October with your preferred session time at r.elliottburns@qut.edu.au

Thank you in anticipation

Raylee

Full QUT Ethics Committee clearance has been granted for this project.

This doctoral project is supervised by: Associate Professor Jill Franz: School of Design, Faculty of Built Environment and Engineering and Associate Professor Sandra Taylor: School of Cultural and Language Studies, Faculty of Education – Queensland University of Technology

Appendix B

Letter consent form Architects & Education Facility Planners

Name
Address

Dear,

Thank you for agreeing to participate in the data gathering for my Doctor of Philosophy research '***Designing the 'school library': spaces and places for learning'.***
This study will investigate the potential for multiple voices of experience - educators, designers/architects, education facility planners and students – to influence the design of the school library as a learning space and place. Your role as an Architect and your experience in school facility design will provide valuable perspectives to the research.

The Semi-Structured Interview
The data gathering method for this phase of the project is a semi-structured interview of 45 - 60 minutes duration. Through an interview statement the researcher will name the aspects of focus for the project and invite participants to discuss those aspects which are of interest to them.

The interviews will be audio-recorded with permission and transcribed by the researcher who will also make notes. Participants will not be named or directly identified with their statements. Some data will be aggregated and attributed to a group [e.g. 'the scope of concerns for teachers included the following …….].

You are invited to email the researcher if there are matters you wish to clarify with respect to the research. To maintain the integrity of the research report, the researcher may contact participants to verify data interpretations at appropriate times during the data analysis phase.

Ethics
Expedited ethical clearance for this research project has been granted by Queensland University of Technology Research Ethics Committee. The ethical clearance conditions of the university require that the researcher provide the information contained in this letter to participants in the study and obtain their written consent.

If you are prepared to participate in the research, you are invited to sign the consent form on the verso of this letter and return it to the school office for collection by the researcher.

With sincere thanks and best wishes,
Raylee

Research Title: '*Designing the 'school library': spaces and places for learning'.*
Principal Researcher: Raylee Elliott Burns
Lecturer - Queensland University of Technology
Victoria Park Road, Kelvin Grove 4059
Ph: 07 38643554   Fax: 07 38643988   email: r.elliottburns@qut.edu.au

Doctor of Philosophy Research Project
'*Designing the 'school library': spaces and places for learning'*.

Consent Form

Name:

………………………………….....……………….………………………………………………………………

I have read and I understand the information provided in the statement about the above research project.

I agree to participate in a semi-structured interview related to this study.

I understand that:

The interview will be conducted by the Principal Researcher
The interview will be recorded for transcription and analysis
Participants will not be named in the transcripts or in the final thesis
Transcripts of the interview will be available to participants for response
The final thesis document will be available to participants

Signature: ………………………………………………

Date: ………………………………………………………

Research Title: '*Designing the 'school library': spaces and places for learning*'.
Principal Researcher: Raylee Elliott Burns
Lecturer - Queensland University of Technology
Victoria Park Road, Kelvin Grove 4059
Ph: 07 38643554   Fax: 07 38643988   email: r.elliottburns@qut.edu.au

Appendix C

Consent form students

Doctor of Philosophy Research Project
Designing the school library: 'spaces and places for learning'

Student Consent Form

Dear Students,

My name is Raylee Elliott Burns and I am doing a research project about the school library.

As part of this project I would like to talk with students at this school about the library.

You are invited to join the group for a discussion.

Please tell me your answer to this invitation by placing a **√** beside **YES** or **NO** in the box below.

Student Consent

☐ **YES** – I wish to join the group to talk about the library

☐ **NO** – I do not wish to join the group

Please write your name and the date

Name: …………………………………………………………………………..……………………………………….

Date: …………………………………………………………………………..……………………………………….

Thank you

APPENDIX D

Pre-conditions and Protocols for semi-structured interviews

As noted in Chapter 1 and in Chapter 6, participants in the semi-structured interviews for the study were educators, students, education facility planners and designers/architects. The largest group of educators and students were drawn from three (3) Brisbane (Australia) suburban schools allied with the Independent non-government school sector. A separate group of teacher-librarians were interviewed. Educators at a fourth school were involved only to the extent of two (2) planning meetings at which the researcher recorded field notes. The designers/architects were directors of architectural practices specialising in education facility designing. Two (2) of the education facility planners were employees of the Catholic Independent school system, and one (1) was the Business Manager at an Independent non-system school.

Participation in the study was invited through circulation of project information to:

- Brisbane Catholic Education and to the individual school principals;
- the School Library Association of Queensland through the Executive Officer;
- Council of Education Facility Planners International, at a professional association meeting;

As noted in Chapter 6 Gathering small stories, the semi-structured interview statement was expressed as follows:

> *In relation to the research project I am interested in what you understand about school libraries and in how you imagine learners and their activities in relation to school libraries. I am also interested in how you see your role as a designer of learning spaces, for example school libraries, and in the experiences and influences you call upon as a designer of learning spaces.*

Semi-structured interviews: pre-conditions and procedures

Student participants

The pilot study was useful in establishing the pre-conditions for the semi-structured interviews, in particular for the students whose ages ranged between 9 and 17 (approx). Marshall & Rossman (1999) emphasise the value of including the often absent voices of children in education research and point out considerations for the interviewing of

children, in particular that they should feel comfortable in interview situations. I chose to limit the student group size to a maximum of six (6) participants in order to encourage a conversation-style within the group and to enable me to attempt to recall student's names so that their contributions could be acknowledged personally if needed.

A supportive physical environment was established for students by negotiating the use of familiar seminar or meeting rooms in the school libraries on each site as the venues for small group interviews to enable students to feel relaxed about the interview (Carspecken, 1996). I greeted the students at the door of the room and moved to my position at a chair with an adjacent table for the recording equipment and note material. I invited the children to bring a chair and gestured to indicate that they could sit adjacent – around the table or in open space. If needed, I moved my position so that I could make eye contact with each of the children.

I welcomed the students as a group, introduced myself by name and thanked them for their generosity in participating in the study. I described my previous work in schools as a teacher-librarian to create a link with their experiences, reminding them about the overall focus of the study and my keen interest in their understandings and opinions. I explained to the students that I needed their permission for the interview data to be recorded and used in the study. The signing of the permission forms provided a pause before the formal interview session.

The semi-structured interview statement for students, introduced the project and the particular aspects of interest. The experience of the pilot study indicated that the students could require prompts in order to move the discussion to the next area of interest and that these prompts sometimes required a 'for example' clarification, particularly in the case of student understandings about libraries.

The opening interview statement outlined the scope of the four key aspects:

> *I am working on a research project about school libraries. So I am interested in what you think about school libraries and I am interested to know how you use your school library. I am also interested in the other libraries you might have visited and in what you think about the spaces of the libraries at your school and in other places.*

To commence the discussion, I restated the first aspect of interest and gave an example to stimulate the discussion:

So, perhaps we could begin with what you think about libraries. For example: If you had to talk about the library to someone who had not seen a library or used one – how would you tell them about it?

As the discussion unfolded I added prompts when needed, to encourage expansions of concepts and experiences:

I am wondering how you use libraries?

I am wondering if there are other libraries you visit …. Can you talk about these?

I am interested in what makes you come back to these libraries [school or public/community]? What do you think about going back?

So, who do you think makes the decisions for how the library in the school will be? How the spaces of the library will be?

What would you like to say to the people who make the decisions [teachers, architects, builders] to let them know what you think about the spaces of the library?

Adult participants

The semi-structured interviews with educators were undertaken most often in groups according to school and individual preferences. One Principal was interviewed singly to accommodate particular school circumstances. Seven (7) teacher-librarians (TL) volunteered for the group interviews. Some teacher-librarians were unable to attend the group interview dates on either of two (2) Saturdays suggested for the group TL interviews. Subsequently one (1) of these TLs was interviewed in company with the Principal and the other was interviewed with a Deputy Principal. Locations for the interviews in the schools were selected by the Principal depending on available space and this was most often in the library precinct. In the case of the two (2) TL groups, participants were interviewed in a seminar room at Queensland University of Technology.

Architects and education facility planners were invited to choose the physical location, date and time they preferred for their individual semi structured interview. Each of these participants was interviewed individually. One interview with a facility planner took place in the researcher's workplace and the remainder of the interviews with architects and

education facility planners were conducted in participants' workplaces at their suggestion (Carspecken, 1996).

The semi structured interviews in the study were introduced and stimulated by brief but comprehensive statements to focus participants on aspects relevant to the research – understandings about school libraries, learners and learning, designing approaches, designing relationships and designing influences. The focal points in the semi-structured interview statements were ordered differently across the participant groups. The potential value in differentiated ordering of the statements emerged from the experience of the Pilot Study. The hesitancy of the designer/architect in the Pilot Study to deal with the less familiar focus of libraries, learners, learning, caused me to consider that a more flowing discussion could be possible if participants were eased into the discussion according to and commencing with their specialised area of experience.

Thus the order of the statement was retained as above for the educator interviews, but re-ordered for the designers/architects and education facility planners. The potential value in differentiated ordering of the statements emerged from the experience of the Pilot Study. The hesitancy of the designer/architect in the Pilot Study to deal with the less familiar focus of libraries, learners, learning, caused me to consider that a more flowing discussion could be possible if participants were eased into the discussion according to and commencing with their area of specialised experience.

The semi structured interview statement for the designers/architects and education facility planners was thus expressed as follows:

> *In relation to the research project I am interested in how you see your role as a designer of learning spaces, for example school libraries, and in the experiences and influences you call upon as a designer of learning spaces. I am also interested in what you understand about school libraries and in how you imagine learners and their activities in relation to school libraries.*

The opening sentence in the statement for the designers/architects introduced the research interest in designing in relation to the participant as 'designer' and linked designing to the spaces of learning rather than only to libraries by using the broader scoping term *learning spaces*. While this connection assumed that educators, designers/architects and education facility planners have learning space designing as an activity in common, the statement left the interpretation of designing to the participants to

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express their own understandings, experiences and influences. The second sentence then introduced the matter of learners and their activities. It is noteworthy that one (1) of the architects and one (1) of the education facility planners chose to begin the interview discussion with reference to libraries.

Beginning with a broad statement established openness to allow participants to introduce into the discussion any matters of significance to them associated with the areas of research interest. The specific matters of significance introduced by the participants could then be explored more deeply by seeking clarification, expansion or illustrative examples. In this way participants were offered the opportunity to express more fully those matters of particular concern to them. Prompts for clarification, expansion and refocus included questions such as:

> *When you were talking about xxx, you mentioned yyy, can you talk a bit more about that?*

> *I am interested in your experience with qqq, can you tell us about that?*

> *Are there other things you would want to say about zzz?*

Using this approach the semi-structured interviews became a process of discovery, unfolding, evolving and emerging according to participant understandings, realities and experiences (Heath, 1989; 2010). It was then a matter for me to draw respectfully on the participant expressions to clarify, further inform or refocus the discussion (Carspecken, 1996; Kvale, 2002).

Most of the interviews progressed in the order of the semi-structured interview statements, however one of the architects and one of the education facility planners chose to begin with reference to libraries. The semi-structured interview statements for the students maintained the same four focal points, which were directed to the scope of the student experiences of school libraries and their understandings about designing approaches, roles and processes.

Semi-structured interview data were audio-recorded and transcribed verbatim. These verbatim data are the source of all quotes used in the data analysis in Chapters 7, 8, 9, and 10.

Appendix E: Overall participant data focus

Participants	Libraries	Learners & Learning	Designing outcomes	Designing processes	Designing influences
Educators					
TLs	Beliefs/Philosophy, Vision, Experiences, Research Practices, Examples/Scenarios	Beliefs/Philosophy, Experiences, Research Practices, Examples/Scenarios	Exemplars Scenarios	Practices, Relationships, Partnerships, Questions	Beliefs/Philosophy, Vision Experiences, Research, Practices, Examples/Scenarios
Principals	Beliefs/Philosophy, Experiences, Research Practices, Examples/Scenarios	Beliefs/Philosophy, Experiences, Research Practices, Examples/Scenarios	Exemplars Scenarios	Practices Relationships Partnerships, Scenarios	Beliefs/Philosophy, Vision Experiences, Research, Practices, Examples/Scenarios
Teachers	Beliefs/Philosophy, Experiences, Research Practices, Examples/Scenarios	Beliefs/Philosophy, Experiences, Research Practices, Examples/Scenarios	Scenarios, Anecdotes Questioning puzzlement	Scenarios Anecdotes Questioning puzzlement	Questioning puzzlement
Students					
Primary	Beliefs/Philosophy [limited] Practices, Examples/Scenarios Experiences	Beliefs Practices, Examples/Scenarios, Experiences, Relationships	Exemplars, Questioning	Questioning/speculation on processes of designers and educators	
Secondary	Beliefs/Philosophy [moderate] Practices, Experiences	Beliefs Practices, Examples/Scenarios Experiences, Relationships	Examples/Scenarios Anecdotes	Speculation on processes of designers and educators	Speculation on influences on designers & educators
Designers Architects					
A [Director/Educator]	Beliefs/Philosophy Practices	Beliefs/Philosophy Practices	Examples/Scenarios	Practices, Relationships Partnerships, Scenarios Process proposals	Personal philosophy and experiences
B [Director]	Examples/Scenarios	Personal experiences anecdotes	Status quo practices	Status quo practices SQ Partnerships	Personal philosophy and experiences
C [Director]	Examples/Scenarios	(-Learners) Personal experiences anecdotes	Status quo practices	Status quo Practices SQ Partnerships	Personal philosophy and experiences
Ed Facility Planners					
#1 Educator/EFP	Beliefs/Philosophy Practices Experiences, Examples/Scenarios	Beliefs/Philosophy Practices Experiences, Examples/Scenarios	School System focus	School System focus	Beliefs/Philosophy Practices Examples/Scenarios Research
#2 Project Mgr	Omitted General School focus Experiences	Beliefs/Philosophy Experiences	Status quo practices Innovation exemplar	School System focus	Personal Research Observation
#3 Business Manager	Disclaimed capacity to comment	Disclaimed capacity to comment on either learners or learning	Aesthetic Architectural focus Problem examples	Status quo, anecdotes Problem examples Project schedule focus	Status quo financial practices

Appendix F: VAST: designing heuristic – overview

Values *People have values*	Activities *in relation to aspects (activities)*	Site/System *of buildings*	Technology *which must be expressed in built form*
System of human relationships • Feelings • Attitudes • Beliefs • Customs • Laws	***System of human activity*** • participants/actors • characteristics • relationships • materials • actions: sequence, outputs • action effects • conditions: requirements • relative dimensions • support services • information support • risks	***System to support human activity*** Environment, surface, subsoil, property • location: in context • context: relationships • access: main & limitations • aspect: compass orientation • prospect: outlook • climate: diurnal & seasonal • micro-climate: local & site • character: site & context • services:	***Production of the built space system*** • structure • skin • climate control • subdivision: internal • services • finishes and the economic implications
Representing values in: • literary descriptions – narrative of the users • sociological analysis – systematic observation • speech protocols – interview, forum, 'listening space' • exemplars – 'like'	**Representing activities in:** • adjacency matrix: activity connections • flow chart: linear, recursive • bubble diagram: patterns of connections • room data sheet: equipment space requirements • time lapse photography: 'slices of time' • video: 'what it looks like in action' • computer graphics; dynamics	**Representing sites & systems in:** • location plan: relationships • photography: qualitative • annotated site plan: integration of aspects • overlay plan: transparency rendition of aspects • model; 3D • computer graphics: dynamic of all the above	**Representing technology in:** • photographs: installations • sections & elevations • type details: detailed drawings of aspects

Drawing on the work of John Zeisel (1984), Heath (1989) describes the underpinning thesis of **VAST** as: '*people have **V**alues, in relation to aspects [**A**ctivities] of buildings [**S**ite/**S**ystem] which must be expressed in built form [**T**echnology]*'. The **VAST** elements scaffold the exploration of systems of human relationships and human activity, which are then enabled by surrounding systems which support human activity within built spaces. Conceptualising designing as a *'specialised kind of problem solving'* involving strategic and tactical approaches, Heath encourages designers to apply the **VAST** heuristic critically and with a certain amount of *'free floating anxiety'* (Heath 1989:17). Applied to the **VAST** elements, the interrogative frame of the critical theorist's question: *'who and what is valued here?'* (Popkewitz & Fendler, 1999) prompts exploration of other questions concerned with influential participant relationships and activity: Who designs these spaces and what agendas are fulfilled through designer roles? How are learners imagined in the design process? How are participants influenced in the design process? How do design elements work to prohibit, permit, locate and order the ways in which learners and teachers are positioned and the ways in which learning takes place? (Foucault, 1967; Jamieson et al, 2000).

Appendix G: VAST designing heuristic – values

1. People have **Values**

Discovering Values	values find expression in a range of ways … discovering the system of human relationships
Feelings	*personal-subjective responses* - may be difficult to articulate - may relate to the 'sense' or 'feel' of a place, or to ideas of comfort, belonging, excitement or stimulation.
Attitudes	*observable responses* - may be consistent across groups or characteristic of individuals - may be evident in cohesion around a feature or aspect of a place - associated with affective or emotional response 'aesthetics'
Beliefs	*organised, systematic, verbalised attitudes* - may be evident in strongly held views proactively expressed or further systematised into creed/policy.
Customs	*habitual and accepted ways of doing things* - may not be so clearly expressed as beliefs - may be taken-for-granted, unexamined and unconscious – related to ideas of culture '*the way things are done around here*' – lack of compliance may invite disapproval.
Laws	those values which are so accepted that they have become *enforceable* – such that disregard or lack of compliance brings punitive responses. Behavioural expectations.
Representing Values	in the process of designing, an investigation of values can be researched, recorded and represented in a range of ways …
Literary descriptions	'Stories' or 'narratives' introduce and summarise the value systems of the people and place/s, the social groups, the 'dwellers' who share concerns about the designing of the spaces in which they will live and work. Such stories draw on and give prominence to the imagination of 'vernacular designers' over that of 'accredited designers'. There is value in historical accounts, metaphor and recording the human dimensions of the life and work of the group.
Sociological analysis	Records of systematic observation to balance imaginative description – qualitative/descriptive or quantitative - demographic data – relationships data.
Speech protocols	Records of direct responses – what people actually say, recorded as exactly as possible without interpretation – via interviews, town hall meetings, roundtable discussions which include both vernacular and accredited designers. These are opportunities for deep listening by both vernacular and accredited designers.
Exemplars	The aspects that individuals or groups identify as having the characteristics of the spaces they desire – akin to 'shopping' - for ideas, elements, attributes, features which are close to perceived requirements – may be stimulated by visits to sites which express the approximate needs of the group or of individuals.

