2011

Good practice report
Student transition into higher education

Trevor Gale, Deakin University
Stephen Parker, University of South Australia

Requests and inquiries concerning these rights should be addressed to:

Australian Learning and Teaching Council
PO Box 2375
Strawberry Hills NSW 2012
Australia

Street address:
Level 14, 300 Elizabeth Street
Surry Hills NSW 2010
Australia

Telephone: 02 8667 8500
Facsimile: 02 8667 8515
Web: www.altc.edu.au

ISBN 978-1-921856-84-6

2011

Contents

Overview

Student transition into higher education (HE) is of considerable interest in the current policy context of equity and expansion targets for student participation and attainment in HE, recently announced by the Australian Government (*Transforming Australia's Higher Education System* 2009).

This Good Practice Report reviews 19 completed projects (14) and fellowships (5) funded by the Australian Learning and Teaching Council (ALTC) between 2006 and 2010, and identified by the ALTC as contributing to an understanding of student transition into HE. Five current projects (3) and fellowships (2) are also identified and summarised although, given their in-progress status, they are not analysed in this Report.

The summaries identify and analyse the findings of, and resources for, teaching and learning in HE produced by the ALTC projects and fellowships, particularly in relation to student transition. (See Table 1 below for an overview.) To enable a reading across these, each project/fellowship is summarised in six sections: (1) overview; (2) design, methodology; (3) findings, resources, outcomes; (4) dissemination; (5) implications for student transition into higher education; and (6) project report online availability. Sections 3 and 5 are particularly pertinent to the interests of this Report.

The project/fellowship summaries are ordered in two broad groupings, according to their undergraduate and postgraduate (specifically, higher degree by research; HDR) focus. While the Report is primarily interested in the transition of students into undergraduate education, student transition into postgraduate education (from undergraduate or other education contexts) is significant enough to warrant its examination within a broader conception of student transition. As the HE sector becomes increasingly differentiated, with some universities downsizing their undergraduate enrolments and increasing their postgraduate enrolments, and as postgraduate qualifications increase in importance in the context of a global knowledge economy, student transition from undergraduate to postgraduate HE will become increasingly significant.

Within these undergraduate and postgraduate groupings, the project/fellowship summaries are arranged in overlapping themes. The undergraduate grouping includes projects focused on: supportive and enabling technologies; mathematics, statistics and the science and technology disciplines; issues of retention and cultural difference; and the first year student learning experience. The postgraduate grouping is also arranged in overlapping themes, including skills and criteria associated with: HDR student research, supervision and examination, in creative writing, creative and visual arts, law, technology, dance and in inter-disciplinary and trans-disciplinary fields.

Only two of these completed projects/fellowships (CG7-494 and Kift) claim explicit focus on issues of student transition into HE. Another (CG7-395) is closely related. As an explicit focus, student transition tends to be of interest primarily in undergraduate HE. In the order they appear in this Report, the undergraduate-focused projects/fellowships can be represented on a rough continuum from implicit interest to explicit interest in student transition.

Analysing the completed projects/fellowships as a collective, there are two interrelated observations regarding student transition into HE that have implications for teaching and learning. Echoing Colley's (2007) first two conceptions of transition, they represent the key outcomes for HE teaching and learning of the ALTC work

completed on the topic. The first draws attention to HE as a distinct cultural context, while the second draws attention to the academic capital that governs this context. Together they focus on what students transition *to* rather than what they transition *from* and are premised on the implied benefits of making the transition.

1. Higher education: recognised as a distinct cultural context

The distinctiveness of HE from schooling or other education contexts is implied in how the concept of student transition into HE (or from undergraduate to postgraduate HE) is understood in the projects/fellowships. That is, the difference in these contexts is seen to be sufficient enough for 'transition' to be an issue. Recognition of this contextual difference is evident in several of the completed projects/fellowships.