Appendix H: VAST designing heuristic - activities
2. People have Values in relation to Activities

Discovering Activities	discovering **the system of human activity** - who does what, with whom, and with what resources …
Participants/actors	Who are the groups and individuals? Who helps? Who visits? – rich descriptions of characteristics and relationships
Actions: sequence, outputs & action effects	What do they do? Priority activities, relationships among activities, support activities, sequence of activities, impacts or 'side effects' of activities – noise, heat.
Materials & equipment	What to they use? Fixed, mobile, power dependent, individual, shared, noise creating, heat producing/sensitive.
Information support	Computers, telephony, signage
Conditions: requirements	Comfort conditions required – match or mismatch between conditions and activities – light, air - problems/solutions
Relative dimensions	Minimum dimensions required for the activities – activity interrelationships – shared 'space' options
Support services	Power, cabling, water, air conditioning, air filtering, drainage
Risks & responsibilities	Direct or indirect risks to health and safety – access issues for disabled - problem/solutions
Representing Activities	**in the processes of designing, an investigation of activities - dynamic and diachronic – taking place over time … can be researched and represented in a range of ways**
Adjacency matrix	To demonstrate the strength of connections among activities – concerned with proximity and distance – related & unrelated activities
Flow chart	To demonstrate sequences of events – linearity – workflow, traffic flow
Bubble diagram	To demonstrate patterns of connections among activities – related to adjacency/distance
Room data sheet	To record equipment sizes, relationships, working space requirements, service requirements, space dimensions
Time lapse photography	To 'record slices of time' representing diachronic aspects of activities – related to flow
Video	Lifelike record of activities for detailed study
Computer graphics	Dynamic, virtual representations of observations – to analyse space requirements

Appendix I: VAST designing heuristic – site/system

3. People have **V**alues in relation to **A**ctivities of **Sites/Systems** -buildings/environments

Discovering site/s	***Discovering the system/s to support human activity*** *Designing within a wider system … physical interface … interiors and exteriors …*
Environment	**Location** in context; **access** [main and limitations]; **aspect** [compass orientation re shade, light]; prospect [views]; **climate** [rain and wind effects, diurnal & annual temperatures]; **micro-climate** [adjacency of natural landforms, water]; **character** [defining, unique features]; **services** [public, nearby]
Surface	**Contour** [landform]; **soil** [soil rocks and distribution]; **vegetation** [tree/plant preservation – preservation orders]
Subsoil	**Geology** [foundation conditions]; **services** [location of existing underground services]
Property	**Boundary** [site boundaries]; **building line** [restrictions on area for building]; **easements** [right-of way restrictions]; **plot ratio** [height or volume restrictions]; heritage [restrictions, preservation]
Representing site/s	***in the processes of designing, an investigation of sites/systems can be researched and represented in a range of ways …***
Location plan	To demonstrate the site in relation to its broader environment
Photographs	To demonstrate qualitative aspects of the site – environment and surface aspects
Annotated site plan	To integrate all aspects of the site – like a room data sheet
Overlay plans	Transparencies representing aspects, overlayed on the annotated site plan – integrates elements - clarifies
Models	Dimensional representations of sections, aspects or the overall effect of the site
Computer graphics	Combining the advantages of all of the above

Heath, T. (1989). *Introduction to design theory.* Brisbane: Queensland University of Technology *© Raylee Elliott Burns (2003)* r.elliottburns@qut.edu.au *This document was prepared using the work of Dr Tom Heath. Permission is given for this page to be copied with this footnote retained. This document may not be published in any other form without the permission of the author.*

Appendix J: VAST designing heuristic - technology

4. People have **V**alues in relation to **A**ctivities of **S**ites which must be expressed in built form (Technology)

Discovering technology	***the production of the built space system*** *… professional, technical & accountability concern of accredited designers. Educator concerns re: aesthetics, amenity, budgets/grants,*
Structure	The relationship between load and support and the provision of stability.
Skin	Protection from the elements – roofs, walls, openings
Construction	Materials; forming and assembly techniques
Climate control	Passive [insulation]; active [solar collectors]; powered [energy sources for heating and cooling]
Subdivision	Division of interior spaces – nature of internal partitions and floors
Services	Water and drainage; electricity and gas; air conditioning; lifts; fire services
Finishes	Decoration and finishing; durability, aesthetics, comfort
Representing technology	***in the processes of designing, an investigation of technologies can be researched and represented in a range of ways..***
Photographs	Of completed installations – re structure, skin, construction, subdivision, finishes – may be stimulated by visits to operating sites which express the approximate the needs of the group or individuals.
Dimensioned drawings	Of systems and relationships among systems - plan, section, elevation.
Type details	Detailed drawings of critical or specialised parts of systems

Appendix K: CLN603 Designing spaces for learning

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CLN603 Designing Spaces for Learning ~ 2011

Getting started

Dr Hilary Hughes

Unit Coordinator/Lecturer

</div>

Hello! I'm excited to be working with you in this unit *Designing Spaces for Learning*. I look forward to getting to know you online and perhaps in person.

In this unit, you have the opportunity to view familiar educational environments, both physical and virtual, in different and creative ways. We'll be sharing a special learning journey, as this is the first time that I have taught CLN603. However, I am well acquainted with the unit, having coordinated it for a number of years. I also draw on a rich collaborative relationship with Raylee Elliott Burns, who created the unit and taught it between 2005 and 2010. While I have modified some aspects of the unit, overall it retains the essence and shape that Raylee envisaged, as well as learning materials that she developed.

To introduce myself … I've been with the Education Faculty at QUT since 2005. I have extensive professional experience as a librarian/information literacy educator in various academic, public and government libraries. I'm committed to continuing learning, and value the opportunities for professional interaction offered by my membership of associations such as ALIA and SLAQ. My research interests include information literacy and informed learning (using information critically, ethically and creatively to learn); and the experiences and needs of learners in culturally diverse and online-intensive contexts. My doctoral thesis explored these aspects: *International students using online information resources to learn (QUT, 2009).*

In August- December 2010 I was Fulbright Scholar-in-Residence at University of Colorado in Denver. This was an amazingly fulfilling experience professionally and personally which you can read about on my blog www.fbdenver.blogspot.com. And on a personal level, I enjoy travel, the movies, the beach, swimming, walking, reading, music and singing.

I'm well aware that postgraduate study can be challenging - especially if you are returning to uni after a few years. So the main purpose of this message is to let you know that I'm here to provide support and encouragement. And a word of friendly advice - please be

kind to yourself, and set your study priorities within the wider context of your personal and professional life. Try to pace yourself through the semester, so that you gain best advantage of the learning experience without burning out in the process. Don't hesitate to contact me as soon as questions or concerns about the unit about arise.

Wishing you a successful Semester 1, 2011 ~ Hilary
Introducing Raylee Elliott Burns, creator and previous teacher of CLN603 ...

Raylee's interest in learning space design has emerged from library designing experiences as a practising teacher-librarian (1983-199), as a consultant with school communities for Brisbane Catholic Education (1989 – 2000) and through tertiary teaching and course co-ordination at Queensland University of Technology (2001 – 2010) in the Graduate Diploma of Education (Teacher-Librarianship), the Master of Learning Innovation and the Master of Education (Teacher-Librarianship).

In 1999-2000 Raylee participated in a QUT Scholarship in the Professions Grant research project led by Professor Kerry Mallan: *Performing hybridity: impacts of new technologies on the roles of teacher-librarians*. This project provided the early foundation for Raylee's work in the QUT Faculty of Education post-graduate program leading to the designing and development of the unit of study CLN603 *Designing Spaces for Learning*.

Raylee explains: "The spirit of *Designing Spaces for Learning* is the conceptual and practical synergy among learners, learning and pedagogies and the spaces and places of learning in schools. This unit of study is a *place* for educators to question and critique, to research across the field and to develop conceptual and practical capacities to *influence creatively* the designing and design of school learning spaces". Raylee's commitment to this area of interest continues through consultancy with schools and the finalising of her doctoral research project *Voices of experience' designing the school library: spaces and places for learning.*

Overview of CLN603 ...

Learning and assessment are closely aligned in this unit. Learning activities are designed to be intellectually challenging, practical and relevant to the real-world. The understandings and projects that you develop will be applicable to educational contexts beyond this unit.

CLN603 has four Modules which you can access from the *Learning Resources* page of the CLN603 Blackboard site.

Orientation Module

Introduction to the unit

Module 1: Learners Contexts & Discourses

Begins your exploration of the environments in which designing for learning occurs, the changing identities of learners who the focus of the designing process, and our roles as educators and designers.

Module 2: Design and Designing

Introduces you to key designing conceptions and practical applications.

Module 3: Space-Time and Place

Encourages you to consider the possibilities and implications of changing environments, both physical and virtual, for designing spaces for learning.

Study plan

For a schedule of key learning and assessment activities, please see the *CLN603 Study Plan* on the *Assessment* page of the CLN603 Blackboard site. It includes key dates for workshops, online tutorials and assignment submission.

Recommended study commitment

As a rough guide, for a Masters 12-credit point subject, plan about 10 hours of study per week for CLN603.

Learning resources

All essential unit information and learning materials are available on the CLN603 Blackboard site (via the QUT home page). To access resources and participate fully in online learning activities you will need:

- Reliable broadband Internet access
- The capacity to receive and send email
- Web browser, eg: Mozilla Firefox or Safari
  (Please note: Internet Explorer does not work well with some Blackboard applications, including Elluminate)
- a PC headset with microphone (available from computer retailers; a cheap one is fine)

There is no set text for this unit, but the Modules include a number of required readings, commentaries and presentations. You will find links in the Modules to resources on the

Web and in the CMD (QUT's Course Materials Database). I would also encourage you to read and research beyond the required materials to support your learning. QUT Library provides access to a wealth of information in the form of books, online reference sources, electronic journals (periodicals and newspapers) and specialist subject databases, via the following links:

- QUT Library Catalogue http://www.library.qut.edu.au/find/books.jsp
- Databases http://www.library.qut.edu.au/find/databases/

Assessment

There are two graded assignments: for details, please see the *Assessment* page of the CLN603 Blackboard site. I shall provide formative assessment (critical feedback and guidance) throughout the semester in various ways, online and in-person. I also encourage students to provide peer support and critical feedback to each other.

Workshops

CLN603 Workshops will take place 9.30 am – 12.30 pm on Saturday mornings in Weeks 1, 3 and 6 at QUT Kelvin Grove Campus Room B403.
Workshops are intended primarily for <u>internal</u> students – but all CLN603 students are welcome to attend.

Site visits

Site visits are optional but highly recommended. One of the Saturday workshops will include a visit to the newly refurbished QUT Library. I shall also organise an additional visit to a Brisbane school around Weeks 8-10 (to be advised).

Online tutorials via Elluminate

I will be hosting online tutorials most weeks, using Elluminate teleconferencing software. Please see the *Study Plan* for dates and times. Participation in the online tutorials is optional but highly encouraged for internal and external students. The Week 1 online tutorial will focus on orientation to the unit and establishing a sense of community among students. From Week 2 onwards, some online tutorials will have a theme (advised in advance), while others will provide the opportunity for more general discussion. There will always be time for questions and answers relating to the unit.

For information about accessing Elluminate online tutorials and recordings, see the Elluminate guide in the Orientation Module (on the CLN603 Blackboard site).

Evaluation and feedback

Your critical feedback is always welcome and I will take it into account for ongoing development of the unit. Please complete the LEX evaluation of this unit when it is conducted towards the end of the semester. You can also comment at any time via the Blackboard site – or just send me an email.

APPENDIX L: Data analysis notation sample

Educators: Designing processes, practices & participants

Foundations Philosophy and vision Role focus <u>Vision & Leadership</u> **Analysing personal capacities within the designing process** **Relating / substantiating the expression of a vision as a foundation for designing the library** **Advocating ongoing visioning and planning** **Inferring personal confidence in the capacity to articulate a vision** **Expressing concern about personal capacities to inspire others with the vision** <u>Learners-pedagogy-space links in designing</u> **Substantiating pedagogical practices as a foundation for designing decisions** **Proposing the metaphor of a street as a designing principle for school libraries** BC → So Invivo STM. →	The library needed to be <u>designed with vision</u>, and I've been able to <u>articulate a vision</u> but it does leave you <u>worried and frightened</u> about who will come with you on the vision. 3.5 *The library operates best when they <u>embrace the client</u> and for me that's been teenagers, so recognising that they require <u>understanding and flexibility and compassion</u> in some instances. 5.1 INFLUENCES The educational plan is not a once for all thing. The architects or designers, <u>have a lot to answer for</u> in that their vision of planning quite often ends when the project is viewed to be completed. 3.17 We <u>articulate</u> that we're attending to individual needs and learning styles. <u>I'm still observing that the vast majority</u> of resource based learning requires that the thirty students are all doing the same thing at the same time. We made a <u>decision not to create library spaces that provided that sort of access</u> 4.1 <u>Some schools are now designing using the metaphor of a street</u> rather than the <u>metaphor of a book</u> 4.2 you've got to align with the sort of, objectives and mission statement of your immediate supervisor and you've got to find out what s/he's aligned with 30.2 All sort of things conspired, we needed the technology but that was one example where our needs and the needs of the mission statement of the school and everything came together 30.3 if you can align aspects of the school vision, it gives you a focus too and then by default because you've linked the vision, it gives them (administrators) the focus and they know that everybody then is working towards that. 30.4 It's about flexibility and flexibility is about recognising what we're doing in <u>the learning</u> we are establishing here and <u>the spaces</u> have to meet that. We constantly have <u>on our radar</u> that it's an ever changing world for these kids and we don't want to set up anything here that even five years down the track we're stuck with. So yeah, it's always, you know whatever we do is trying to be as <u>responsive</u> as we can to the emerging needs, the curriculum, the community. 13.4 The <u>planning starts with people in mind</u> and that's what we kept coming back to, was how we <u>visualised the learner</u> and the sorts of things that they would	Vision Leadership Vision in practice Vision — mismatch? – discourse of construct? – assumptions: communication Vision – articulate but ? practice spaces to achieve METAPHOR – Vision Leadership SCENARIO BBC SO-PRACTICES. Customary practice 'alignment'. Invivo 'on our radar'! – research? – prof awareness Vision → planning with learners in mind Learners

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Semi- Structured Interview Transcripts 1-101

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Transcript 1-5 ATL [Educators: Teacher-Librarians]

These transcripts are verbatim statements drawn from the original audio-transcribed verbatim transcripts and clustered using the key study foci:

- School libraries
- Learners and learning
- Designing processes
- Designing influences
- Designing outcomes (an additional cluster which emerged in the participant data)

The statements are preserved within the individual or group semi-structured interviews, numbered and identified by the speaker. All participant statements and quotations analysed or referred to in the analysis chapters are traceable to these transcripts.

ATL Transcript 1
School libraries

1. A space for learning. An enriched environment of function, light and space. You need to look at how that space for learning is resourced. ATL1
2. The library is that space in a school that everyone can come to. ATL1
3. They get in the library the access they don't get anywhere else ATL1
4. For me, learning involves information and information is the currency of libraries. ATL1
5. The facility, the partner, a partner in the teaching and learning. ATL1
6. I struggle a lot with information services because I think we really need to leap over that and I'm not quite sure what the terminology should be but, so get rid of the word services, because people just view you as a lending service and not much more than that. ATL1
7. I think it's got to be consistently able to be growing and changing and adapting. ATL1
8. The idea of the library as place starts to get more shady too because the learning can be taking place anywhere and not restricted to a particular site as in the library so again the delivery needs to be flexible, anywhere it needs to happen. ATL1
9. [influences] the library operates best when they embrace the client and for me that's been teenagers, so recognising that they require understanding and flexibility and compassion in some instances. ATL1

ATL Transcript 2
Learners, learning (libraries)

1. A life long learner and how that links back to a place called a library. ATL2
2. The two words that keep coming into my mind are readers and thinkers, and problem solvers I think as well. ATL2

3. If you want to use a metaphor for the twenty first century, they're knowledge workers. ATL2
4. If they [students] are attempting to solve an information problem they're in an environment where they can get rapid feedback, not just from their teacher but from whoever might be in the library ATL2
5. That timely intervention can happen when there are people there to support so learners can meet the need at the moment. ATL2
6. Refocus and reflect and develop and move on ATL2
7. Snowboarding, where okay you understand some of the concepts of what you're meant to be learning about and it's not until you start to read that your concept grows and builds. ATL2
8. The sorts of pedagogies, the rich tasks that they're doing demand such a wide range of information gathering and delivery ATL2
9. They're information seekers and it depends on how much time and effort and opportunities they're provided in a particular organisation as to how you might play a role in shaping that experience of information seeking and push it through to learning. ATL2
10. Trying to get people to understand the immersion that's required and giving students a realistic time frame to do that. ATL2
11. My plan was for the principal, the bursar, all these people who make fundamental decisions about how the school will operate, to take responsibility for one tutorial group. Then that way everyone's an information problem solver. Everyone's an information seeker. It meant that they had to understand the OPAC [digital catalogue], know about the databases, teach the students Google Advanced, and be able to tell them why we would probably only use Google Advanced if we're searching a public web, the hidden web. ATL2
12. Being able to work with small groups of students - really bringing the skills in - working in small groups and individuals to help them to problem solve - working with them in small groups it starts to really gel with them in terms of their problem - small group, individual, just on a tutorial basis. ATL2
13. We made an active learning strategy from the brain conference which is where I'm going to be putting my energies. You know maybe not library conferences, I'm going to start going to brain conferences. ATL2
14. Another term that's thrown around a lot is learning styles. But I don't think that people really understand or cater to properly. You know, I think it's used a lot, it justifies a lot of things but I don't really believe that it's actually understood. ATL2

ATL Transcript 3
Designing processes

1. It's a context challenging, exhausting experience ATL 3
2. It's very easy to pay attention to the macro. You have to maintain momentum for the micro. ATL 3
3. There can be barriers so you start to think of yourself as a whining nag after a while, because there is a hierarchy that exists so you need to have a lot of stamina. ATL 3

4. The planning starts with people in mind and that's what we kept coming back to, was how we visualised the learner and the sorts of things that they would be wanting to do, not necessarily required to do. ATL 3
5. The library needed to be designed with vision, and I've been able to articulate a vision but it does leave you worried and frightened about who will come with you on the vision. ATL 3
6. Trying to be flexible, to be able to shift and accommodate needs as they arise and that often is going to put somebody else out, so some people are negotiating as it happens and to fine tune that flexibility. The negotiation is a huge thing. Its critical everything relies on it ATL 3
7. I think the experience that I had was very fortunate because the architect made himself available and we had many, many meetings, particularly within the context of the bottom line, the economic bottom line. ATL 3
8. In addition to meeting with the architect, there were lots of preliminary designs that were put on display and made available for students and teachers to look at and make comment on and that, I think was, they probably didn't make the connection or see the relevance in those early stages. ATL 3
9. But they (teachers) (students?) were involved in that philosophical and sociological and pedagogical discussion that underpinned those designs. ATL 3
10. There were a lot of initial committees and people on the committees were, and actually this was the architect's idea, the committees were asked to make a presentation to the staff of what their educational philosophy was in terms of the new building and from those presentations a Building Reference Committee was selected. ATL 3
11. We had all those planning and consultation moments and there was a lot of dialogue and the architect listened and responded and he came back with preliminary drawings. Once we did the preliminary designs and they were shared and reviewed and modified and then that's it, there were no more changes because plans have to be redrawn. ATL 3
12. The infrastructure, the cabling or the wireless technology I think you need a very forward thinking, very pedagogical IT person working that planning structure as well and over the period of time that we were consulting the IT level was modified. ATL 3
13. Maybe the architect does need to provide a model. That didn't happen in our case because there probably wasn't a budget for it or even a three dimensional graphical - computer modelling, to a certain extent we had that. ATL 3
14. Not enough people made their way to it [preliminary drawings display] - the sad thing is there were key moments right throughout the planning process where people who are now being challenged had opportunity to have input and they didn't take it up. ATL 3
15. The other frustrating thing about working in the school, you know staff meeting time which could've been devoted to a whole lot of exciting discoveries was never made available. ATL 3
16. [outcomes] The next stage of the project is going to be making that work, putting that into practice and that's the challenge. ATL 3
17. The educational plan is not a once for all thing. The architects or designers, have a lot to answer for in that their vision of planning quite often ends when the project is viewed to be completed. ATL 3
18. 7 weeks for a post occupancy review and bursars have already completed the budgets for the following year and not even contemplated the need to review what's going on in a brand new part of the school or consider needs in the next budget ATL 3

ATL Transcript 4
Designing outcomes and decisions

1. We articulate that we're attending to individual needs and learning styles, well I'm still observing that the vast majority of resource based learning requires that the thirty students are all doing the same thing at the same time or whatever the formula is. We made a decision not to create library spaces that provided that sort of access ATL 4

2. Some schools are now designing using the metaphor of a street rather than the metaphor of a book. ATL 4

3. [influences?] it is a really scary position to be in because even without being able to spend a bean I'm trying to make the spaces more flexible in their usage to accommodate different things and then trying to always have in the back of my mind refurbishing and planning for expansion ATL 4

4. So now we have a building that's functioning and all of a sudden people are saying, oh my god, how do you get into this building? You know, the way finding that the articles talk about and connecting new buildings to old buildings and keeping the aesthetic is a challenge, and there are now dilemmas being experienced by the community because of way finding ATL 4

5. It may take a few minutes but you need to just get your head around it and make it work. You know, it works, it looks good, it does link in appropriately on many different levels

6. The next stage of the project is going to be making that work, putting that into practice and that's the challenge. ATL 4

7. I think we've achieved many things with the facility, the library that we've got now. ATL 4

8. If I had a chance to do it over again there are some things that I would change. I think there's some oversights from the management people that were involved and it was a struggle to pick those out in terms of project nature. ATL 4

9. I read in a specifications document that whatever the cost of the building there should be a 10% equivalent of that for fitting out, you know in our case that actually should've been $700,000 but we had about 80. So you know that part of providing a facility was a major challenge. ATL 4

10. I think in budgetary terms that's something that they don't, from a bursar's point of view, from a business manager's point of view, it's almost secondary. It's not really considered up front, with the initial planning. It's key, it's absolutely key because you know we haven't got the furniture that I would've preferred. It's a compromise and so it's okay. ATL 4

11. School supervision is an issue that others at the school see as essential and if you're looking at a building like ours that has load bearing walls, blocking any kind of vision from one area to another then it's an interesting sort of problem solving exercise. ATL 4

12. I would prefer there to be a couple of smaller stations for staff, interspersed actually around the areas so that within the limited supervision it's a less an imposed, I'm watching you type of thing. ATL 4

13. If I think about my colour and light. One of the things we asked for was light and we've got that in abundance and whilst it has it's own set of problems in terms of the spaces where the students are working it's good, it's wonderful. So there is a sense of, a sense that it's uplifting almost, when you walk in. You're uplifted and that's to do with the quality of the light and the dimensions of the internal space itself; and we know that quality of light and quality of air are essential for learning. ATL 4

14. That little section of the counter is self explanatory ATL 4

15. [Some] things have not been maximised in any way yet. We've got a, we call it a café, like a kitchen out there and the idea behind that was to introduce spaces that were familiar to students. Spaces that they used to having, spaces for conversation and put them into the library, especially with extended hours. ATL 4

16. [influences – research] There are spaces outside the library for conversation and gathering as well and there are also outside spaces so some of the rationale for that was because we have a [river] view and also that movement is one of the essential things for oxygenating the bloodstream and making the brain you know, ready for learning. ATL 4

17. The acoustics are great and it is noisy but it's not noisy where you couldn't function, there's a hum in the place. ATL 4

ATL Transcript 5
Designing influences

1. The library operates best when they embrace the client and for me that's been teenagers, so recognising that they require understanding and flexibility and compassion in some instances. ATL 5

2. Being immersed in literature, educational literature about information literacy. You know, you use that phrase and teachers just go blah, switch off. ATL 5

3. Knowledge management is another area that I did a lot of work in and realising that none of these things are achievable without, they underpin lifelong learning and lifelong learning as a concept is something that schools seriously need to understand, because it is embedded in the curriculum documents and general learning statements that come out [system published]. ATL 5

4. So the thing that influenced me was realising the importance of lifelong learning and how that might translate in a school environment and the work, and having that team to create a facility that lends itself to lifelong learning, how that will unfold in terms of curriculum. ATL 5

5. The other things that I think influenced my experience was certainly going out into other libraries, a number of study visits to access a range of different libraries, so that was university, public, corporate, special, school , about 70 different libraries over a period of time ATL 5

6. From the public library experience, and the Brisbane public libraries in particular, listening to the research that they have done in terms of retail and picking up on what works in retail and trying to translate that. ATL 5

7. There are spaces outside the library for conversation and gathering as well and there are also outside spaces so some of the rationale for that was because we have a view and also that movement is one of the essential things for oxygenating the bloodstream and making the brain you know, ready for learning. ATL 5

8. Some research from the PEW Institute about youth and the internet and how they're leading the way in terms of creating a mobile and connected nation - mobile phones and, and ipods and things. They've got to start looking at using those sorts of things that kids are hiding under the desks, to use, the motivation is in those sorts of technologies as an equity issue, because you know, a school like ours where there is such a discrepancy in

access to technology and the equity point is a particular one that the library can go some way to addressing. ATL 5

9. Equity of access for teachers too. ATL 5

10. How frustrating schools are as knowledge organisations because the infrastructure is not there. ATL 5

11. Michael Hargreaves, does that ring a bell? The quote that he had quite a few years ago now, probably a decade about where he said we only value what we can measure, not what we can learn. I think middle schools are starting to turn that around and some libraries already are ATL 5

12. I think that change and innovation is seen as a threat to the way other people [non-innovators] are working ATL 5

13. They talk about the half life of information and it keeps shrinking, so everybody's got to be an information problem solver, and it's that I guess, generic set of skills that require increasing specialist knowledge. ATL 5

14. Ours is going to be a pedagogical paradigm shift in terms of changing the way teachers particularly approach and think about it but, I think it is a really important area. ATL 5

15. The digital space is something that really needs to be explored and exploited in a lot of schools far more ATL 5

16. Listening to, getting back to you know, where we got our ideas from, I used to listen into the Radio National program By Design where they talked specifically about buildings. ATL 5

17. It is a really scary position to be in because even without being able to spend a bean I'm trying to make the spaces more flexible in their usage to accommodate different things and then trying to always have in the back of my mind refurbishing and planning for expansion ATL 5

18. We've got to look at a couple of years down the track so it's an interim process but the thought of planning for that, I just realise how much more research and investigating and seeing other ideas and I think because the money is going to be very tight, it's not going to be a situation where several million will be provided to it. I'm sure it won't but we're still going to have to try and make those spaces work in some form for a whole new need as well. As well as trying to make it flexible ATL 5

19. It's [refurbished library proposal] been in the mix for ten years which doesn't sound all that long but in terms of the way pedagogy has shifted and changed it's a huge change. The needs really are vast. ATL 5

20. The only advantage we've got is that it's [the current library] reasonably sized and so we've got some space to do something with. It's a dog's breakfast of a design so in terms of trying to work out how to do that I really can't, and I know that I'm going to need a lot of discussion and assistance and more research and investigation. ATL 5

Transcripts 26-30 BTL [Educators: Teacher-Librarians]

These transcripts are verbatim statements drawn from the original audio-transcribed verbatim transcripts and clustered using the key study foci:

- School libraries
- Learners and learning

- Designing processes
- Designing influences
- Designing outcomes (an additional cluster which emerged in the participant data)

The statements are preserved within the individual or group semi-structured interviews, numbered and identified by the speaker. All participant statements and quotations analysed or referred to in the analysis chapters are traceable to these transcripts.

BTL Transcript 26
School libraries

1. I think it's really part of the philosophy of just total learner development, BTL 26
2. When our centre was being designed it was actually designed with the development of learners in mind, with extra curriculum and with a community overlaid – a community of learners. BTL 26
3. *It's a cultural hub. A lot of functions are educational and school community* BTL 26
4. *you are going to tertiary libraries this will culturalise you to the possibilities and expectations in those libraries and what they will expect of you as learners*
5. We have space for display, on one of the big curve levels as part of the education parameters and there's a theatre attached too, BTL 26
6. The library is a practical sort of face, a physical environment in which learners can develop.
7. I'm motivated by the fact that that's where the literature collection is, so therefore the learning that takes place revolves around that. BTL 26

BTL Transcript 27
Learners, learning (libraries)

1. I guess pedagogy changes. In secondary and junior secondary seems to be going more towards independent learning and group learning. We had a lot of that with New Basics with groups, lots of group tasks and activities so there was a much greater demand for students to come in small groups to the library, often without teachers. BTL 27
2. So being able to have the spaces to accommodate them to use the technology resources as well as book resources can be a bit of a challenge in sort of, standard libraries where you've got sort of four large class spaces and only a little bit of flexibility. So trying to rearrange things to provide those groups for individuals and small groups often who want to use technology is, yeah BTL 27
3. always have the teacher support and I wouldn't accept the building unless I had that collaborative support with the teachers because it doesn't work otherwise. BTL 27
4. you need spaces in the design to enhance those educational opportunities and activities BTL 27
5. the learning needs seem to be coming more and more diverse and perhaps difficult to cope with in a traditional sort of, what do I say, more sort of old fashioned library, trying to compete with providing spaces for large groups, small groups, individual students, quiet work, noisy work, various group technology, individual technology. They were becoming sort of real challenges. BTL 27

BTL Transcript 28
Designing processes

Consultative conversations

1. [architect conversation] Had you said you didn't want a multi layered building, because it's on three levels, you'd have ended up in a ice cream brick box on the way to the gymnastic centre, but because you said that sounds exciting, then I was able to sort of get cracking on these different levels and layers and you know, BTL 28
2. [architect conversation] you weren't saying, how will we supervise people, as a lot of the teachers were saying. How will we supervise them, we can't see them. And he said, well we'll find ways to do that. BTL 28
3. we've always had to justify and now the, and this is where perhaps our schools are slightly different, there's a foundation and a library building fund and we had to our amazement 60 odd thousand dollars in that, so that's why I've been able to recarpet all of level two, get the new tables, get the couches, because the Tax Act says that xxxx money can be used for furnishing. BTL 28

BTL Transcript 29
Designing outcomes & decisions

1. we have space for display, on one of the big curve levels as part of the education parameters and there's a theatre attached too, so a lot of functions are educational and school community. It's a cultural hub BTL 29
2. because of the genius of the architectural design, we can have those five classes and they don't, you can hear a bit of noise but they don't impinge BTL 29
3. level two, it goes around in a big terrace, is the social noisy area and it's just a nice change on that level to accommodate seniors on the wide stairs. BTL 29
4. round tables with an ellipse side which can all be swivelled together and they fit the curve better with the building and we're getting eight couches and mulberry red kidney couches with no arms and firm backs and they sit on that and they can play chess or they talk or, and they're going to be placed down the curve and around BTL 29
5. our push in next year's budget has been for a trolley and have it set up and have wireless connection so that it can come out but not be there all the time. just purchase the trolley xxxx it's not much. BTL 29
6. it is a supervision problem, we have a real problem at school with boys playing computer games and bringing up pornography and you'd be amazed how avid they are at doing that. BTL 29
7. We've changed the layout so that the teachers supervising with a teacher coming in or teachers passing with a study group, they [the students] can be seen and with all this matter of student care I think you've just got to do it. BTL 29
8. I'd create a media tuition room with him my AV guy who is fantastic with media and is a Channel 7, you know, the techno guru who did the olympics and everything, he just can do everything, and he's so accommodating and he's so clever and creative. as a media centre, it could be glassed in. BTL 29

9. I'd have more of it [casual furniture] perhaps, more comfy couches. Boys love to loll BTL 29
10. It's colourful, calming environment in that space. BTL 29

BTL Transcript 30
Designing influences

1. and I'm not being totally critical but, there has been a history of our administrators needing to catch up with current ideas and practices - whether it's educational philosophy or design of buildings or activities or team teaching, you know, I've always had to bring the external evidence and I think it was a little bit of a male thing too you know, you've got to prove often with figures and statistics, and it's no good just going in and making suggestions. BTL 30
2. you've got to align with the sort of, objectives and mission statement of your immediate supervisor and you've got to find out what he's aligned himself with BTL 30
3. All sort of things conspired, we needed the technology but that was one example where our needs and the needs of the mission statement of the school and everything came together BTL 30
4. if you can align aspects of the school vision, it gives you a focus too and then by default because you've presented, it gives them the focus and they know that everybody then is working towards that. BTL 30

Transcripts 31-35 DA1 [Designer/Architect]
These transcripts are verbatim statements drawn from the original audio-transcribed verbatim transcripts and clustered using the key study foci:

- School libraries
- Learners and learning
- Designing processes
- Designing influences
- Designing outcomes (an additional cluster which emerged in the participant data)

The statements are preserved within the individual or group semi-structured interviews, numbered and identified by the speaker. All participant statements and quotations analysed or referred to in the analysis chapters are traceable to these transcripts.

DA1 Transcript 31
School libraries

1. It's wonderful to see that school libraries have reinvented themselves DA1 31
2. Librarians are reinventing themselves as information managers. DA1 31
3. I mean they've really come to the fore, there's no doubt in my mind that libraries and librarians who were once seen as peripheral, sort of like almost old fashioned places and people have really leap frogged over everybody to be information managers and repositories of whole lots of information and that's been terrific to see. DA1 31
4. To me, the library in a school serves a number of purposes. It's a place that needs to be

very central, it's got to be in the heart of the school, it's got to be a node point. It's got to be a place where it is rich in information resources. DA1 31

5. Simply being able to get information, now some of that will be still in hard copies. Fiction I think is still suited to hard copy, so you can still sit up in bed and read a book. I think books in that regard will still be, will still be valid. Non fiction type stuff well, there'll be that in hard copy but also in libraries there needs to be lots of ICT terminals, even laptops you can borrow off the desks and go and sit in a beanbag and work on a laptop and be hooked up wirelessly. Because so much of information comes through the internet. So that's libraries as a source of information DA1 31

6. Libraries as a place of communication are also viable in that you know, you should be able to work in teams in libraries. You should be able to talk in certain places in libraries and you should be able to communicate with a lot of other people from the library to other places, like other kids in other libraries in other schools or, other people within your own school, your teacher, your parents, your mates, either through the library internet, email system or you know, probably coming and will come more as just SMSing, with your mobile phone. So I think libraries also as spaces where you can communicate. DA1 31

7. Then I think libraries are incredibly important as unstructured social places where it's a place usually, you find them carpeted and you find easy chairs, beanbags, you find a less structured environment. (Libraries) take on the role of social places, places where you can escape and you know kids will, well we all, not just kids, will go to places where they feel good, where they like it. [sensory]. It can be a place where kids, especially if you attach some food provision to it, it can be a place kids want to go you know, even after hours and on weekends. DA1 31

8. I really loved the library, you know and certainly with the emphasis on literacy, reading literacy, then you know to me, the library is a really, one of those spaces where you really want to encourage kids to frequent, and it's not just, well yeah, it's not just during school hours or during lunch and after school, DA1 31

9. I think this is a much broader issue, schools ought to be reconstituted as a much wider environments in the community, but I think school libraries should be open much longer hours and be used by and financed by a broader section of the community, and in that way kids can drop in and out and it can be more than just a school facility. DA1 31

DA1 Transcript 32
Learners, learning (libraries)

1. I don't think anything's changed with the learners since the stone age. I mean people, people have been people with brains and intelligence, innate intelligence forever' DA1 32

2. I think what's changed is that we understand more of how people learn and we're catering more now, in this environment for trying to individualise learning for each student and that's still hard. Having recognised that every kid is different, it's still a challenge to do that in a system of mass education DA1 32

3. I think learners too, generally are more aware of the importance of learning in the social times we're in, and economic times. I think they're more aware of how they learn and the alternatives for learning, and where they feel more comfortable learning as opposed to not comfortable learning. DA1 32
    [social-emotional]

4. Schools as they're set up you're dealing with a large number of kids who are stratified according to age groups and in secondary schools then stratified into subject silos. So to a very large extent when you're working in a system of say Catholic education or state government education, even private schools, the way the curriculum has been driven by

the assessment processes, ie Year 12 assessments, then that drives how and what is being taught, and mainly how, what is being taught. [connection between assessment-driven curriculum and pedagogical practices] DA1 32

5. So you might have, a formal lecture theatre, if you want to impart knowledge to two hundred people at one point in time the most efficient way to do it is a lecture theatre, that's knowledge as in information. you may have kids who prefer to sit in a bean bag in a very informal space, sucking on a bottle of Coke or something, reading a book or maybe watching a DVD. So all those sorts of spaces have to be catered for, kids who would like to work in groups because a lot of kids like group work as opposed to working on their own, you know, [relating learning preferences and learning space options] DA1 32

6. I used to like studying in the university library, simply as opposed to home. I never studied at home for the simple reason that I just liked to feel that I was going through the pain with a lot of people together, you know. It was that, this come in, what I'm doing here and so I think, yeah I suppose, it's certainly more informal social spaces in schools. DA1 32

DA1 Transcript 33
Designing processes

1. There are fairly defined stages in the design process, which you probably know, but you can start from a master plan of the whole school site. You then, and then you talk about A, either the whole school or you talk about a portion of the school and you go into what they call a schematic design where you're, it's like coming down a funnel you know. DA1 33 [invivo]

2. You get certain input, you listen to certainly the people who are interested, the stakeholders and from that you start putting down your first sketches. DA1 32

3. Now at the end of the schematic design you come back to that group and you say, well for a start you want sign off in order to proceed because, and certainly you want to know if you're barking up the wrong tree because there's no point in keeping going. DA1 32

4. So, you come back to the group and getting the group input is very, I mean it's just, I don't think you, well you can't design in a vacuum, you know. A designer just can't go and design something without having a client. I mean it can be done but it's sort of like, meaningless. You've got to have a purpose and you've got to have the client's input at the start and through the process, so at the end of the schematic design, back you go. You have some input from the clients, yes, no, maybe, you're on the right track, da da da da and then you go down and design the xxxx and there you're looking for more input all the time. DA1 32

5. You know it might be to do with positioning of walls. It might be to do with relationships between spaces and still a bit of the macro area. You might start by dimensioning up areas and again, you can sign off then and then you go into what's a large portion of time, the documentation where you're basically translating those design drawings into drawings that builders can read and use for pricing. DA1 32

6. ** Like you know, getting from a tune in your head to writing a bit of music that everyone can play on the piano.** DA1 32

7. So you create these very detailed drawings where you're calling up all sorts of things like floor conditions, paint colours, a lot of dimensioning, the way things go together. Joins and so on and materials and probably at that stage there is design input from the client but probably not as much as there was in the early stages and then when you go to the next stage of tendering and the thing is actually being built then the client probably doesn't have very much input at all because the train's on the rails and things are moving and it's a bit late to move stuff around now, you know. It's like a bit impossible to say make this change now, so the early stages are the very important stages. DA1 32

8. Let's look at school design and trying to make this place to be a place where you really like to come and you feel good about being there, and even you contribute to the design yourself.