For example, Christine Bruce's fellowship notes a variety of education contexts and a variety of pedagogies applicable in these contexts, in part because different contexts have different purposes. Similarly, Project GI7-635 indicates that students' 'successful' transition into new education contexts is dependent on their prior knowledge; that is, the extent to which knowledge and ways of knowing in the new context is similar to knowledge and ways of knowing in the former context. The greater the distance between these, the more students question their academic ability and/or whether they belong in HE (Project CG7-395). While students might explain their transition 'problems' in these terms, the insight from Project CG7-507 is that this transitional distance – between one context and another – is often better explained in cultural terms.

2. Higher education: governed by a distinct cultural capital

French sociologist Pierre Bourdieu's (1988) explanation of these contextual differences is that HE values certain cultural and social resources over others, which are specific to and govern the HE field. Bourdieu names these resources as 'academic capital', a distinctive institutionalised form of cultural capital.

Several of the projects/fellowships acknowledge the importance of this academic capital in HE and the difficulties it poses for student transition. For example, Adams and Poronnik refer to students' knowledge deficits (specifically, the lack of academic capital) and what this means for accessing dominant knowledge (see also CG6-24). Project LE6-15 similarly refers to the perceived lack of adequate preparation by some students, which restricts their access to knowledge, and the need for a coordinated institutional response. For some projects, an appropriate response involves recognition that some forms of knowledge transmission (pedagogies) are discipline specific (CG6-20) and, to aid student transition, these pedagogies need to be explicit (GI7-631). Others (e.g. Kift, and Lister & Edwards) note the importance of keeping student transition in mind when designing curricula ("what counts as valid knowledge," Bernstein 2003: 85) and assessment ("what counts as valid realization of this knowledge," Bernstein 2003: 85). In short, the projects/fellowships highlight the importance of HE curricula, pedagogy and assessment – the three message systems of education (Bernstein 2003) – in the transition of students from a range of backgrounds to 'successful' futures (e.g. careers in science, see DS6-598).

Only a few projects/fellowships challenge the dominance of the prevailing academic capital. For example, Project CG7-494 observes that students' responses to pedagogies are culturally informed, while Project CG6-25 notes that students enter university with a diversity of knowledge stances. Even fewer take this recognition of difference to its logical conclusion, to argue for the recognition of alternative knowledges and knowledge forms (Mitchell) and for the creation of legitimate space within HE for these (including embodied knowledge) (PP6-45). These are matters that are taken up further in the literature review later in this Report.

Table 1: Key outcomes for teaching and learning from ALTC projects and fellowships related to Student Transition into HE

Project / Fellowship	Findings	Resources
Educating the Net Generation: implications for L&T in Australian universities (CG6-25)	Little evidence to support perception that Uni students are 'digital natives' or that Uni staff are 'digital immigrants'	<www.netgen.unimelb.ed.au> <www.groups.edna.edu.au/course/view.php?id=2005>
A new enabling technology for learning and teaching quantitative skills (CG6-24)		Software package to support L&T maths skills for students, educators and future contributors.
Quantitative diversity: disciplinary and cross-disciplinary mathematics and statistics support in Australian universities (LE6-15)		Report on learning support in maths and stats; symposium proceedings; good practice examples for learning support; national network & community of practice
Embedding quantitative principles in life science education, Professor Peter Adams and Professor Philip Poronnik (2006 ALTC Associate Fellows)	'Life science' primary area of student interest; level of maths knowledge for life science courses not beyond capabilities of students entering tertiary study	Lecture notes, examination paper example, and common assignment and project examples, available from <http://www.maths.uq.edu.au/~pa/ALTCfellowship/>
Re-conceptualising tertiary science education for the 21st century (DS6-598)	No systematic approach to or staff consensus on role of first year lab demo sessions; lab sessions don't take sufficient account of student backgrounds and futures.	Nine recommendations for action
Physclips: Multi-level, Multi-media resources for teaching first year university physics (CG6-20)		Learning materials and interactive multi-media tutorials to assist in teaching introductory physics available from <www.physclips.unsw.edu.au>
Teaching Novice Computer Programmers, Dr Raymond Lister and Professor Jenny Edwards (2007 ALTC Associate Fellows)		"How-to" manual; community of scholarly teaching; valid, reliable, gender neutral assessment; bank of teaching and assessing strategies; improved learning reading and writing computer code; repository of questions, reports, discussions, papers (see <http://community.usq.edu.au/login/index.php?id=71>)
The whole of university experience: retention, attrition, learning and personal support interventions during undergraduate business studies (CG7-395)	Factors contributing to students discontinuing study: 'lack of a clear reason for being at university' and feeling of having insufficient ability to succeed.	
Strategies and Approaches to T&L Cross Cultures (CG7-494)	Differences in cultural background lead to different expectations of lecturers, group work and study habits.	
Articulating a transition pedagogy to scaffold and to enhance the first year student learning experience in Australian higher education, Professor Sally Kift (2006 Senior Fellowship)	Six meta-findings, six recommendations for further development of FYE and transition, and six organising *First Year Curriculum Principles*	Case studies of good practice, expert commentaries, Curriculum Design DVD, check-lists and principles for transition pedagogy
Research Graduate Skills Project (GI7-635)	Eight *dimensions* of research graduate capability, and three *approaches* to their development.	Examples of university practices in developing HDR students' skills <www.gradskills.anu.edu.au>)
Australian Writing Programs Network (CG6-42)		Input into the establishment of creative writing research degree at Massey University (NZ); workshops on supervising creative writing research degrees.
Future-proofing the creative arts in higher education: scoping for quality in tertiary creative arts learning, teaching, and research training (DS7-624)	Increased understanding of Australian creative arts postgraduate context vis-à-vis international contexts.	Broad range of statistical data on the creative arts doctorate in Australia. <www.creativeartsphd.com>
Australian Law Postgraduate Network (LE6-03)		Online package including databases of expert supervisors and examiners by area of expertise, and discussion forum for supervisors. <www.alpn.edu.au>
Towards a pedagogy of supervision in the technology disciplines, Professor Christine Susan Bruce (2008 ALTC Teaching Fellow)		Pedagogical framework for supervision plus 'easy reading' version; Student Resources for Supervisor use; short case studies for discussion; four papers detailing methodological and conceptual issues and fellowship findings.
Development and evaluation of resources to enhance skills in higher degree research supervision in a cross-cultural context (CG7-507)	Cross-cultural difficulties that exacerbate student / supervisor relationships identified.	<http://www.mq.edu.au/ltc/altc/cross_cultural_supervision_project/>
Building research supervision and training across Australian universities (GI7-631)	Identifies changing context of research education, with implications for roles and responsibilities of supervisors.	<www.first.edu.au>
Zen and the art of transdisciplinary postgraduate studies: identifying, encouraging and evaluation quality, Associate Fellow Professor Cynthia Mitchell (2006 ALTC Associate Fellow)		Documents: *ID TD PG Quality Criteria* and *Ideas for Good Practice*; workshop resources for academic developers offering sessions for ID/TD supervisors; journal article and conference paper
Dancing between diversity and consistency: evaluating assessment in postgraduate studies in dance (PP6-45)		Issues papers; bibliography; database of Aust. dance theses. Definitions and guidelines for dance-specific variations to the Australian Council of DDoGS' publication on doctoral studies. Website <www.dancingbetweendiversity.com>.

Completed ALTC projects and fellowships

Educating the Net Generation: implications for learning and teaching in Australian universities (CG6-25)

1. Overview

The project aimed to explore and document how university students and teachers use existing and emerging technologies to support routine teaching and learning. Project period: 2006–2009.

2. Design, methodology

The project was undertaken in several stages: (1) *Investigation Stage*: including a literature review and an Experiences with Technology Questionnaire (a survey of students' and staff experiences with and preferences for a range of technologies); (2) *Qualitative Study*: involving a series of interviews and focus group sessions in which more detailed information about students' and staff views of technology were collected; (3) *Implementation Stage*: including seven Implementation Case Studies; (4) *Evaluation*; (5) *Dissemination*.