   So, you know, as designers we don't have to design right down to the last table and chair. We could maybe design to the columns and the floors and the ceilings and say to kids well you know, each year, this is going to be your space, put something of yourself into it in the wall hangings and the painting, so it's yours. You know, you feel some ownership to it. I think there's a lot of scope to do that in schools these days where it's not done [noting the absence of participation in designing] DA1 32

9. So as a designer I think yes you've got to look at the purpose of schools. They're there to educate but they're also there for kids to socialise and they're there for kids to learn skills that they need to take with them into the world of work, and all of those sort of places and spaces are going to be different. DA1 32 [diversity]

10. I would like to think that if we're talking about a new school or a major refurbishment to an existing school, I would like to think that we would be talking to well, the teachers certainly. The principal, the school council, because they're part of the school community. School council maybe because it's made up mostly of local parents, there might be other parent groups. There might be, depending on where the school is, there might be a local community organisation which would have an interest and use some of the school facilities. They could have an input.

11. I would like to see local government involved in school design. Much more community design, input into design, which they do in America. I mean they would spend like eighteen months to two years of intensive community involvement before they, the architect puts anything to paper, DA1 32

12. *Whereas we tend to run. You know, the minister makes an announcement, and you've got to get on the train and go through the stages and, and a lot of it is set down in terms of space schedules and you know, so many kids, that means so many dunnies and so many this, that and the others* DA1 32

13. but I think, I think wide consultation is important. People have got to be able to say they had the opportunity to have an input into these resources. Now a lot of them or some of them, won't take up that opportunity but if, I don't think you can afford to have state colleges say at the end, or the day that school opens, oh yeah but they never asked me, because those sorts of people will moan and groan forever. You know, they'll always say they never asked me and that's why it doesn't work, so you've got to be able to give people the opportunity of having the involvement, but at the same time, you know there is a job to be done and usually a deadline to get it done, so you've got to very carefully manage that consultation. DA1 32

14. a good research project for someone, you know, what are the places in life that you really liked going to? What are the, not necessarily for any length of time, but what are your favourite places and why do you like them? DA1 32

DA1 Transcript 34
Designing outcomes and decisions

1. If you can make libraries and in fact not just libraries but schools, the whole school precincts as nice places to go then that's important, and particularly in this day and age of life long learning DA1 34

2. To reinforce what a lot of people talk about as schools being a community of learners, 'we can design for that', to strengthen that feeling of community and the diversity of spaces

DA1 34

3. If kids' experience of school and education is one of going to an institution which is, could be one of the worst places they go, particularly the toilet and the eating, then their memories of education are going to be pretty coloured, and that doesn't augur well for them wanting to go back for lifelong learning. DA1 34
4. If we could up the standard of schooling in the broader sense, all the environments of what it's like to be at school, what it feels like. DA1 34
5. Some private schools do it, you know, and they sort of set the bar with their landscape, with their buildings. You know kids are going to look back on that and say yeah, going to school was good because it was really, there were some really good places and spaces there DA1 34
6. I think a lot of the places we design for students are far too austere. They're far too institutional, they're far too segregated, almost prison like in their functionality and appearance, DA1 34
7. Flexible and adaptable are words that have been bandied around but I think more to the point is spaces that are, that give various scenarios for learning, various, different, different places where you can learn DA1 34

DA1 Transcript 35
Designing influences

1. So, how do we cope with assessment driven approaches within a system in terms of building. We still try and push the spaces, you know DA1 35
2. In Victoria and I think in Queensland but certainly not in New South Wales, architects have had quite a good input into school design. DA1 35
3. Down here from the 1950s to the 1970s where there was very much standardised design, you know, you can still go around and see schools which are just cookie cutters of other schools. And the reason was that we had this baby boom after the war and we had to get out quantity rather than quality and so away they went with this industrial model schooling and these buildings weren't meant to last more than 25 years but they have and only now there's a reasonable amount of demolition going on DA1 35 [Change? Evolving]
4. So until recently there was no government architect and there is no public works office who do all the designing of public facilities. It's all been outsourced to private architects, which is fantastic and schools the same. So we have down here, there's the school council contract system where every school is designed by private architects. DA1 35
5. Although I said earlier on down this tape that there are systems and you know date schedules and prescriptive things we have to do, you can still do those with some flexibility and indeed with greater flexibility as time's gone on, but through the lens of different firms of architects, who all come to it with a different you know, focus and ideas and so you get great variety and diversity and you also get innovation from people who are prepared to push the bubble and they're not tempted to do just the same old again DA1 35
6. Alternatively it's do just the same old again, which is what happens in New South Wales
7. One thing on the horizon here that's been done in New South Wales of recent times, is public/private model partnership model of dealing with public infrastructure. We've got it already, our tunnel, City Link. New South Wales has got it with certain road tunnels. This model is used to build schools, letting out six or eight schools to a consortium of financiers, builders and designers DA1 35
8. To date we haven't had that in Victoria in relation to schools but I would very much suspect that it's on its way and my fear is that it, in a design sense, it would not be rejected.

9. All that I've just talked about with the stakeholders having an input into design, won't happen and these projects are, they're built, they're run by a private sector or facility managers so the principal and the teachers in the schools don't have to worry about cleaning or repairs, all that's taken care of, but the down side is that I think they're going to have little influence on the original design in the unique sense of their school. DA1 35
10. If you're talking about eight secondary schools in the precinct of Melbourne, a builder financier is going to want economies of scale, and he's going to want to be able to build eight of the same, because he can get a lower price, it makes managing it easier because we all think we know what goes on in every one, and I just can't help but see that in an educational design sense that is a backward step DA1 35

Transcripts 36-38 DA2 [Designer/Architect]

These transcripts are verbatim statements drawn from the original audio-transcribed verbatim transcripts and clustered using the key study foci:

- School libraries
- Learners and learning
- Designing processes
- Designing influences
- Designing outcomes (an additional cluster which emerged in the participant data)

 The statements are preserved within the individual or group semi-structured interviews, numbered and identified by the speaker. All participant statements and quotations analysed or referred to in the analysis chapters are traceable to these transcripts.

DA2 Transcript 36
Learners, learning (libraries)

1. The danger is, what you do is you go back to your own experience at the same stage of your life DA2 36
2. You see all too often models being developed which reflect pedagogies which give away the age of the designer. DA2 36
3. You know you do this, there's this natural tendency to think oh, now what was library like when I was at school, what was a science lab like, or what was a metal lab? DA2 36
4. So I guess the soft option and in the absence of really informed information there's a tendency to take that soft option to think about learners from the point of view of how I learnt. DA2 36
5. It's quite a challenge to try and think about how learning is and to look at and those experiences now DA2 36
6. There's two ways of doing it I guess - One is to ask the kids, and get a sense of how the kids learn and you know, you do get a sense of much more project based educational approaches as opposed to the learning by rote educational practice DA2 36
7. The other way is to explore through research and memberships of things like CEFPI help to identify the current thinking and pedagogy. DA2 36
8. When my kids first started school I remember identifying that the basics were produced in their education through a project based learning kind of approach and I was very sceptical about it, because I compared it to my own experience. I only ever learnt to put commas in the right place by doing it that way, but I've really seen, again it's being a parent as opposed to an architect, the benefits of the project based approach, and it's also helped

me to see that there are some gaps in their development, but then again I am only able to compare it with my own development. DA2 36

9. So seeing it through the eyes of a parent has been very interesting but I'm not sure that I can elaborate much more on how I see learners, other than to say in a negative sense I guess, it's not the way it used to be and it's a mistake to just rely on old models. DA2 36

10. You really need to be looking at not just current models but models for the future, so that's I guess emphasising over the life building which might be 40 or 50 years, it's not going to be what it is now, so the building has to be flexible and the materials that are used and the technologies that are used have to be very adaptable, so I guess that's the thing I learnt about, that I've discovered about learners is how you learn now isn't going to be how you learn for the life of this building. That's probably the most telling thing DA2 36

DA2 Transcript 37
Designing processes

1. Our role and range varies, across a broad spectrum based on the fact that a lot of our clients are relatively, and I don't want to sound patronising, but naïve in terms of what they're doing. DA2 37

2. Some of them, we would get from one end of the spectrum to the other. DA2 37

3. One end being a client who comes with a brief, and they've really thought through what they want, and what they've got to achieve in quantitative terms, numbers of students, area, how that area breaks up and in qualitative terms the sorts of things they want to achieve in that space, and how they want it to feel and look. So a brief that's very comprehensive in that way at one end of the spectrum. DA2 37

4. The other end of the spectrum, particularly for growing schools. They come to us and say you're the architect you should know what a library or a resource centre requires, give us one, that's the brief. DA2 37

5. So those, there's two very, very extreme views on what our role can be. DA2 37

6. That latter role is actually really interesting in that the expectation on us as a designer is one where we really have to develop, in any case you have to develop a very clear understanding of the ethos of the school, college and look at what they're wanting to deliver and how their educational philosophy is and how they want to deliver it, and then also, which is associated with the actual pragmatic deliverability, you know, how does the library fit into their curriculum? How is it going to be utilised by various subject areas? Is it going to be used by, equally across all of the curriculum? DA2 37

7. I mean often the expectation is that we understand those issues from the school's point of view, (those maters) that they sort of intrinsically understand but never articulate, and there's expectation that we do understand how they're going to use it, and, which is a bit of an unfair expectation. DA2 37

8. It's complicated by the fact that often when we get commissioned to do these projects, and it relates to libraries and often they don't get other staff on board within the organisation who can inform the process. So it's not even as if we can tap into knowledge within the school, sometimes we're told we won't need to talk to the librarian DA2 37

9. (In new schools) it's (knowledge)often that it's not even there, so you're operating in a vacuum in terms of the pragmatics of what the schools want to achieve, and often some of these schools don't really, haven't really thought through their ethos of how they actually want to operate either DA2 37

10. So, in those, it's sort of scary, but it's exciting to be involved in a school developing and

having the dialogue to tease those things out. And in a way, it's in those projects that you can engender a high degree of collaboration and ownership of the outcome, DA2 37

11. In situations where the school comes along and says, this is what we want, this is what we need, they've figured it all out. You almost just become a draftsman in the areas of joining the dots, and you've even been told where the dots are going to be. DA2 37
12. So, the ideal is somewhere halfway between those two DA2 37
13. And you can have a school who's developed a sense of knowing how they want to go about doing what they do, and they might have developed a sense of, in general terms, how much space they want there, or how the resource information centre is going to plug into their school life, but they haven't quite figured out the details of that and you get to work on that together, that is probably the ideal, somewhere between the two. DA2 37

DA2 Transcript 38
Designing influences

1. We've tried to maintain a focus on the ultimate goal of the school's development. So if that's an influence it's that the temptation is to just lock into this project without really considering the long term effects of it or where it fits into the big picture. [tensions] DA2 38
2. So I guess master planning trust is an important, it's something that often schools assume is going to work out in the long run, but it really needs to be a major influence on the design of an individual school, how it fits into the big picture. DA2 38 [relationships]
3. At least the design brief all over is an influence for us is, we, I mean buildings are important and we like to produce good quality buildings that look right but we also really emphasise across a lot of relationships and people relationships. DA2 38
4. Our relationships with our clients are important, our relationship with people within the whole procurement process is important and we try to have, to ensure that the buildings that we build actually encourage relationships as well. DA2 38
5. And I guess it's more about that than, more about relationships than about the buildings, we like to really think that relationships are, that relationships drive pretty much everything. So it's a kind of a holistic thing, we like to practise it how we relate to people. We also like generally to foster, engender good relationships. It's important to us, it reinforces the reasons for the work. DA2 38
6. I guess we try to be good stewards of our client's resources because we do work, we don't work for developers or people who might have a tendency to build buildings and flick them up DA2 38
7. We're influenced by the fact that clients have a long term interest in the ability of buildings to be robust and meet long term needs and be flexible. So that influences how we design and that's probably affects how buildings look to a degree as well. So that's the main influence for us DA2 38
8. And probably, related to that is trying not to be too dictated to by fashion, current fashion, but trying to create buildings which are dynamic spaces, relationships between spaces which are quite timeless
9. And that's about the stewardship of providing the client with something that is going to fulfil the requirement for the long term, that influences what we do. DA2 38 [Ethics]
10. Those influences are what we see as almost imperatives, actually also affect the whole process of delivering buildings. There's the tendering process and how, the whole procurement process is, I think there are different procurement processes which achieve a

better quality result than others. So, it's very interesting in terms of trying to define what you want to achieve, it's a quality and time and cost constraints influence what you're trying to achieve, and will have an affect on what kind of processes that you use to get particular outcomes DA2 38

11. I'm not one to worship, you know hero worship architects except for one and that was Gaudi

12. Exciting, very exciting buildings to look at. He was my hero in many ways, but I don't think I seek to emulate him DA2 38

13. So, it's quite a diverse range of influences. I'm not particularly a modernist in an architectural sense. I'm very pragmatic and that might be why the clients are what you have to keep in mind DA2 38

14. Frugal budgets that have to be met and are able to be met in a way that's meeting the needs through architecture because I love the, the holistic approach of being able to be involved from the beginning to the end. Seeing it through and seeing an idea and developing the whole, to see the thing happen, working to meet the needs. DA2 38

Transcripts 39-43 DA3 [Designer/architect]

These transcripts are verbatim statements drawn from the original audio-transcribed verbatim transcripts and clustered using the key study foci:

- School libraries
- Learners and learning
- Designing processes
- Designing influences
- Designing outcomes (an additional cluster which emerged in the participant data)

 The statements are preserved within the individual or group semi-structured interviews, numbered and identified by the speaker. All participant statements and quotations analysed or referred to in the analysis chapters are traceable to these transcripts.

DA3 Transcript 39
School Libraries

1. Well we've had an experience with a few – not something we do every year. DA3 39
2. We are involved in school facilities but not always libraries. . DA3 39
3. Mostly down south – Sydney . DA3 39
4. Some council libraries – one recently in [State]. This one was - Largely it was an extension to an existing library. . DA3 39
5. School libraries? DA3 39
6. As I say – not a regular part of the work. We get to see a few through CEFPI conferences and I went with [colleague] to see the new Harrison library. Yeah – pretty impressive. Some things could have been done differently there. They're keen. . DA3 39
7. Well clearly things are changing – I mean it is very different from our day – or when I was at school – the 60's and 70's for instance
8. There's a lot more going on and it's important to stay in touch with that. . DA3 39
9. The technology is a big thing – this is so changing in terms of infrastructure needs that it's a week-to-week movable feast in the IT area. Every school is different – some have significant IT budgets and others are modest. So the bones – cabling and all of that is

important to get right. DA3 39

DA3 Transcript 40
Learners, learning (libraries)

1. Well clearly things are changing – I mean it is very different from our day – or when I was at school – the 60's and 70's for instance DA3 40
2. There's a lot more going on and it's important to stay in touch with that. DA3 40
3. The technology is a big thing in learning – this is so changing in terms of infrastructure needs that it's a week-to-week movable feast in the IT area. Every school is different – some have significant IT budgets and others are modest. So the bones – cabling and all of that is important to get right. DA3 40
4. Learners and Learning? DA3 40
5. Well, we can get the teachers in for that – although sometimes we've been told not to speak with the teachers – at least initially. DA3 40
6. The library staff we often speak to during the project at different times. DA3 40
7. Sometimes there's fairly fixed ideas about libraries. And you do wonder whether the whole library thing will change. DA3 40
8. We did see that school in Melbourne – no library in a new school – Their idea was online and dispersal of materials to points of need. They seemed pretty confident about that. DA3 40

DA3 Transcript 41
Designing processes

1. Designing processes / roles DA3 41
2. Well there is a standard approach for the independents – the Block Grant Authority – a Federal matter. We don't build for the State – at least up until now – That may change – however we like to be directly involved with clients and that's not the way it works with DET apparently. DA3 41
3. I mean you can do the template thing but this is not a good model for young architects. DA3 41

DA3 Transcript 42
Designing outcomes and decisions

1. A familiar story – medium sized coastal town and growing area – facility too small. Different interest groups not easily catered for in the usual council administrative buildings. So there was an idea to extend the local library. DA3 42
2. It was important to take advantage of the environment – wooded areas nearby and the coastal feel. DA3 42

DA3 Transcript 43
Designing influences

Designing influences
1. Well there's a tendency to talk about the inspirational – Gaudi, Frank Lloyd Wright and maybe some Australians. All admirable in their own ways DA3 42
2. I tend to draw inspiration from others around me – even in the discussion with clients new ideas and ways of going about things are always possible and sometimes surprisingly inspirational DA3 42

Transcripts 44-48 EFP1 [Education Facility Planner]

These transcripts are verbatim statements drawn from the original audio-transcribed verbatim transcripts and clustered using the key study foci:

- School libraries
- Learners and learning
- Designing processes
- Designing influences
- Designing outcomes (an additional cluster which emerged in the participant data)

The statements are preserved within the individual or group semi-structured interviews, numbered and identified by the speaker. All participant statements and quotations analysed or referred to in the analysis chapters are traceable to these transcripts.