3. Findings, resources, outcomes

The project found that there is little evidence to support the perception that university students are 'digital natives' or that university staff are 'digital immigrants'. Both students and staff experience and utilise technology in a variety of ways. In particular, the technological experiences first-year university students bring to higher education are diverse.

4. Dissemination

Several documents were produced as part of this project, including: (1) *A Handbook of Findings for Practice and Policy*; and (2) a *Toolkit of Resources for Educators in Australian Universities.* In addition capacity building workshops were held, a website/forum was established for discussion, and 19 conference and invited seminar presentations were delivered. The project resources and publications are available to download from the project website (<www.netgen.unimelb.ed.au>). An online community has also been established, hosted by edna groups (<www.groups.edna.edu.au/course/view.php?id=2005>).

5. Implications for student transition into higher education

The project addressed issues of transition by acknowledging the diverse range of *knowledge stances* about computer technologies that students bring with them to university study ("the technological experiences first-year university students bring to higher education"). The implication is that preconceptions about students' knowledge stances need to be challenged and teaching staff need to engage with what it is that students bring to university rather than assuming that they all possess similar attributes (e.g. that they are 'digital natives').

6. Full project report available online

<http://www.altc.edu.au/project-educating-net-generation-melbourne-2006>

A new enabling technology for learning and teaching quantitative skills (CG6-24)

1. Overview

The project developed computer software to enhance the quantitative and mathematical skills of students transitioning into higher education (from upper-secondary and lower tertiary levels). Project period: 2006–2008.

2. Design, methodology

A driving principle behind this project was that mathematical skills are best attained through 'doing' rather than by observing others or through passive instruction. With this in mind, the project sought to enhance quantitative skills by developing a learning aid that would entail students undertaking a series of mathematical problems themselves with the aim of improving student skills and performance.

3. Findings, resources, outcomes

The project produced a software package designed to support learning and teaching mathematical and quantitative skills for three key groups: students, educators and future contributors. The software package includes 138 question templates, providing access to questions, answers and solutions to one or more questions of a specific type. Areas covered include: arithmetic; algebra; sigma notation; sets and probability; straight lines, graphs, distances, intersections and simultaneous equations; functions, domain, range, quadratics and trigonometric functions; logarithms and exponentials; derivatives and integration; matrices; introductory programming skills with Python; science (examples from biology, physics, chemistry); business and finance.

4. Dissemination

A document containing maths samples was made available online. In addition, project team members presented a paper at the 11th Annual International Conference on Education and Virtuality; an invited presentation at the Department of Applied Mathematics and Informatics in Donetsk National Technical University, Ukraine.

5. Implications for student transition into higher education

This project contributes to students' transition by providing them with increased access to *dominant forms of knowledge*, which they would otherwise lack. It achieved this through providing *discipline-specific* teaching and learning methods for mathematics students to redress what is perceived as their difficulty with the subject matter, to help them reach the standards required.

6. Full project report available online

<http://www.altc.edu.au/project-new-enabling-technology-learning-uq-2006>
<http://www.altc.edu.au/resource-new-enabling-tech-mathematics-uq-2008>

Quantitative diversity: disciplinary and cross-disciplinary mathematics and statistics support in Australian universities (LE6-15)

1. Overview

The Quantitative Diversity project focused on facilitating additional learning support for undergraduate students' development of their skills in mathematics and statistics. It aimed to do this by creating a community of practice and national network of support staff across all Australian universities covering all disciplines and professional programs. The project was premised on the belief that: (1) similar to literacy, numeracy is integral to understanding in all disciplines, (2) that such understanding is increasing in importance given advances in computer technologies, and (3) that the diversity of students' mathematical and statistical abilities is increasing, with many in need of extra support. Project period: 2006–2008.

2. Design, methodology

The project was designed in seven stages: (1) a series of reconnaissance visits to Australian and UK universities; (2) website analysis, phone call reconnaissance and a sector-wide survey; (3) a national symposium; (4) stakeholder engagement; (5) website creation; (6) cataloguing and audit of relevant resources; and (7) an analysis and synthesis of data generated by previous stages.