EFP1 Transcript 44
School Libraries

1. This is the biggest evolution in our schools I believe, particularly the role of a T-L, and even T-L is changing. EFP1 44
2. I see that the library, and this is a very functional view, the librarian or the teacher librarian has evolved from the keeper of the books to the knowledge manager in the school and that has I think has challenged both the people in the role and the people going to the role, and IT has facilitated this change into knowledge management because, it's almost historical, computers were first in libraries before they were in admin, because it was the classic database management tool, and that's fine. EFP1 44
3. Wireless connectivity to access stuff, and the role of a T-L is going to be challenged again and where that's challenging my [the TL] traditional role of being the only person other than the principal and deputy principal who can influence curriculum design. EFP1 44
4. the library is the second most important for expressing the culture of the school. The first most important is the entry to the school, whether it be at the front gate or the front of the admin or both, quite often they're so close together you'd think they were one. In the language of school design they talk about welcoming entry and expressions of school culture and design are absolutely top of the list to convincing parents that this is a place of confidence and that they know where they're going and I think that the library has the opportunity to drill that culture at a deeper level and specialise in aspects of that culture EFP1 44
5. This book week activity depending what they are, are a symbol of community culture, community participation in culturation of the students, of the value of reading EFP1 44
6. It's a place of engagement. The admin reception and front of the school are a place of display and statement. The library is the only other place in the school apart from the classroom where you can pull the culture together EFP1 44
7. Equity

for some families they have a three year old computer, unreliable internet access and they're getting bugs in their system at home. They come up to the school and they can do all these wonderful things, save it on a memory stick or email it home and go on with the work, yeah, equity has been settled. EFP1 44

8. I think libraries will always have a need to coordinate the storage of key resources in the school that are once only resources like the, when data projectors first came in, the one data projector EFP1 44

9. There's always going to be a need for a hands on visual text, the big book novel, that mode will always be there. I mean our technology is keeping developing so the price of printing is going to continues to fall as people shift their printing to the lowest economic base around the world and produce books. You know they're always going to be there, they're a different aesthetic feeling. You can't read of a computer screen all day long. You can't curl up with your laptop on the couch EFP1 44

10. Apart from that it almost becomes a second, well de facto gathering space for different purposes within the school and display and initiatives. Whatever new initiative is in the school can be based in the school library because it is, if you physically locate it centrally, it will be used as a central resource, but there's so much future possibilities for libraries that perhaps we ought to, those traditional where the external walls were only moved in order to form a courtyard that serves the library, EFP1 44

11. I think we'll move to libraries where the external walls can move so that they can facilitate the indoor stage area of a performing arts area. You can basically back off the end of the building if you shape it right and lead out into the open and you can integrate your indoor and outdoor facilities EFP1 44

12. this building is becoming a, within block grants a large multi purpose building. EFP1 44

13. I think whatever the role of the library is or information centre or whatever you want to call it, I think it's central to the operations of a school, whether it's in the past or the present or whatever it's future could be used, therefore the place needs to be physically accessible to all people. EFP1 44

14. You know equity across the site, so they can't just position it at one edge of the site, and that means parents as well as students and staff. EFP1 44

15. In some ways if you could build a school with the staff room in the middle and then the library came, and then the admin just outside of that and the library outside of that and then the classrooms outside of that, it means that the resources are constantly seen every single day and that's the only way most teachers access them, because they have to fall over them. EFP1 44

16. You've got to come out and continually market it and what it's useful for and maybe that's the role that the, as we become so much more resource rich in our schools, that we need to almost have a resource market place EFP1 44

17. it's a second entry, you've got another entry to your library and it's usually very important. It's the largest gathering space in the school and most primary schools EFP1 44

18. and it makes a statement and it's where parents can engage meaningfully with the school and its culture because that's where the kids are and that's where the epitome of the best learning examples should be in the school, and it's a place of greatest display in terms of what's happening in the whole community and not just in their own little window box in the classroom. EFP1 44

Transcript 45

Learners, learning & libraries

1. *Engaging in professional conversation and modelling that (research strategies and inquiry learning) with the students so that they became a second curriculum designer EFP1 45

2. the difference between a good teacher and a teacher who kids don't engage with is the level of intensity that they provide the learner EFP1 45
3. *You need the kids to have constant feedback and gratification or self actualisation on a fairly cyclical event and as they mature you can go out over a longer time frame EFP1 45
4. *You know when they get to the end of the project they think, oh in actual fact it wasn't as good as I thought it was going to be because of step B, or my original idea wasn't that good, but I enjoyed every step along the way and I learnt that life is a process and construction is a process, design is a process, projects are a process and I've learnt about process. EFP1 45
5. *If you can get the right evaluation techniques and do it. So I think you've got to create things that work on the way the kids' learning cycle operates, and adults are the same. You know, you don't want it to be drawn out over months and months and months like writing a thesis, you know. You want some gratification along the way. EFP1 45
6. *Yeah, so curriculum design has to reflect the way kids think and act and behave and that brings the excitement into it, but it takes a lot of preparation from a teacher, and acceptance that these kids have to learn cooperative behaviours to be able to move between unsupervised, or non directed supervised activities. So that the man arts teacher here, science teacher here, textile teacher here, art teacher here and these kids are moving flexibly between them, that's a lot of contracting between students and teachers and the exception should not rule the general, but unfortunately it does. EFP1 45
7. Groups of computers within an inch of the learning pods or the MYTECHS will be required for design work, research work, but you don't need a whole labs at one time, and the more and more portable it becomes the more and more space you'll have in a secondary school and you'll just need equipment with wheels on it. EFP1 45
8. You drive your learning from intuition in many ways. I don't know, I, you try to surround yourself with people who are prepared to run with something and you're prepared to let them run with something if you trust the person EFP1 45
9. *You can't, you cannot avoid the impact of information access, rapid dispersed information access. If you don't get in and try and mould that and use it to enhance your learning then it's out of control and this is the job of libraries EFP1 45

EFP1 Transcript 46
Designing processes

1. Evolving, it's dynamic and you have to create some of the work yourself in order to meet agendas. So the construction, the planning and construction of new schools has a number of phases and I'm just one of the cogs in the wheel. EFP1 46
2. My role is somewhere is somewhere in between demographics and the appointment of the principal. EFP1 46
3. So someone else purchases the land after we've done demographic studies, I then have to develop an education brief based on the community expectations or vision for a school and the demographics, and hand that detail through to consultants and builders so they can then build a school based on the relationships we set up. EFP1 46
4. We'll now prepare an education brief, we have, we're pretty close to the mantra, the motto. We're pretty close to the vision statement. The Brisbane Catholic Education has developed a generic curriculum brief based on the early years document, the middle years document and the years of secondary schooling document, and everything just says we have. It's saying we have three phases of schooling regardless of whether we have primary or secondary separately or in conjunction and that's what I was trying to get at, a commitment to what we actually are saying because everyone backs off from committing

to anything, particularly curriculum because so many people have different views. But at a broad agreement we have three phases of learning. How you manage that in the school is up to the individual person to pick up and run. EFP1 46

5. from survey data that we'd already pre sent out, and many, many people filled out the survey data and then some of those people, or other people and actually went through the data and made summary statements of what was the essence of that data, saying well this college, academically this is what we expect. This is our college, culturally this is what we hope. This college, for the students, the student care, this is what we hope. For the organisation, this is what we hope, and so they put down their aspirations for the secondary college and that will be the basis of the mission or mission statement for the college, and from that we can develop objectives, goals or KPIs or whatever the renewal plans, for principals to pick up and run. So I'm in charge of that developing process EFP1 46

6. I then work with existing staff if they're there like the primary staff. We'll run mock secondary school staff to work out what are the most important, what are the relationships required on an educational site and what priority are they in. For instance, if we were to sit down with a primary class and say to them, prep 1 and 2 where are your highest priorities? They'll say toilets, playground, learning support. Library comes after that, admin is a poor second EFP1 46

7. So, my job is to try and provide frameworks for the steering committee who are establishing the school to wrap up in a parcel and then we present that to our leadership team at xxxx to say yes, this is the great way of starting the school and we agree to support this with resourcing,

8. So we design a school in effect, off the ground and we look at all the relationships that are going to go on in this new school. The first layer of that relationship is the spirituality of the site, so it's much easier to hang your hat on something than not to hang your hat on something So we hang our hat on the spirituality, it might be the Augustinian tradition, for example. We'll use that as the mantra or the motto for the school. That'll then drive the elements of the vision statements EFP1 46

9. So, I convene these conversations and I look ahead to what is the most realistic theme. I see if that is data driven from the local community and I convince leadership that that is the right way to go, so I've got to sell all that EFP1 46

10. So I guess I'm a support person, a conduit, a facilitator, a motivator, also got to put the brakes on things. I've got to massage everything so it comes out the right way to the builders who just want to be told what to do, because while they might have their own creative ideas at the start, essentially theirs is the functional role to get the dollars and the space matched up and if they can get the design right in between that's a third priority, but their first priority is to build the right spaces for the right price. EFP1 46

11. My priority is to get the right shaped spaces for the right purpose and that's where the tensions can arise because there's, there has to be a compromise. You cannot get all your own way on both sides, the building and planning side and that's why you need to prioritise what are the most important relationships and those that aren't as important, they're the areas you have to compromise in. EFP1 46

12. So you're informing those sorts of things. So, it can be a highly influential role but the extent is the extent of your own knowledge and your research and your relationships. EFP1 46

13. Relationships with the, everyone up the process and down the process is absolutely crucial. Otherwise you don't carry credibility you just get written off particularly by the, those who are more functionally orientated, as in the builders. v

14. The consultants are usually by nature fairly creative because they are generally not engineers, they are generally architects. Although there are some engineering firms who

are more functional in their building and we are trying to engage those sorts of people in this way of thinking. EFP1 46

15. Even if it means we run a, run an audit over it according to the patents and say listen, you're eighty percent right - probably another twenty percent we need to find so why don't we put a kink in that room down there and that'll give us a cave area for the kids. You're down on cave areas around the school, you know. So those sorts of things can inform but essentially you've got to trust the architect to deliver the goods as well, you know EFP1 46

EFP1 Transcript 47
Designing outcomes and decisions

1. In secondary schools you don't just have, you have manual arts rooms, you have domestic science rooms. You have all of the traditional subject areas but if you look at some of our schools which are only ten years old, these rooms are so far apart from each other it's crazy, and yet when you look at the way students learn, students sometimes might take a double forty minute period in order to do their CAD work and then another double forty minute period to do the woodwork but, so they have to, they have, it's all project based learning particularly in the middle school EFP1 47

2. And as a total package you get a better quality and a flexible learning routine and so what Rick has done has encouraged the construction of MYTECHS, middle years technology centres, and now we're going to early years technology centres where, all these facilities, instead of being dispersed across the campus, all on the peripheral because students access those out of the core, they're actually centralised in a, it almost looks like a shopping centre where they have a market place, where kids move between these things and they have a marketplace to do their planning, and all of a sudden you have an integrated study project EFP1 47

Transcript 48
Designing influences

1. And so if you can get the proximity relationships worked out on site that actually clusters in the early years and the middle of the primary and the upper primary, it actually forms three natural clusters, so you can, if you can establish what are the prioritised relationships on the site from the teachers' perspective in terms of managing the school, you then cast a shadow down on the ground for which the builders then can facilitate. So you can imagine the learning modes and all of the interconnecting pathways literally, from what has to be closest to what and then of course the builders have to look at the topography of the site and work out how they can actually fit it on the ninety degree slope or the flat ground EFP1 48

2. When we come to the architectural aspects I don't have any official role in master planning apart from informing it. However, there's always a back and forth, what do you reckon because everyone wants to make sure everything runs smoothly. This is where I have to be very subliminal in my influences. However if you get the instructions right, if you get the relationships right, then at least you get the shadow right and the major buildings. What happens inside the classrooms in terms of internal design or what happens inside the library is still a very undefined thing and seems to run off the experience of what people have done in the past. The last project we did and how things went. [post occupancy

evaluation] post project evaluation conflated EFP1 48

3. The other part of my role besides starting a school is actually evaluating them after they've been constructed but I don't have any control in between. EFP1 48

4. So, one of the things I'm trying to do is have a language which runs from curriculum to planning, through building and eventually to post occupancy evaluation, and hence I've been working on Prakash Nair and Randall Fielding's book of Language of School Design. EFP1 48

5. So I can actually convene a conversation with the curriculum team, building division, planning division, a couple of architects and another school principal and thank goodness, everyone says this is the way we've got to go forward, and continue the dialogue but everyone sees value in the pattern of language which they're suggesting. A way of designing schools and evaluating them in order to achieve curriculum outcomes, so we're on a winner, at this point in time. EFP1 48

6. Research in practice success breeds success. A very successful project with one of our building officers who's been writing to this 'pattern language'. Done a lot of research and for a building officer he's certainly performs way out of his range, so he's been able to influence considerably. EFP1 48

7. He has out-thought most of the curriculum people because he's been able to connect learning theory with building and because he's got the building side he's got the credibility for those who approve the shape of the building. EFP1 48

8. So, the reason for taking this pattern language forward is we've got success, we've got respect for [Project Mgr's] work. He's talked about it, I saw an avenue to push my agenda and that is I have to connect education briefs, the post occupancy evaluation and I have done all the research from both ends and they had nothing in common between one and the other from what has gone before in the system. So I saw this as a way, a conduit to connect the two and if I can get the builders on board in between, we then have a cyclical event which will continuously inform and improve building practices in the system EFP1 48

9. Post occupancy evaluation – example / scenario EFP1 48

10. At an operational level of teaching and learning the functional level of whether the doors open in the right direction and whether they're the right height, that's another issue and that's a separate type of post occupancy evaluation. EFP1 48

11. I'm talking about the curriculum drive of post-occupancy evaluation, so when teachers occupy the facilities do they use them for the intent for which they were designed? EFP1 48

12. And how much education do we need to do of these teachers to make sure they understand why they are built the way they are and that should be driving, facilitating, flexible enough for them to have mulitple ways of teaching but they do eliminate some of the more traditional methods. EFP1 48

13. You can't work in that marketplace in traditional ways, separated Home Ec, woodwork, blah blah, you just can't do it. A traditional teacher will tear their hair out so there's a lot of professional learning for these people. I don't buy into these new schools unless they can do it, so I see this as a conduit to cover the process and not only drive the process in our new schools but backwardly integrate into our existing schools EFP1 48

14. so I see this as a conduit to cover the process and not only drive the process in our new schools but backwardly integrate into our existing schools. So that when you have a school, school ex that says, I want to build a storeroom so I can hold all the kids' project work, and say well hang on they're in a middle school. They are supposed to be on display, that's what middle school's about, celebrating their learnings and you want to build a storeroom to hold their half finished projects. Why can't they go back to their home class rooms and put them on display on the side benches or hang them or have an area within the woodworking area, or somewhere they can dispersely display this project work. For a

Transcripts 49-53 EFP2 [Education Facility Planner

These transcripts are verbatim statements drawn from the original audio-transcribed verbatim transcripts and clustered using the key study foci:

- School libraries
- Learners and learning
- Designing processes
- Designing influences
- Designing outcomes (an additional cluster which emerged in the participant data)

The statements are preserved within the individual or group semi-structured interviews and are numbered and identified by the speaker. All participant statements and quotations analysed or referred to in the analysis chapters are traceable to these transcripts.

EFP2 Transcript 49
Libraries

1. Well in libraries traditionally with books and libraries you really do have concentration on the audio and the visual. I mean I think the audio probably you know, people reading stories or you know, visual probably in the sixties or seventies, it seemed that with television that was always associated with the library, so there was you know, other media and it was audio, audio visual and it's only probably more recently that I've seen libraries expand to include the kinesetic learner. EFP2 49
2. Many aspects to them, which is display, be it of books or artworks and make a feature out of the display, out of the archive, be that rare books or be that sculptures or paintings. EFP2 49
3. So I do think there's a tacit learning involved in building spaces like libraries and shopping centres EFP2 49
4. I've read about three languages, natural language and mathematical language and graphic language, and you know, you've obviously got people who prefer to learn in any of those languages or all of them, and they seem to be relevant to libraries, library resource centres because you do have various media, be they books or you know electronic media materials, EFP2 49
5. Scenario/Exemplar
    I think of a project that I'm a little bit involved with at the moment, at Sunnybank Hills, there's a primary school there has done an addition to the library. It was interesting that they chose the library as the place to do the addition and it is a, basically I guess you'd have to say a junior years technology centre. It's an innovation centre they call it, to provide xxxx loops for experiments with food, science and wood, I was told. It was a great brief but it was very hard. You know, I think it heralds a watershed in that you potentially are doing art, science and technology in a hands on way in association with the library resource, so that's another style of learning hitherto I don't think it's been included much in libraries.

EFP2 Transcript 50
Learners, learning (libraries)

1. Without a doubt the learners are children in schools in fairly traditional modes, you know EFP2 50
2. I guess there is quite, possibly some connection for those learners outside of school. I don't know that that exists strongly EFP2 50
3. Like we've got to the stage here where there's a substantial proportion of learners coming on site, maybe there's a possibility of learners being community members using our facility out of hours. EFP2 50
4. I suspect that long term that may change and in particular instances it may change but in the future, which is useful because the Brisbane Catholic Education it's primarily based on the learner being present, literally. You know that may be the school site accessing by virtual something in the resource lab. EFP2 50
5. So again, the learner in my job is somebody that's in the general proximity of the building. You know, they're basically a human being actually learning. So it could be that people other than the designated students might actually learn in there too, or be in there. EFP2 50
6. You get great differences in how people learn. There's at very least those different modes of you know, learning which are probably not exclusive of each other but are in sequences. EFP2 50
7. And I also think of the communication that's involved in learning can be very different, in different kind of languages, it can be you know, I read in books on design where they talk about three languages, natural language and mathematical language and graphic language, EFP2 50
8. You've obviously got people who prefer to learn in any of those languages or all of them, and they seem to be relevant to libraries, library resource centres because you do have various media, be they books or you know electronic media materials. EFP2 50
9. I think I'm an observer of myself and how I've learned, you know, and just seeing myself in learning situations over the years I would definitely have to say that I'm a kinesthetic learner first of all, having been a tradesperson, most of my life, but you know I have done tertiary studies and you know, I know how I like to study and there were certainly great teachers that I had, you know, that I was interested in. People who really, I guess, you know, gave me a passion for learning and showed me what heights you can gain in learning. EFP2 50
10. People reading **Metzinger** in German to a kerosene lamp every night in New Guinea in a hut, you know, for all these years, probably the second brightest person I ever met, you know. The brightest person I ever met going to Japan and six months later publishing a book, How to Learn Japanese, and continuing all of his life in Japan to publish in Japanese, you know. These are great learners in my experience and they, you know, they encouraged me to know what you can do if you've got a passion about a subject and about learning about it. EFP2 50
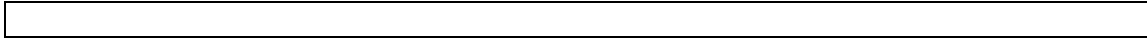
EFP2 Transcript 51

Designing processes

1. My role is to be, can be seen as either a project manager or a client representative. I prefer to see it as a client representative and the delivery of the provision is what I'm most concerned with. EFP2 51
2. We have some influence in the design team, as a, I think depends, this is where you can exercise your individual whatever, beliefs or you know, experiences in how you see that representation for the client EFP2 51
3. The client is the owner, the owner is Brisbane Catholic Education and you know, then you have various levels of views, so you have obviously, the most profound user is the student, and then there's other people with various claims on use, you know, like teachers/librarians or teachers in the case of resource centres. EFP2 51
4. And then you have other administrative levels of, and they are represented in the process, the latter stages but the initial stage of the school they are not represented because they don't exist, and that is the on the ground managers as it were, the school principal and whatever other administrative people they have. EFP2 51
5. The actual provision of what is allocated is, at least in simple terms, is predetermined by the Administrative guidelines from Canberra, which are interpreted by the Queensland Catholic Education Commission and the Block Grant Authority, into probably almost basically, only you know, square metres and dollars. EFP2 51
6. Square metres are set by Canberra and the dollars are effectively set by the BGA so that'll be a dollar rate for building a so called library resource centre. So, you know, there's just very strict formulas, EFP2 51
7. Exactly how that's configured and it goes in there is in part precedent, in part tradition, in part you know, novelty and innovation and so long as you don't move from the total square metres allotted or from the dollars EFP2 51
8. I mean that's hard to say because if projects run over they do move from the dollars, but theoretically you have to design to the dollars. Apart from that, you can almost do you know, anything you like, so my role as, I see as you know, trying to make the actual delivery through the design and construction phase occur. EFP2 51
9. [Proviso approach] well I mean, in my role in this particular job, we are constrained as I said by delivering a building, so that's what my job is about. It's about built environment. It certainly is somewhat about natural environment too, but that's not in any way constrained other than initially in the land purchase. EFP2 51
10. So the spaces that I might have the opportunity to influence might be the building and the, you know, the outdoor spaces around it. You know, so to limit myself to that aspect of the job, EFP2 51