3. Findings, resources, outcomes

Project outcomes included: a dedicated website of catalogued resources; a report on the history, nature and provision of learning support in mathematics and statistics in Australia; proceedings of the national symposium; examples of good practice for learning support in mathematics and statistics; a national collaborative network and community of practice.

4. Dissemination

Project outcomes were disseminated at the national symposium, via the project's website <http://sky.scitech.qut.edu.au/~macgilli/carrick/> and directly to stakeholders.

5. Implications for student transition into higher education

The project seeks to contribute to students' transition into (and retention within) higher education – specifically culturally, linguistically and academically diverse students who require additional support in the development of their mathematical and statistical skills – by creating a community of mutual support for support staff. The project's contribution to understanding student transition is in identifying *the perceived lack of adequate preparation* experienced by some students and *the perceived lack of a coordinated approach to supporting students* in some knowledge areas.

6. Full project report available online

<www.altc.edu.au/project-quantitative-diversity-disciplinary-qut-2006>
<www.altc.edu.au/resource-quantitative-diversity-mathematics-qut-2008>

Embedding quantitative principles in life science education, Professor Peter Adams and Professor Philip Poronnik (2006 ALTC Associate Fellows)
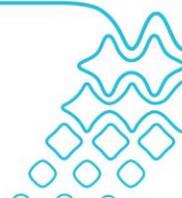
1. Overview

In response to declining numbers of HE students undertaking studies in enabling sciences such as mathematics, the fellowship sought to identify: (1) the level of mathematical knowledge required in introductory life science courses; (2) any perceived 'deficiencies in knowledge and skills of commencing students'; and (3) to design teaching and learning principles to address these shortcomings. The Fellowship aspired to increasing the quantitative skills and knowledge of students entering the life sciences and assist with student achievement. Fellowship period: 2006–2009.

2. Design, methodology

The fellowship was divided into two main activity groups. The first involved *identification*: of the necessary quantitative and mathematical skills required for life science students to succeed and to measure their current general mathematical skill level; and of the areas that students find problematic and why this might be the case. The second group of activities involved: the design and implementation of teaching and learning frameworks that present relevant material in an accessible and timely manner; and using the developed materials and techniques in one or more introductory large enrolment life science courses. Feedback and measurement of the effectiveness of project outcome was also included.

3. Findings, resources, outcomes

The fellowship findings revealed that the majority of students surveyed, identified 'life science' as their primary area of interest, while most believed that mathematics was important or very important. The study found that the level of mathematical knowledge for life science courses is unclear, but "certainly should not be beyond the capabilities of students entering tertiary study having completed intermediate level mathematics to the final year of secondary school". The project produced a number of resources including: course lecture notes, an examination paper example, and common assignment and project examples, which are all available from <http://www.maths.uq.edu.au/~pa/ALTCfellowship/>.

4. Dissemination

Dissemination of the research findings included several journal publications (for example, a paper published in *Journal of Science Education and Technology* in 2008) and conference presentations.

5. Implications for student transition into higher education

The Fellowship contributes to knowledge about transition to the extent that it recognises that some first-year students lack the required quantitative skills for the higher education context, which would aid their transition.

6. Full fellowship report available online

<http://www.altc.edu.au/altc-associate-fellow-peter-adams>
<http://www.altc.edu.au/resource-embedding-quantitative-principles-life-science-education-uq-2010>

Re-conceptualising tertiary science education for the 21st century (DS6-598)

1. Overview

The project was motivated by a significant drop (of about one-third to a half over 20 years) in the proportion of university students studying mathematics, physics and chemistry. In particular, the project focused on first year science courses with a laboratory demonstration component, and the challenges that students face when studying this subject matter. Project period: 2006–2009.

2. Design, methodology

The project employed a 'grounded research' approach to illuminate the challenges faced by first year science students. This was undertaken by conducting 83 semi-structured interviews with staff (heads of department or unit responsible for teaching in the discipline, subject coordinators, laboratory demonstrators, technical support staff) and students.