EFP2 Transcript 52

Designing outcomes and decisions

1. Proviso approach] well I mean, in my role in this particular job, we are constrained as I said by delivering a building, so that's what my job is about. It's about built environment. It certainly is somewhat about natural environment too, but that's not in any way constrained other than initially in the land purchase. So the spaces that I might have the opportunity to influence might be the building and the, you know, the outdoor spaces around it. You know, so to limit myself to that aspect of the job, EFP2 51

EFP2 Transcript 53

Designing influences

1. We have some influence in the design team, as a, I think depends, this is where you can exercise your individual whatever, beliefs or you know, experiences in how you see that representation for the client EFP2 53
2. I would definitely say that the approach I take to being a member, or even sometimes be a leader, of a design team is all my experience in construction all my life, you know. And the bulk of it having been directly with architects, EFP2 53
3. I've been in and out of construction, mostly in, since I was seventeen and I have worked in you know, four countries, in every state of Australia and I have worked in industrial, commercial and residential settings, and in all of those experiences of construction have always, every little bit, up on the tools as a tradesperson or as a foreman and supervisor, albeit as the owner of a construction company and the owner of a millwork and joinery company, and now the owner of a design, you know industrial design firm, I have always worked in those teams of design professionals and construction professionals. EFP2 53
4. pretty much always been on the delivery end of that team, so coming to being a you know, to a different position and representing the owner, being a client's representative, it's for me, a different side to the same coin. EFP2 53
5. It's like, it's like I have been servicing owners for my whole life in construction, in design teams, in one way or another, design and delivery you know, teams. EFP2 53
6. So to be a client rep is informed entirely by those experiences. I find it easy to be a client rep because I know from all these experiences what the clients want, I think EFP2 53

Transcripts 54-57 EFP3 [Education Facility Planner]

These transcripts are verbatim statements drawn from the original audio-transcribed verbatim transcripts and clustered using the key study foci:

- School libraries
- Learners and learning
- Designing processes
- Designing influences
- Designing outcomes (an additional cluster which emerged in the participant data)

The statements are preserved within the individual or group semi-structured interviews and are numbered and identified by the speaker. All participant statements and quotations analysed or referred to in the analysis chapters are traceable to these transcripts. The original audio-transcripts are available on CD.

EFP3 Transcript 53

Libraries

> 1. I'm not the person to ask about that. You will need to talk to others about that.
> 2. [Interviewer prompt: Yes I am aware that you offer particular expertise, but I wonder if you would be prepared to talk a little about your perceptions, your understandings about libraries]
> **3.** No I can talk about the part I played in the committee and in other ways

EFP3 Transcript 54

Learners, learning, libraries

> **1.** As I said, I'm really not the best person to ask about that. We had plenty of teachers involved in the discussions**.**

EFP3 Transcript 55

Designing processes

> 1. We had a committee and some sub-groups for particular aspects.
> **2.** There was plenty of expertise for learning and teaching. Sometimes too much – some aspects of the research took a long time to bring to the committee

EFP3 Transcript 56

Designing outcomes and decisions

> 1. Some things have been added since the opening – the digital screen for example. This has improved the information for students and teachers and offers up to the minute record of areas of the library you can have access to.
> 2. You can see that use of natural light is a big feature – this was a big thing at the time - but this in itself has caused problems. We need filter blinds on some windows because there is too much light – glare, in fact, which is a problem with the computer use.
> 3. The infrastructure could also be rethought and the connections to other buildings in the school. Again the transitions are not smooth. Some spaces are wasted – like the café space, this is not used for what it is intended and the balconies have a limited use.
> 4. The IT is a mix of cabling and wireless, however that took a lot of work and we can just hope that future adjustments are possible using the approach we have taken.
> 5. One of the things to change would be the access to the library. There is no really logical or welcoming access from the ground floor to the library. It is very indirect. This is complicated by the building being for a number of purposes, so it now appears like an administration building with a library as a sort of annexe. It is not straightforward to find your way there. For the overall expenditure, this is not the best outcome.

Transcripts 11-15 GE1 [Teacher-librarian & Principal]

These transcripts are verbatim statements drawn from the original audio-transcribed verbatim transcripts and clustered using the key study foci:

- School libraries
- Learners and learning
- Designing processes
- Designing influences
- Designing outcomes (an additional cluster which emerged in the participant data)

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GE Transcript 11
School libraries

1. I'm probably biased but I think they should be central to all the learning and teaching that takes place in the school ... they should reflect the values, the missions the vision of the school community. Their prime, probably their prime role is to support student learning and I guess teacher facilitation about student learning.

2. I think it's central to the whole enterprise we've got I think it's more than, it's more than functionality. It's about for me, a statement of what you believe about learning in the community and I use the word community broadly because I think it's bigger than you know, students and staff.

3. I see what happens at this place, what you put in place, how you design it, what happens here is a good reflection of what the overriding approach to learning is in a particular place. Yeah, that's how central it is and you know..

4. I just believe that in many ways the school should be designed around it because of the fact that so much of the whole learning enterprise relates to not just what's there or who's there, or the interactions that happen with learning so it's like the marketplace of the school.

5. I like that notion of the market place. When you think of a market place, it's where a lot of transactions happen. A lot of social stuff, they change, they move, there's different people from different places and different ways of engaging in whatever they're doing. Particularly for these kids that sort of the ability for kids to move around and to do a range of things within the space. And you know I guess we, what we know about our students is you have to give a little bit of latitude for the movement and socialisation that happens.

6. The first week we opened, they didn't know what was appropriate for this large space. Like it became a, a big playing field or big playground,

7. I remember that analogy of the hub a long time ago with the wheel with the spokes going out and, and maybe I wouldn't like to see it as big as the wheel with the hub and the spokes going out but certainly all that kind of activity, it being very much part of the broader community, and we have to work on in other ways that we can involve our, the wider community more in the learning that takes place in here.

8. There's so much outreach into other things that happen in the school, and that's essential to the resource centre. It's because of the people [library staff], they are more and more, switching people into learning, they are more and more taking the service out to people within the school within the community.

9. It's different. The old way of looking at a library is a bit like a sports shed. Stuff goes in and stuff goes out, but that's not how we see it any more. There's so much more that's transacted in a good resource centre.

10. In the past, they were places people went to and you got things and that's probably a rough definition but they're no longer that any more because the role of the people in it, I think the architects designing them need to pay attention to this,

11. There's probably more interpersonal than related to materials I think. That's the way I see it. It's the relationships of all the dynamics and, and the dynamics of all the relationships that take place.

12. I see them as a place of community not, not, not the right of any particular group, a place for everyone. But the confident ones walk in here with an air of you know like, this is my place.

13. because this place is everybody's place. You know, there's no sense of not belonging. Yeah I would sense, that people have a sense of ownership, that everyone belongs here.

14. Sometimes it's an extension of the classroom. There are connections with what's happening in the classroom.

15. You can have 15 year olds and preschoolers here. They can free range, they're being given a little bit of independence here. So it's not so much a hub, but an extension. Sometimes it's the core of what they're doing and sometimes it's not.

GE Transcript 12
Learners, learning (libraries)

1. The year 10s are a classic example... those students who really like the hubbub of being everybody there, you'll have a large group working there, sometimes teacher directed. There'll be another group up on the couch, some sitting on the floor, some on the couch working, our computers on wheels, the wireless ones, to allow for that flexible learning. Sometimes it's in a corner with a computer on your lap with your friend beside you. GE 12

2. A confident student, is one that actually knows the workings and is able to, perhaps control, control is not the right word, but manipulate those workings to assist other students. So that to me is an indicator of a confident, I guess a confident learner GE 12

3. Many of those kids in some ways are the disenfranchised kids of the school and part of the reason for having the services [counselling, pastoral care, chaplaincy] located within this complex [library] is that there's a lot of connection which happens with the library. GE 12

4. Because of the nature of their, the learning and I guess it's all the learning that takes place in our school that there's a variety and we cater for different learning styles, so those students who want to be by themselves, [teachers] book these rooms. GE 12

5. Having the wireless laptops in here will really fit their learning styles and who they are. GE 12

6. They're a bit tribal, and I don't say that in a derogatory manner. Tribal to me is relational, it's a small group, it's having space. It's being able to spread out. In some schools you would bring a group into the library and you would have a desk setting, but you wouldn't think of doing that here. They'll choose a variety of ways to transact their learning. GE 12

7. I think that's one of the successes of our school. That we have recognised that in our students and that's the way, that's the way we are, and I think this building reflects that too. GE 12

8. I agree they are a bit tribal, so you have a hunting ground here (laughter). GE 12

9. I think it's important to empower students too. . We actively encourage our students to be responsible, the volunteers, with the books, the hardware and everything really, how to use the photocopier. They are quite confident and they just deal with it. I know that's perhaps not formal learning but it's confidence I guess. So that to me is an indicator of a confident, I guess a confident learner. GE 12

10. It's highly relational. You can't underestimate the social value of this. GE 12

11. Actually that's a really critical thing, because of what we encourage, how things are placed and the relationships between people and the relationships between different elements within the physical building are all important because you know there are going to be people moving around from group to group and just communicating in different ways. GE 12

GE Transcript 13
Designing processes

1. [Facility Planner] had his master plan. He had the shape, that particular design, so to a large extent some of that was pre, was pre determined. He asked me did I want carrels and I said no. He seemed very keen he couldn't see us building a library without them, so we have some. You'll have two or three students sitting here by themselves and they're away from everything but I think that's possibly as far as we will go with the, in that regimented, linear type. GE 13

2. However in the next stage, I was very excited last Friday working with [Facility Planner] on the next stage because again we're creating spaces, some for a specific purpose but really sort of concentrating on spaces for communication and for cooperative learning. GE 13

3. We're prepared to be a little less formal. We fought that linear option hammer and tong and I tried to make it very informal wherever we could in the school. Formal wouldn't work here, and I think that's being tuned to the nature of the kids. Now having said that, you've also got to move them to a higher level sometimes. GE 13

4. It's about flexibility and flexibility is about recognising what we're doing in the learning we are establishing here and the spaces have to meet that. We constantly have on our radar that it's an ever changing world for these kids and we don't want to set up anything here that even five years down the track we're stuck with. So yeah, it's always, you know whatever we do is trying to be as responsive as we can to the emerging needs, the curriculum, the community. GE 13

5. I think, this is a principle I'd apply in any new school. I understand why they do things, why certain processes are in place, I just think that if you're going to commission a group of people to open a new school and the brief is to do something different, something innovative, then those people should be engaged before everyone else is

engaged. There are things here that we have inherited that we would never have agreed to. [If we had been engaged earlier] There are some areas within the college that we just wouldn't do in a fit. GE 13

6. Just in the whole, in that first stage, things like design briefs were pre-determined and I think that's happening more and more in other places. [Facility Planner] he had a design brief before and it was like a list and it all just went ahead. GE 13

7. To me the whole, the brief, the design all of that, whoever's involved needs to see it as a partnership rather than as a client architect thing. Why would you separate it? Things get overlooked. GE 13

8. But you know, lo and behold this theory that before you do something, the library or whatever it is, you should get the engagement of the consultant, shouldn't in fact be the first job. The first job should be well what do we want, who are we doing it for, what are we doing, what's the possible future? GE 13

9. And for us it was the case that 'this is the model this is the process', sort of take it or leave it. There was no way we were going to get a library in the first stage. GE 13

10. So, and this is another whole story. I've been involved in how they [school system] do the selection of their consultants for schools and that's certainly not the prevailing culture of this organisation. It's changing, it is changing but that hasn't been the underlying philosophy. GE13

11. The underlying culture has been that somebody who thinks he knows better than everyone else chooses the consultant, you know, your architects. Well before any of this is a process of negotiating who is this for, how do we want to be here, what do we really want. GE 13

12. And there was even one stage when there was talk of having a second library resource centre. Where did that idea come from? No consultation about that one. The biggest waste of time even thinking about it. GE 13

13. He's [Facility Planner] been far more open in this [second] stage. So it's obviously better than the first stage really. In the first stage he made changes to things that [Library Consultant] had recommended, and those changes were made I think, without consultation and without that being pointed out that perhaps would not be the best option. GE 13

14. This last planning day was far more, it was probably the most productive. I think maybe that there's communication now and an articulation of where we're going. GE 13

15. He seems, like this time, he's more available. Early on we had issues because it's been so rushed. This time it seems to me like, this is better. GE 13

16. Yeah, there's something different there. Everyone had a good day last Friday. GE 13

GE Transcript 14
Designing influences

GE Transcript 15
Designing outcomes & decisions

1. **The problem of foresight: the front door:** I'm not happy with the doorway, it's not going to be a big enough catchment area for when we have larger numbers of students entering and exiting simultaneously. And I know that from my experience at my previous school. And I tried to articulate that to [Facility Planner] that we needed a bigger space there. I accept that perhaps I didn't articulate it well enough. GE 15

2. **The problem of reading architectural plans and 'spatial sense':** The other thing was when you look at your plans and you look at the size. I'm not an architect and I'm not a Facility Planner, I'm not someone who's got that background. While I have designed things, that's not my area of expertise and perhaps someone with more expertise could've looked at that and said we need it to be this size for the future. So I'm wearing some of that, that I either didn't communicate that well enough to [Facility Planner] or I didn't have the understanding in reading the plans and measurements and I think that's happened in other instances with rooms and size. GE 15

3. **The problem of reading architectural plans:** I didn't want the circulation desk so far from the front door [indicating placement] and my understanding from the plans was that it wasn't far from the front door, until well into planning and I'd actually wasted all this time, energy and money in ordering a security system that we can no longer use because of the design of the building. And we did not discover that until it was installed. I thought I was being proactive and planning well and in fact it wasn't. [EFP] and I weren't on the same wavelength and he wouldn't change it. I'd put the horse before the cart and thought I was doing the right thing being efficient, and it blew up in my face. GE 15

4. **Confronting the problem of the 'template':** And [previous school] remember that? [The architect] came along with the design and didn't even white out the previous school's name on it. Thank god, it was a good chairman of the building board who sacked him. It cost us a lot of money but then we never built for years later, missed the BGA round, but I mean that to me was typical of the time. But there's still that pervading sense that people that work in 'The Planning Department' know best. And it's not a matter of people who work in schools know best either, we all, you know there are things we don't know and understand, so therefore it has to be a partnership. But yeah, it's about what comes first, and to me, the 'what comes first' is looking at your learners and what you see shows you where are you heading with all of the rest of it. GE 15

5. **Wrestling with the problem of 'fashion': the reading pit:** *And the great reading pit. The students could not have handled a reading pit but right or wrong the architects wanted us to have a great reading pit. We were short on space. But they were saying, you've got reading pits everywhere else. So I said 'but does that mean we need to have it?' With our kids we could see split heads and broken arms. I felt we did not have enough space and I felt I had to really jump up and down and be dogmatic about it. And they probably thought this old bird's being a stick in the mud and not wanting the kids to have some fun on the steps. Eventually we built a low amphitheatre in the courtyard outside for author visits and performances. It made more sense and the wheelchairs had more access that way as well. #It took us 10 years to fill ours in. I liked it as a gathering space but it became more and more of a problem. We tossed it because it seriously detracted from the flexibility. GE 15

6. **Addressing the problem of absent 'voices'.** You know I would actually do things differently. I would ask students. I mean talk to the kids. We're ignoring the reason we're here when we design all of this. I don't know how much input kids have ever had in designing schools. I don't think anyone has ever asked them what they think should be here. They could be consultants. They're the ones we should ask. I love that idea, they'd do a good job. GE 15

Transcripts 20-25 GE2 [Greenock – Teachers]
These transcripts are verbatim statements drawn from the original audio-transcribed verbatim transcripts and clustered using the key study foci:

- School libraries
- Learners and learning
- Designing processes
- Designing influences
- Designing outcomes (an additional cluster which emerged in the participant data)

 The statements are preserved within the individual or group semi-structured interviews, numbered and identified by the speaker. All participant statements and quotations analysed or referred to in the analysis chapters are traceable to these transcripts.