3. Findings, resources, outcomes

Data from the interviews revealed that there was no clear or systematic approach to first year lab demonstration sessions. Among staff there was no consensus on the role of labs for first-years, nor did lab sessions take sufficient account of "the diversity of student backgrounds and futures". Further findings included: the mismatch between staff assumptions about students' desired future study and careers in science and what students actually aspired to; and the disconnect between lab demonstrations and lecture material. Nine recommendations for action were also developed out of the research findings.

4. Dissemination

The project leaders presented their findings at an unspecified number of ALTC events between 2006 and 2008. Findings were also reported at the Associate Deans Teaching and Learning (ADT&Ls) national conference in June 2008.

5. Implications for student transition into higher education

This project sought to improve student transition to HE by addressing teaching and learning practices. Specifically, it achieved this by addressing the *diversity* of first year students who bring to university a range of *prior learning backgrounds* and different aspirations for further study and career in science. The Project also sought to improve student learning in other areas – such as a closer alignment between lab sessions and lecture content – in order to enhance transition to HE study of science subjects.

6. Full fellowship report available online

<http://www.altc.edu.au/project-reconceptualising-tertiary-science-uc-2006>

Physclips: Multi-level, Multi-media resources for teaching first year university physics (CG6-20)

1. Overview

The inferred aim of this project was to aid in the teaching and success of introductory physics programs; specifically mechanics and electromagnetism. Project period: 2006–2007.

2. Design, methodology

Apart from a literature review, no specific research design, methodology or project plans were stated.

3. Findings, resources, outcomes

The main deliverable for this project was the implementation of the website itself <www.physclips.unsw.edu.au>. The site makes available a set of learning materials and interactive multi-media tutorials to assist in teaching introductory physics.

4. Dissemination

The project report (2007) indicates that the website received more than 1000 unique visitors per day in its first teaching period, with each visitor typically downloading 20 files. Overall there were typically 30,000 hits per day. The website continues beyond the end of the project.

5. Implications for student transition into higher education

The project contributes to student transition through the development of *discipline-specific* pedagogies for aiding students' engagement with physics. The resources developed by this project were intended to aid students' transition to physics programs in HE by improving student performance and hence success and retention rates.

6. Full project report available online

<http://www.altc.edu.au/project-physclips-multilevel-multimedia-unsw-2006>

Teaching Novice Computer Programmers, Dr Raymond Lister and Professor Jenny Edwards (2007 ALTC Associate Fellows)

1. Overview

The fellowship was undertaken in response to falling enrolment rates in Information and Communication Technology (ICT) courses and poor retention to further ICT study. This trend was attributed to poor instruction of introductory subjects and student disenchantment with the subject. The aim of the fellowship was to improve the teaching and learning of computer programming through systematic analysis of end-of-semester exams in order to formulate ideas on where the problems lay for novice programmers. Exam questions were then devised to test these ideas and assess if they addressed the perceived shortcomings of the teaching and learning of computer programming. Fellowship period: 2007–2009.

2. Design, methodology

The fellowship employed action research techniques to systematically collect evidence from end-of-semester exams, with the aim of subsequently improving the teaching of computer programming.

3. Findings, resources, outcomes

Ongoing and achieved outcomes include: (1) a repository of questions, reports, discussions, papers (see <http://community.usq.edu.au/login/index.php?id=71>); (2) an instructional 'how-to' manual for running similar multi-institutional collaborative projects in any discipline; (3) the development of a community of scholarly teaching, built across institutions to help share resources among IT academics; (4) the development of valid, reliable and gender neutral assessment strategies for novice programmers; (5) the creation of a bank of appropriate material for teaching and assessing novice programmers; and (6) improved learning of both reading and writing computer code by novice programmers.

4. Dissemination

Dissemination of fellowship findings include: 16 published papers authored and co-authored by 26 project participants; a set of end of semester exam questions that has been adopted by 14 universities across seven countries; and workshops.

5. Implications for student transition into higher education

The fellowship employed *discipline-specific* teaching and learning methods and *assessment* techniques to improve student performance in ICT subjects, as a way of enhancing students' transition into these subjects in the earlier stages of their degrees.