GE Transcript 20
School libraries

GE2 Transcript 22
Learners, **learning (libraries)**

1. Every child can find something they're interested in to do in the library GE2 22
2. There's space so you can spread them out around and still have that visual connection. Space is more of an issue in the classroom. GE2 22
3. There is enough room for them to distance themselves if they need to and do what they want to do. GE2 22
4. Because of our range of learners, we get quite a few that are happy to sit down with picture story books and yeah, it doesn't seem that stigma attached whereas if you're in the classroom you know, obviously they're going to cop some flak for it from other children. GE2 22
5. It's also too a great place to display work so other, or things that are happening, so other students see what other classes are doing that you don't have in your own classroom, so often there's artwork on the wall or things like that. GE2 22
6. I think I just really appreciate all the space here now. GE2 22
7. We have such a supportive staff here. I mean they are really tuned in to things. There is a lot of support for the kids. GE2 22

GE2 Transcript 23
Designing processes

1. You can tell the architects or designers actually work it out how much space one body takes up, and you very much can tell that and so you know, you can very much tell this is how much space per child this class or this walkway, that's it, an equation. GE2 23
2. I mean we, you feel so privileged to be in something that's so new and so wonderful and then you think, why didn't they listen to the people. GE2 23
3. They just don't, they don't listen to people who are initially working there. Like if I was designing a house my architect would have to listen to me and I would get what I wanted.
4. Like the people who are actually here, who spend so many hours in a place should be able to have a bit more of a say in what they want. GE2 23
5. I think you know with the teachers and principals and people who are in that environment really need to be listened to and heard . GE2 23
6. I mean it's great for an architect because they can go in and they can design, and usually they try and put their stamp on but when you don't work in that field all the time, and people (we) do and people have worked in lots of different schools and they can see what is needed and what works well. GE2 23
7. I know that [Principal] has had lots of arguments with the architects over things in particular, and we've lost out on and then again we're back to just things that are just design faults, you can pick up from them. GE2 23
8. So I think that you know, those people[designers/architects] that are in charge you know, they really need to be spending time in schools and be responding positively to what people say, rather than no, we can't do that, we can't do that, we can't do that. GE2 23
9. The funding needs to be looked at, you know, education has changed and will continue to change dramatically, but we're still funding to this you know, one child per this much area or whatever. Learning isn't just sitting at a desk. GE2 23
10. Ideally, if it was nothing to do with money you would have a double area where one part of that would be set up as a traditional classroom and the other area would be set up, you know, different areas, bean bags, chairs, computers, so that your class could flow. You would have room for the diversity of learners. But funding says that is just not possible. Funding says this is how much we'll give you per child for your school, therefore we're restricted to that and what I think the architects and designers try to do is do the best with that space given that they're very much into their own design thing and putting their mark on it. GE2 23
11. I think it's probably, the funding is probably where it should start. GE2 23

GE2 Transcript 24
Designing outcomes & decisions

1. Private enterprise has come so far with setting up offices and work spaces. Offices are much bigger now than they used to be because industry has changed, and teaching is changing. Learning is changing. But they're [designers/architects] not actually thinking education's changed. GE2 24
2. I think that you know like also the fact that in the designer's quest to keep up with things such as natural light and natural air ventilation and the environment, we have nowhere to display work because we have no wall space GE2 24

3. Some of the very old schools you know, like New Farm or the old buildings at Toowong and that, the rooms there are actually quite large rooms and I know a long time ago they had a lot more students in them but now, having today's number of students in those large rooms, there is so much space there. So you get a better deal in old schools, never mind about new, it should be better but it's more restricted. GE2 24

4. Quite a lot of our children actually need their own space and because of the size of the classrooms there isn't any room to give them that space. GE2 24

5. It just seems to me that we suggest things like that railing in there (library) is one clear example. No one wanted it, even [the Principal], it wasn't necessary, we hated it and there were massive arguments about it, and they [project decision-makers] wouldn't change it we're told well just put plants in front of it, so little things like that. GE2 24

6. There's nowhere to move properly. I think that even though our buildings are new and everything else there's still a lot of design flaws with them.   GE2 24

7. They put lots of doors in, we've got extra doors and then you've got extra doors but then you can't sit a student or put furniture actually anywhere near the doorways because people have to, you know the free flow of people. GE2 24

8. I think too they forget, for instance if you made a whole wall of corkboard for children, and let's face it that's what we're on about, to display their work, not everything has to be up high, but there's this whole idea that anything below probably 1.2m is wasted. It's almost as though they don't realise that children wouldn't mind if things were down there closer to them. The displays are for the children. GE2 24

9. We've had the fans have in between the two lights, so when the fan's on you get this constant flickering which is really hard for a lot of learners. A lot of our learners these days, are more sensitive to little nuances like that and it can really stop them from being able to concentrate GE2 24

10. We've got paper drawers for the paper, which is great except they're not actually big enough. You know the paper you buy from thingo [paper merchant]. It would have been a simple matter to get that measurement. So now you either don't use the drawer or you fold the art paper GE2 24

11. We would rather probably have a room with free standing furniture that we could move around and we could create spaces and if you didn't want the furniture you could take it out. Rather than have stuff that's fixed because a lot of our stuff is fixed. GE2 24

12. I've got a broom cupboard that is this wide 20cm, but it doesn't have a broom in it because the broom doesn't actually fit in it, so it's this total cupboard that is quite nice but we can't use it, for absolutely nothing. Nothing will fit in there. GE2 24

13. If the fridge cupboard was bigger we could actually keep the TV and video in there but it's not, so it doesn't fit, so it's just things like that. You know, like there is no storage space for TV and videos and stuff] GE2 24

14. In the new building the light switches are right across the far side of the room so you have to come in and go right across to the other side of the room. So if you're there in the dark for parent meetings it's dangerous. GE2 24

15. That whole piece of glass from floor to ceiling, it's a one piece of glass that hasn't got a window in it, there's just this big sheet of glass on the western wall. You wouldn't sit a child near it because it would be too hot. You can't get any air through it, it's just this like a

corner. Nice view of the garden but you can't go near it in the afternoons everything cooks. GE2 24

16. That's part of the frustration too, is that you know, that the buildings are built – a huge dollar investment and yet there is no money for blinds. GE2 24

Transcript
Designing influences

Transcripts 58 - 76

Greenock New school P – 12 New library in stages

1. **Yr 10/11 (3) Transcript 58 -67**
2. **Yr 11 (3) Transcript 68 - 75**
3. **Yr 7 (5) Transcript 76-76 [curtailed by fire drill]**

These transcripts are verbatim statements drawn from the original audio-transcribed verbatim transcripts and clustered using the key study foci:

- School libraries: student experiences
- Learners and learning: student experiences in school and other libraries
- Designing processes: student understandings about who participates in designing activity & makes designing decisions
- Designing influences & outcomes: student perspectives about designing elements and their effects

The statements are preserved within the individual or group semi-structured interviews. All student participant statements and quotations analysed or referred to in the analysis chapters are traceable to these transcripts.

Interview Focus	Yr 10/11 Participant Statements Transcripts 58 - 67	Yr 11 Participant Statements Transcript 68 - 75	Yr 7 Participant Statements Transcript 76
	Transcript 58	Transcript 68	Transcript 76
Understandings/ Perceptions of libraries *'If you had to talk about the library to someone who had not seen a library or used one – how would you tell them about*	1. *I'd describe it as a large, neat space with books and couches and comfortable places to sit and relax, to be used for research or just reading*	1. *I'd say it could be used for study purposes, or leisurely reading I guess.[Yr11]GS* 2. *It's a place you can go and escape from what you were doing.*	1. *It's a place to read and borrow books and stuff [Yr7]GS* 2. *Yeah and they have computers more than in*

it?'	[Yr10/11]GS 2. It's a quiet, almost secluded environment rather than a regular classroom [Yr10/11] GS 3. It's a library because of the way it's used – it's different from a classroom. (at lunch time) it becomes more like an education playground I guess [Yr10/11] GS	You can read and look at magazines. [Yr11]GS 3. Our school is about the symbols in the entry and on the tiled floor and sort of like the library represents that because it's the same culture [Yr11]GS	the classroom [Yr7]GS
	Transcript 59	**Transcript 69**	**Transcript 77**
How have you used libraries?	1. Mostly reading. There's mostly books [Yr10/11] GS 2. If you feel like a corner you can just focus on a book or whatever you are reading. You don't have to worry about what's around you .. you don't have to attract a lot of people. I think that's sometimes important [Yr10/11] GS 3. The couches are good – and bean bags and	1. For study mainly and when you have to get assignments done. [Yr11]GS 2. I use it for accessing internet sources. They have databases you can't use from home. [Yr11]GS 3. You can come here to do homework for an hour after school. [Yr11]GS 4. The lounge space and the computer area are the best spaces to use. You can move around when you need.	1. Okay, at lunch time … the library is more of a game place because they offer board games [Yr 7]GS 2. We come with the class to borrow. You can take home a few books but not the CDs [Yr 7]GS 3. Projects. The display over there is our stuff from the explorers the maps and that model[Yr

	cushions. It's friendlier, so we can relax. It's something that appeals to us [Yr10/11] GS	Sometimes the computer area is crowded and we aren't supposed to double up at computers. [Yr11]GS 5. You can go there to relax – there's couches and chairs with cushions. [Yr11]GS	7]GS
	Transcript 60	**Transcript 70**	
Are there other libraries you visit – talk about these	1. I go to the council library mostly in the holidays. 2. They're more populated. There's different people – more old people and like families [Yr10/11] GS 3. well, the library that I visit they give you, they offer you certain area that you might like to go for your age and how much it's going to cost if you need to pay to use the computer and how much time that gives you. How many printouts and how much you need to pay for extra printouts and stuff like that, it has a bigger framework, and	1. I've been to the [suburban] library and the library at UQ and QUT. [Yr11]GS 2. Sometimes I go to the State Library at the weekend if I'm looking for something…[Yr11]GS 3. I went to the New York Public Library … bigger than anywhere I have seen before. We didn't know what to look for. [Yr11]GS	1. There's a new library at [suburb]. We haven't been there yet. I think you have to join. You don't have to join at school do you? [Yr 7]GS 2 My sister went with the kindy[Yr 7]GS 3 You can borrow games[Yr 7]GS

		who you can go to for certain areas, I guess.		
	Transcript 61	**Transcript 71**	
What makes you come back to libraries – school library – or not	1. It's there, so you can go there easily [Yr10/11] GS 2. *[other libraries] are not as friendly. Like they are friendly, like the staff and everything, but it's more personal at school libraries because you see them more often and thy know you, yeah [Yr10/11] GS	1. They generally have the stuff for projects and exams. You can book spaces to do group work – but there's not enough of them. [Yr11]GS 2. There's different places to sit – you can choose to be alone if you want. [Yr11]GS 3. Some staff are not very approachable. [Yr11]GS	1. There's space and the couches are good. This is a couch school. 2. Yeah the couches
	Transcript 62	**Transcript 72**	
What makes you come back: other libraries – or not	1. They're larger and they have a much wider variety of books [Yr10/11] GS 2. *They're not as friendly. Like they are friendly, like the staff and everything, but it's more personal at school libraries because you see them more often and they know you, yeah [Yr10/11] GS 3. I like their organisation .. I find it easier to pinpoint what I want and what	1. You can sit around and read for a long time – no one asks you to go like happens at school. [Yr11]GS 2. I tried the council library at [suburb] but I couldn't find the fiction for my age. The younger fiction was in a big area by itself and there was a sort of adult section …[Yr11]GS 3. You can open-surf – we can't do this at school. It means you can get the stuff you need now[Yr11]GS	

	I'm looking for because they have such a big range. They actually have a whole section with what you want and they're so organised that they have certain staff that can help you with certain needs [Yr10/11] GS 4. *If you're looking to read into a certain area they have, usually they have people that have expertise in certain areas. So you've got that specialist staff.* 5. *It's like a meeting place for a few friends or something after your doing a joint project at school [Yr10/11] GS* 6. *The systems seem to be more friendly. There is a self-service checkout. You can put things on hold and they email you when it comes in [Yr10/11] GS* 7. *The resources are more up to date [Yr10/11] GS*	4. *You can go to different areas whenever you want to. [Yr11]GS* 5. *There are good spaces to spread out. There are sort of meeting rooms, even small ones where you can work by yourself. [Yr11]GS* 6. *The university library has a more set structure, they have a lot more organisation and like framework in the way their library is meant to be used. [Yr11]GS* 7. *Always they have bigger spaces with good lighting and air-conditioning. [Yr11]GS* 8. *There are big collections of books and DVDs and the shelves are not crowded. [Yr11]GS* 9. *They have coaching sessions for using the [council] library. At the [university library] you can ask for help at the front desk. [Yr11]GS* 4. *You need good*	

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		online access, the way information is now you need databases like at the UQ library[Yr 11]GS	
	Transcript 63	**Transcript 73**	
What would you change about the school library if you had the chance? *Prompt: If the space of the library was empty how could you change it?* *Prompt: If you took everything out, what would you bring in to the library?*	1. *More computers in quiet places. Computers require concentration [Yr10/11] GS* 2. *Some more rooms for groups and working on projects [Yr10/11] GS* 3. *Couches and cushions … because it's comfortable [Yr10/11] GS* 4. *Bring the shelves back in. It wouldn't be a library without the shelves [Yr10/11] GS* 5. *Computers of course, you need them to do work [Yr10/11] GS*	1. *A bigger space. There's so much stuff in here. It could spread out. [Yr11]GS* 2. *Interactive white boards and better computers. Maybe laptops[Yr11]GS* 3. *Good lighting with dimmers. [Yr11]GS* 4. *Paint areas in different colours. [Yr11]GS*	1. *I don't know. It would look funny empty [Yr 7]GS* 2. *You have to have the shelves [Yr7] GS* 3.
	Transcript 64	**Transcript 74**	
Who do you think makes/has made the decisions about how the library will be?	1. *We know there was [were] architects at this school to help the teachers make the school end up as a vibrant school [Yr10/11] GS*	1. *Probably the Principal and the teachers… and then the builders. [Yr11]GS*	1. *Maybe Mr [Principal] and Mrs [TL]?*

	Transcript 65	Transcript 75	
What would you like to say to the [teachers and the architects and builders] people who make the decisions to tell them how you think about the library spaces?	1. *The library should be inspiring and even the school, so when people come they will know that this is a happy, bright and energetic sort of school with people in it who are energetic. Because the way you set the school up in a certain way will make people respect how the school is and how we should behave in the school [Yr10/11] GS* 2. **More beanbags, couches and cushions and benches [Yr10/11] GS* 3. *The size of space for books could be smaller because of databases. Maybe that could be for computers or people [Yr10/11]GS*	1. *The size is important. The place should be big so it can be used by groups and classes and also by people who are working by themselves. [Yr11]GS* 2. *We need good access to online materials because that is how the information is now. The size of space for books can be smaller because of databases. Maybe that space could be for computers or people. [Yr11]GS* 3. *The place should attract everyone in the school even those people who don't like reading. Everyone should feel welcome. [Yr11]GS*	1 *We need it to be big. There's lots of kids here. So you can spread out and there's room at lunch time.* 2 *There could be more of those rooms.*
	Transcript 66	**Transcript 76**	
Comparison contrast – with other libraries With classrooms	***Comparison with classrooms*** 1. *A classroom is just a square, so wherever you go you are going to*		1. *It's better in here, there's more room and you can spread out. It's bigger*

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	be seen by someone else. Whereas [in the library] you can go between the bookshelves or into a corner and not many people can see you there, and they won't come and annoy you [Yr10/11] GS 2. *Yeah, you can't get by yourself in a class [Yr10/11] GS* 3. *[In the library] I really like the couches and cushions and the bigger spaces [Yr10/11] GS* 4. *The number of computers [in the library]. We only have one computer in our classroom [Yr 5] GS* 5. *The classroom] It's just too small and they try to cram too much into it. Even if it is a good size, they just put too much into it [Yr10/11] GS* **Transcript 67** *Yr 10/11 Exchange:*		*than it was last year. They built that bit with the new doors and the steps.* 2. *It could be bigger* **Interview interrupted by fire drill**

	1. *There's all these big cupboards and shelves that don't get used and they are cluttered along the side of the room. A couch would be better … 2. *No it's not a good idea, because we had one on our classroom and too many people were trying to sit on it at once and … trying to jump on it. 3. It was used irresponsibly … Interviewer: So can you tell me about that? 4. *Having a lounge in our classroom it was like a different attitude. It caused … distractions. 5. *It's meant to be when it's best for everyone and some people don't know the rules. 6. *We respect Miss B [teacher-librarian] and they [other students] wouldn't even dare to try it [jumping on the couch].		

	7. *This [the library] is like one of the public places, whereas the classroom is ours so it's different. 8. *A library requires a different sort of etiquette than a regular classroom. *We have different manners and a different way of behaving in this area [the library] than we would in another. 9. I think it might be how you want it to be, like how you have a certain space done a certain way and the people behave differently because of the spaces. 10. *Like the classroom is different to the library and different to other places like … your bedroom. You can change your bedroom to suit yourself. To make it comfortable for you and also for		

	other people if you want to. Like relaxing or fun and energetic. 11. Like a church. You act differently in a church from say the local sports centre because of the way the church is set up. It's a quiet space with seats in rows and statues and stuff like that. Whereas the vinyl floors and equipment of the gym or sports centre would make you react differently		

Transcripts 6-9 HP [Harrison Principal]

These transcripts are verbatim statements drawn from the original audio-transcribed verbatim transcripts and clustered using the key study foci:

- School libraries
- Learners and learning
- Designing processes
- Designing influences
- Designing outcomes (an additional cluster which emerged in the participant data)

 The statements are preserved within the individual or group semi-structured interviews, numbered and identified by the speaker. All participant statements and quotations analysed or referred to in the analysis chapters are traceable to these transcripts.

HP Transcript 6
School libraries – learners and learning

1. It is a research place in the school – the possibilities are limitless. We are promoting the idea and potential of the self-directed learner. The new opening hours of the library increase the access. HP 6

2. I see our library as an interactive place, a place for engagement, for students to have their own learning style, personal style as an example. HP 6

3. What I've seen is a marked change, a shift in the ways that our school library operates and is regarded in the school. There is a change in the way the staff operates. It is about relationships, education and leadership. HP 6

4. We have renamed the role of the teacher-librarian – it's now the *information resources coordinator.* HP 6

5. I think our library offers a model of enquiry learning in the school – one that is a model for learning across the school. The approach could be transferred – and hopefully will be – to the kinds of learning that happens in classrooms. HP 6

6. There is such resource knowledge here and it is shared. What I value particularly is the proactive advocacy for information and resources. HP 6

7. I can make my particular information needs known and [TL] will not only seek resources and materials for me, but will also feed me with other related information over time. HP 6

8. The technology is changing the ways we work and even the library resources. HP 6

9. We talk about the *world wide web* rather than the *Internet,* because there is a bigger meaning there – more than about being able to access information online, but also about the students responding to their own information needs and creating customising information for their learning – and about making connections – being part of the world wide web of information and learning. HP 6

10. The layout of the library for example allows for different kinds of learning. There are quiet spaces and noise-filled spaces so there can be energy and industry and independence with all kinds of media – students developing expertise with the technologies and media where there's expertise to support that. HP 6

11. The students respect the space … it is a space for learning engagement. The library spaces will be translated to the Middle School so that there are spaces of quiet, access, interaction, hospitality, physical ambience, independent spaces, group spaces HP 6

HP Transcript 8
Designing processes

1. We had a planning committee – not a big group – the TL and the Deputy Principal, the architect and the Business manager and the IT Coordinator. This was a core group. They met weekly for some time and then perhaps fortnightly and periodically with the architect. HP 8

2. There were regular reports to the leadership [School Admin] team. There were focus groups and forums with teachers, volunteers and parents. There were others, teachers throughout the time, who joined for particular things and I came to the occasional meeting. HP 8

3. [TL] undertook the chairing of the committee and exposed us to things we had never experienced before – or even thought of. Sometimes – at the time I am sure people

thought 'do we have to have this detail?' But [TL] was so thorough and knowledgeable with everything. HP 8

4. [TL] worked very well and closely with [architect] – there was a lot of respect there. HP 8
5. It was exciting and we were learning. The planning process was a bit organic. It was a kind of unfolding according to the vision and problem solving according to the budget . HP 8
6. As I said the budget was a balance point – but [TL] took the budget challenges up as opportunities to re-think choices and costings. HP 8
7. I'm sure [Business Manager] would have something to add to what we might do differently with the process. HP 8

HP Transcript 9
Designing outcomes & decisions

1. I remember that the budget this was a particular concern with the technology and so with the choice of wireless technology. HP 9
2. At the time the idea of wireless was the way to go and we investigated it, but the costs were significant and there was not a local site where we could see the installation working well – there were doubts about our geography for wireless in parts of the school. It was even difficult to find interstate sites to compare ourselves with. So in the end we opted for cable and some wireless and this has proved to be a good choice – and it was what we could afford. This will probably change too, but hopefully we are set up for making this kind of change. HP 9
3. The ambience was a big thing – and colour, it needed to be energising for students. And the matter of light - I know that there is research around this, so we looked at studies that examined the effects of natural light on concentration and well being and considered the use of natural light in the building. Now some of that has had to be moderated for glare, but the need for artificial light is minimised. HP 9
4. As you know the furniture became a particular thing. The table shapes vary – trying to encourage collaboration and gathering together for groups. Looking at commercial and café furniture gave us the idea that this could encourage different ways of thinking about and using the spaces. The couches are very popular – these are recovered second-hand furniture – sturdy, covered in funky fabrics. HP 9
5. Things we would do differently? Well the balconies are not used as freely as they could be – the safety issues are not easily resolved. They are used but under supervision and this is a pity – but there may be a way. HP 9
6. The café is not used as [TL] would have wanted – we haven't quite come to terms with food and drink, but the space is in demand for informal things – particularly staff, parents and visitors events. The regular author visits in partnership with [local bookshop] – the café space is very good for this. HP 9

Transcripts 95 - 101 [Harrison Students Yr 11]

These transcripts are verbatim statements drawn from the original audio-transcribed verbatim transcripts and clustered using the key study foci:

- School libraries: student experiences
- Learners and learning: student experiences in school and other libraries
- Designing processes: student understandings about who participates in designing activity & makes designing decisions
- Designing influences & outcomes: student perspectives about designing elements and their effects

The statements are preserved within the individual or group semi-structured interviews. All student participant statements and quotations analysed or referred to in the analysis chapters are traceable to these transcripts.

	HS Transcript 95	
So, perhaps we could begin with what you think about libraries. For example: If you had to talk about the library to someone who had not seen a library or used one – how would you tell them about it?	1. A place for study and leisure reading, with lots of resources for learning. Fun and educational. 2. There are spaces for different activities. 3. Our library speaks of young people. The colours and the furniture are sort of young – not like the old library that was brick inside with sort of old furniture. You feel like it was made for you because of the colours and things. 4. There are things about the culture of our school in the library. It is a place for enjoyment as well as working on projects and research. 5. It is a benefit for the students.	
	HS Transcript 96	
I am wondering how you use libraries?	1. Mostly for research and for reading.	
	HS Transcript 97	
I am wondering if there are other libraries you visit …. Can you talk about these? *Public libraries and the state library.*	1. *The state library at the weekend sometimes* 2. *public libraries and the state library*	
	HS Transcript 98	
I am interested in what makes you come back to these libraries[school or public/community]? What do you think	1. *It's easier to concentrate at the other libraries because you don't know anyone and they have rooms where you can work by yourself.* 2. *You can have more privacy at the public library* 3. *also there's people xxxx also people there*	

	who know about the resources and they'll look at your assignment xxxx see if they have information and stuff 4. *Council libraries are like big bookshops – you can get films and DVDs, stuff they don't have at school. There are big collections of books and DVDs and the shelves are not crowded. The resources are more up to date*	
	HS Transcript 99	
So, if you had the chance what might you change about the school library?	*Resources:* 1. *I feel that some of the resources are oversimplified. When we need information for research and the only books available have very simple texts… (pause) I mean I know that there are Yr 8s and that* 2. *It's like there's a lot of information online but sometimes you need other sources and having a book can help you to get detail like specialist stuff or kind of deeper information* 3. *Also there are not enough resources for personal interests and hobbies. That would make the non-fiction better – to add leisure materials as well as the fiction.* 4. *Glass: all the rooms have glass – so it's hard to be private to work by yourself and it's distracting. I think that the glass makes it distracting, and you feel as if you are being watched.* 5. *There are not enough private spaces. It would be good to have more rooms for one person or two* 6. *More laptops. The study students take up a lot of room and the computers. It is a good place to be and everyone wants to go there.* 7. *But the librarian and the staff demonstrate databases and stuff at the beginning of the year. Then you can use them whenever you want to*	
	HS Transcript 100	

So, who do you think makes the decisions for how the library in the school will be?	1. I know there were a lot of people involved in the library here in making decisions. There was a competition to choose quotes for the wall – about reading and books and learning. We looked for some online and one of ours is up there.	
	HS Transcript 101	
What would you like to say to the people who make the decisions [teachers, architects, builders] to let them know what you think about the library?	1. The light is good – it makes it energetic and the colours are bright and clean and some of the areas are sort of matched with the colours like walls and chairs 2. The balconies are so good – we really appreciate them but we can't go out there without a teacher. It's good to be outside in the open air. We have some book discussions out there and last year we had our team break-up for netball out there. 3. I love the windows out to the outside world, where I can sit and look up to see the street and towards the river I feel sort of calm. It would be claustrophobic without the windows 4. Some of the table shapes are weird. It would be better to have them like a rectangle or a square you would fit more people but the couches are good sort of mixing some different shapes 5. Well it's good but all the rooms have glass so it's hard to be private to work by yourself and it's distracting. I think that the glass makes it distracting, and you feel as if you are being watched	

Transcripts 16-20 ME [St Mary's Teacher-librarian & Deputy Principal]

These transcripts are verbatim statements drawn from the original audio-transcribed verbatim transcripts and clustered using the key study foci:

- School libraries
- Learners and learning
- Designing processes
- Designing influences
- Designing outcomes (an additional cluster which emerged in the participant data)

The statements are preserved within the individual or group semi-structured interviews. All participant statements and quotations analysed or referred to in the analysis chapters are

traceable to these transcripts.

ME Transcript 16
School libraries

1. I have had to rethink that, because as a TL I have been challenged here by the teachers, because we have laptops in classrooms and the internet, what's the point of a library? ME 16
2. I don't think about the library in terms of books – my thinking has moved beyond that. I don't need to go to the library to get books. ME 16
3. I know we have talked about the issue of equity – of the teaching and learning space being available to all students – and I am just beginning to broaden my approach to an idea of justice for students – and I am now taking that up to our parents and our wider community. Isn't there a role for a library to offer that now as well? ME 16
4. The library here since the refurbishing has become so much more. It's another space – so what is it about the space that's different from a classroom? There's opportunities for the children to be more active. ME 16
5. Such a great source for accessing information – and a tool for designing too and creating.
6. Supporting the learning and particularly with the ICT and the research process , the computers to be able to access the things they need almost immediately and the expertise that comes with the space to show how that is done. ME 16
7. The library can be the 'meeting place' for the activities of the community. It is a good place to celebrate the learning taking place. ME 16
8. I see it as an extension of the classroom. ME 16
9. The library as a place being accessible by everyone, welcoming and memorable and interesting ME 16
10. Some children see it as a play-space – comfort – chat – games. ME 16
11. They can find the quiet spaces and the shells – that ultimately they don't find that in the playground. ME 16
12. The place has to be welcoming – to want to come in and be here and then how you utilise the space inside it has to be flexible to be changeable to be used in a whole variety of ways. ME 16
13. And the kids to have input into that - into how they would like the spaces to be. Depending on whatever's happening. They will come up with good ideas and they have ownership of it and then they are prepared to look after it [only reference to student participation] ME 16

ME Transcript 17
Learners, learning (libraries)

1. Learning is just so big for kids today. Whatever you are doing in the classroom the library becomes another place, another space for children to go to learn and the classroom is not big enough. ME 17
2. And all of the research about the brain and how people learn that we have come to understand. It has actually changed our whole notion. ME 17

3. I see it as teaching and learning spaces, so what a library does offer is expertise – resources and the expertise to actually access those resources. It is an extension – it actually does have to offer more than the classroom. It has to offer the people. ME 17

4. We have put the learner at the centre of the process – so how does this make a difference? We have gone from seeing that children are not the only learners – we now see that we are learners as well, that teachers are learners as well. And here we learn so much from the students. ME 17

5. There's too much to know – you cannot be the continuous expert. What the children are interested in is much broader than it used to be. ME 17

6. Needing specific equipment and guidance and the teacher cannot be the expert in everything. They are the facilitator of learning – so the expertise of the teacher-librarian the ICT teacher is vital in supporting that whole guided enquiry approach [In vivo]

7. We have moved to see teachers as learners, students as learners and I've even taken this out into the community. ME 17

8. In Vivo: Perhaps the ideas about learners have changed- you know the lifelong learning and the roles for the lifelong learning thing we have as part of the system framework. Came out of the syllabus as attributes of lifelong learning – because it doesn't stop. Teachers then have to see themselves as learners – it doesn't stop. ME 17

9. Invivo Into the 21st century it has all happen so rapidly and being a teacher who came from the 80s change has been so dramatic and now I have had to learn so much more particularly about ICT and not be such a digital refugee – trying to be – I won't be a digital native – but at least try, and the library is a catalyst for that. ME 17

10. And that whole notion that there is so much there that you actually need to learn as you need it - not in case you need it 'just in time learning rather than just in case learning'. ME 17

ME Transcript 18
Designing processes

1. And if you remember there was a great excitement - a tangible sort of excitement on the part of parents about the creation of the library and that space – so much so that the parents donated the extra space, the deck space and the work that went with that. ME 18

2. We did a lot of talking to the people who were going to use it as well as the people who were going to create it. So it was that discussion …. Between all the stakeholders that helped us create a space to meet the needs and to stimulate the changes – to be spaces to create the changes as well. ME 18

3. It went through several transitions, didn't it? The connection with the library consultant happened at least a couple of times. There was the curriculum council and conference and pedagogies and the planning that all dovetailed – so that the spaces actually came out of the thinking that everyone was doing. ME 18

4. And teachers wanting to take on Middle schooling principles – so that teachers in 6/7 said 'we want to have regular access to the library, because our learning cannot just happen in the classroom. We need to use the resources in the library'. ME 18

5. I really believe that it wouldn't have happened without [Principal]. I really believe that. He actually made it happen, I don't really know how. But he could hear what we were saying and he could interpret and go to the architect and builders and capture what was needed. ME 18

6. He is very good at gathering people .. experts – at getting them together to talk and to learn from one other. Because the architect had to hear how we wanted to use the space and what we had to say – so that the spaces fulfilled our needs not what he [the architect] thought should happen here. ME 18

7. My recollection is of one day everybody being up on the verandah and of everyone having different ideas and it wasn't as if everybody started with a consensus by any stretch of the imagination ME 18

8. I am remembering that when we finished at St Helens – all sitting around the table saying 'Now that the space is here what do you see will happen here?' By that stage it was a very familiar idea – it was quite a process – it was a rich vision – it took time. Everybody informed each other's vision. Everybody learned from each other. And the architect had to change his approach half-way through, because of the way things developed. ME 18

9. So it always comes back to the conversation to discussion that happens between the people. It's only when you have the conversation that the ideas come together that you start to get a common view of what needs to happen there. Because it wasn't a common view at first was it? ME 18

10. You had your view as the TL – I had this view as the curriculum person and also as a classroom teacher. T as the architect, J as the Principal and the leader and P as the IT person and the 6/7teachers who wanted to use this space to support their learning philosophies. ME 18

11. I don't' ever want to go back to the classroom teacher having no input into what the learning spaces are going to be like. If it is just say the money people and the architect,

then you are never going to get anything worthwhile. We had to work at it, but in the end there was a strong consensus and it was positive. ME 18

12. And you need a variety of experiences. If it is only one person then it could be quite an outdated vision. Initially that vision was shared only among us [K, M, J] and some of the teachers couldn't cope with the ideas. So what changed that – it's more the path of learning, it's using the spaces differently and then others modeling the use of the spaces. ME 18

13. And it was the people who did not contribute to the vision who did not know how to use the spaces, so what does that say? Contribute to the vision. Get everybody talking about it. We should actually have gone bigger, involved everyone. ME 18

14. We probably we harnessed the people who wanted to have input the people who were excited. ME 18

15. I have sometimes put furniture in spaces assuming that people will use it in a particular way and they don't they do something completely different way and one of the things are the lounges over there. One of the things I imagined students relaxing on them and reading for recreation. What I am finding is that students get their laptops – sometimes they don't even sit on the couch, they sit on the floor with their backs against the couch. ME 18

16. Sometimes you have to put yourself into the shoes of the learner – what do I think they would do in the space, how do children work here? ME 18

17. Looking at a space and asking what learners need to work in these spaces. How can I make that happen? ME 18

14. And the kids to have input into that - into how they would like the spaces to be. Depending on whatever's happening. They will come up with good ideas and they have ownership of it and then they are prepared to look after it [only reference to student participation] ME 18

ME Transcript 19
Designing outcomes & decisions

1. the library at St Marys was specifically designed to support those enquiry-based units of work and the ICTs to support that. The other thing was that we wanted people to be able to make creative decisions about time and space and resources in the enquiry based units of work, ME 19

2. the bigger spaces and the variety of spaces you can have more children there – using the spaces for different things all at the same time – and this was one of the reasons that we wanted a variety of spaces in the design – because more groups would be moving around using the spaces for different things. It depends on where they were in the learning sequence ME 19

3. welcoming and memorable and interesting. ME 19

4. The point of that gathering space was to have a presenting, celebrating space for all that was going on – as well as a space for getting together. ME 19

5. KH gave me some research which said that undergraduate students in the US believed that everything was online they don't need to go to a library any more - and then the libraries [librarians?] are wondering how come they are happy to go to Borders but they are not

happy to come here for recreational reading? Borders was creating an experience – a social experience – with dimensions of the cafe. ME 19

6. And so part of the rationale about the café - one of the things the research says about why the reading drops off after students come into secondary schools is because secondary libraries are set up as research atmosphere and spaces and don't welcome the reader – there's no display space and hard to find somewhere to read. ME 19

7. We are thinking about active learning, investigations more self-directed activity. When students come from Prep they will be more confident and self-directed as learners so we need to design for this, we can't put them into highly structured classrooms. ME 19

ME Transcript 20
Designing influences [a dialectic]

1. So its very exciting. So going back to the influences. Now that we are creating the building, designing the spaces to match the learning – it's coming from the curriculum, that's the influence. The early years curriculum guidelines for instance that's making the difference. ME 20

2. And I suppose all that research about the brain and how people learn that we have come to understand. It has actually changed our whole notion. ME 20

3. What I am seeing is that it [the library] is dynamic and there are no set answers and it's changing and it needs to change. I'm on a journey, but I don't know exactly where I am going. I will change and I need to change. I am very aware that we need to respond. ME 20

4. That's what we are doing as designers – providing the options, but they [students and teachers] actually have to use it to be comfortable with it. It's evolving – the options to use the spaces in multiple ways. ME 20

5. Motivated by moving the shelves off the floor and on to the walls and making the resources the support and not the central thing. ME 20

6. What has changed is that learning for children has changed and the way they access information has changed dramatically and children and the process that children use to find information is a lot more active. ME 20

7. It's not just about reading a book or searching a website – it's much more about different investigations – it's even things such as role playing and presenting to their peers. ME 20

8. There's a lot more talking goes on and the children interact more with one another and you need other spaces particularly the library to join with the classroom - the classroom is not big enough. Learning is just so big for kids today. When I say big, there is just so much today that the children are interested in –what's important to them. That's what outcomes based learning has achieved – the world is bigger than just the text book. ME 20

9. The computers to be able to access the things they need almost immediately and the expertise that comes with the space to show how that is done. ME 20

10. I think the spaces do dictate the way you use them and a person can be quite creative in a quite limited space but a more interesting space will encourage more flexible and different uses so you don't keep coming back to the quite structured classroom space. Some teachers will take leadership and the opportunity to use the spaces more flexibly

and other teachers will watch and think 'That's interesting. Perhaps I could do that'. ME 20

11. I think that some teachers need the example of others to show them how they could do things differently – particularly if they are the kind of teacher who doesn't use that kind of thinking. ME 20

Transcripts 77 – 94 St Mary's MS

4. **Yr 5 (3) Transcript 77 - 85**
5. **Yr 7 (3) Transcript 86 - 94**

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Interview Focus	Yr 5 Participant Statements MS Transcript 61	Yr 7 Participant Statements MS Transcript 62
	Transcript 77	Transcript 86
Understandings/ Perceptions of libraries **'If you had to talk about the library to someone who had not seen a library or used one – how would you tell them about it?'**	*Our library is very colourful. The colours tell you about the parts – like the cushions in the reading area – like there aren't any cushions in the computer area [Yr 5]MS* *There are nice people in the library [names of staff]. They can help you choose. They know about new books and if you like an author they tell you when there is a new book [Yr 5] MS*	*It's a place where you go to read and for people to help you find the information you need [Yr 7]MS*
	Transcript 78	Transcript 87
How have you used libraries?	*We go there, our class for times and we can go at lunch time on some days [Yr 5] MS* *Yeah, you can sit on a couch and talk to your friends [Yr 5] MS* *There's chess clubs and stuff like that [Yr 5] MS* **They could change the*	*There are lots of resources – sources of things [Yr 7] MS* *Reading … and researching [Yr 7] MS*

	colours, some of them are pink [Yr5] MS	
	Transcript 79	**Transcript 88**
Are there other libraries you visit – talk about these	The library at [Suburb] is in the shopping centre. I go there with my family. Sometimes we go at night [Yr 5] MS	Holiday things, activities at the council library [Yr 7]MS
	Transcript 80	**Transcript 89**
What makes you come back to libraries – school library – or not	It is cool in the air-conditioning [Yr 5] MS I am excited to come to the library [Yr 5] MS The library is comfortable with beanbags and couches [Yr 5] MS	You can get help to choose and they know what you need for projects [Yr 7] MS
	Transcript 81	**Transcript 90**
What makes you come back: other libraries – or not	There are 100s of Viking books. [Yr 5] MS You can book an X-box [Yr 5] MS There's a kid's corner [Yr 5] MS You can stay there for a long time [Yr 5] MS	Sometimes you can go to a corner and read lots the whole time, you just sit there and enjoy the quiet [Yr 7] MS They have sections for different ages, but you can go anywhere and no one tells you to stay in your own age [Yr 7] MS There's a wide selection of children's books and magazines [Yr 7] MS They have couches and well built furniture [Yr 7] MS Some libraries have food – like in a café [Yr 7] MS There are specialist staff who can help you. [Yr 7] MS It was clean and not dusty. [Yr 7] MS
	Transcript 83	**Transcript 92**
What would you change about the school library if you had the chance? **Prompt: If the space of the library was empty how could you change it?**	Maybe more room… Maybe a water cooler [Yr 5] MS Cushions and giant couches and a chair like a hand [Yr 5] MS An area that reads to you with	Bigger … make it bigger [Yr 7] MS Computers for projects not games [Yr 7] MS More places where you can be quiet [Yr 7] MS

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Prompt: If you took everything out, what would you bring in to the library? Who do you think makes/has made the decisions about how the library will be?	ear-plugs [Yr 5] MS *They could change the colours, some of them are pink [cushions][Yr5] MS*	
	Transcript 84	**Transcript 93**
Who do you think makes/has made the decisions about how the library will be?		The teachers … but they don't build the library. The parents can build the deck out there. [Yr 7]MS
	Transcript 85	**Transcript 94**
What would you like to say to the [teachers and the architects and builders] people who make the decisions to tell them how you think about the library spaces?	Shelves should be low like these so young children can reach them [Yr 5] MS The temperature should be cooler and warmer [Yr 5] MS Good quality wooden shelves and furniture. [Yr 5]MS	Some parents made the cushions [Yr 7] MS The spaces should be big so that a lot of people can use the library at the one time [Yr 7] MS There should be different areas for different activities and rooms for small groups [Yr7] MS Like you need more computers and those whiteboards [Yr 7] MS

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