6. Full fellowship report available online

<http://www.altc.edu.au/altc-associate-fellow-jenny-edwards>
<http://www.altc.edu.au/resource-teaching-novice-computer-programmers-bringing-scholarly-approach-australia-report-bracelet->

The whole of university experience: retention, attrition, learning and personal support interventions during undergraduate business studies (CG7-395)

1. Overview

The Whole of University Experience (WUE) project focused on student retention (and attrition) across all three years of undergraduate business degrees. It sought to identify the factors that lead to business students withdrawing from study and the learning and support services that facilitate their decisions to remain at university. The project also explored how the effectiveness of these services could be increased. In particular, it aimed to generate knowledge about effective teaching and learning practices and share these with the Faculties of Business of each of the participating universities. Project period: 2007–2010.

2. Design, methodology

Data for the project were derived from: (1) a literature review; (2) focus groups; (3) trial questionnaires and principal component analysis, which helped to formulate: (4) the WUE Questionnaire.

3. Findings, resources, outcomes

The most generalisable factors identified by the project as contributing to students' discontinuing their study were their 'lack of a clear reason for being at university' and the feeling of having insufficient ability to succeed. Other contributing factors were institution-specific and not generalisable.

4. Dissemination

Dissemination of the research findings included: five journal articles; nine conference papers; an article published in *Campus Review* in mid-2010; presentations to Associate Deans (Teaching and Learning) in the participating Faculties of Business and to education librarians; workshops for business faculty staff in Victoria and Western Australia; internal dissemination of findings for partner institutions; and a 'Whole of University Experience' group established on the ALTC exchange (<www.altcexchange.edu.au/group/whole-university-experience-retention-and-attrition-first-year-and-beyond>).

5. Implications for student transition into higher education

While this project addresses issues relating to student retention across the three years of a bachelor degree, there are some implications for student transition. As noted above, the main reasons for students deciding to discontinue their study were a lack of clear focus and the sense that they were not capable of meeting requirements. The implication is that institutions need to be cognisant of the diverse backgrounds and aspirations of students and seek to engage with that diversity to encourage students to continue their studies.

6. Full project report available online

<www.altc.edu.au/project-whole-university-experience-usc-2007>

Strategies and Approaches to Teaching and Learning Cross Cultures (CG7-494)

1. Overview

The project sought to identify the influence on teaching and learning approaches in an Australian educational environment of increasing numbers of international students. Specifically, it aimed to improve understanding of Asian students' cultural backgrounds, their previous learning approaches and their perspectives on Australian culture and modes of education. Project period: 2007–2009.

2. Design, methodology

The research consisted of: (1) a literature review; (2) factor analysis for issues in cross-cultural teaching and learning; (3) a student questionnaire, administered to 1026 IT and business students at five universities (640 international students of Asian background and 386 students from Australia or other 'western' countries); (4) interviews with staff and students (both international and local); (5) data analysis; (6) evaluation; (7) completion of guidelines and final report; (8) communication and dissemination of results.

3. Findings, resources, outcomes

The project found that differences in cultural background between international students of Asian background and domestic students led to significant cross-cultural learning difficulties. These included: differences in teaching methods with different expectations of the appropriate levels of interaction and discussion in lectures/tutorials; a greater emphasis on rote learning by Asian students than on group work, collaboration and critical thinking; difficulties with the English language which limits communication and interaction in classes, the ability to take effective notes, group work, homework and comprehending text books.

4. Dissemination

The project produced several support documents to aid staff, students and institutions: *Guidelines for Australian Universities and Lecturers* (including: pre-study preparation; assisting students cope with 'culture shock'; enhancing teaching and learning during study; fostering learning after completion of studies); and *Guidelines for International Students of Asian Background Studying in Australian Universities* (focussing on students' preparation before arrival in Australia; adjusting to student-centred learning styles; in classroom study skills; assignment and group work). The findings of the project were also presented at eight conferences between January 2009 and April 2010.

5. Implications for student transition into higher education

The project recognises that international students come from different *cultural contexts* and bring with them a range of expectations about teaching and learning that are often in tension with existing practices with Australian universities. The project aimed to reduce this tension by providing international students with ways in which they can access dominant forms of teaching and learning practice.

6. Full project report available online

<http://www.altc.edu.au/project-strategies-approaches-teaching-uts-2007>
<http://www.altc.edu.au/resource-strategies-and-approaches-teaching-and-learning-cross-cultures-uts-2010>

Articulating a transition pedagogy to scaffold and to enhance the first year student learning experience in Australian higher education, Professor Sally Kift (2006 Senior Fellowship)

1. Overview

The fellowship aimed to improve the transition to higher education for first year students. It concluded that an integrated, institution-wide approach to student transition and first year experience (FYE) is needed for it to be effective. The project articulated a 'transition pedagogy' to support first year students as they adapt to the expectations of university education. Specifically, it developed 'second generation' first year experience (FYE) strategies focused on student learning, support, success, and retention. Principles were also developed emphasising whole-of-institution transformation. Fellowship period: 2006–2009.

2. Design, methodology

The fellowship was divided into several stages, including: (1) assembling a fellowship collaborative team; (2) creation of a group on the ALTC Exchange to facilitate discussion and communication (<www.altcexchange.edu.au/first-year-experience-and-curriculum-design>); (3) appointment of research and other support staff; (4) development of the case study protocol and the initial iteration of the *First Year Curriculum Principles*; (5) collection of first year curriculum case study data; (6) development of 'expert commentaries' on case study data; (7) convening a 'Fellowship Expert Seminar' (July 2008); (8) an additional sector-wide FYE Curriculum Design Symposium (February 2009); and (9) ongoing dissemination and evaluation.

3. Findings, resources, outcomes

The fellowship produced a range of resources including: case studies of good practice, expert commentaries, production of a Curriculum Design DVD, check-lists and principles for transition pedagogy. It developed six meta-findings, six recommendations for further development of FYE and transition, and six organising *First Year Curriculum Principles*.

4. Dissemination

Findings of the research were presented at conferences and seminars with more than 150 individual presentations to over 6000 academic and professional staff, in 21 Australian universities and six universities overseas, at 22 national conferences/ forums and at three international conferences.

5. Implications for student transition into higher education

This fellowship contributes to student transitions through the intentional targeting of embedded first year curriculum and pedagogy, writ large across disciplines and institutions. It recognises that there is a *diversity* of students who come to university with a broad range of skills, *knowledges* and *values,* which often contrast with that of institutions. The fellowship draws attention to the ways in which *curriculum is designed* to engage with students and assist them in their transition to university culture.

6. Full fellowship report available online

<http://www.altc.edu.au/altc-senior-fellow-sally-kift>
<http://www.altc.edu.au/resource-first-year-learning-experience-kift-2009>

Research Graduate Skills Project (GI7-635)

1. Overview

The project sought to identify the requisite skills for higher degree by research (HDR) candidature and contemporary approaches to the development of HDR students' academic skills and professional attributes. It was undertaken in a context of increased diversity in the HDR population, increased pressure for timely completions and increased concern expressed by employers (government, industry groups, etc.) about the underdeveloped employability skills of HDR graduates. Project period: 2007–2009.

2. Design, methodology

The project was undertaken in two stages: (1) a literature review of skills development in higher education and a mapping of university websites to identify initiatives targeting HDR students skill development; and (2) a case study of one Australian university, involving interviews with nine senior staff with responsibility for HDR student skills development.

3. Findings, resources, outcomes

The project produced a theoretical understanding of HDR student skills and a website (<www.gradskills.anu.edu.au>) detailing the variety and examples of university practices in developing HDR students' skills, including 'what is' and 'what could be'. The project identified eight *dimensions* of research graduate capability (inquiring, analysing, producing, communicating, teaching, managing, thinking, interacting) and three *approaches* to their development (training, scaffolding, performance).

4. Dissemination

Findings from the project have been disseminated via the project's website, six conference presentations, one submitted journal article and two reports to the ALTC.

5. Implications for student transition into higher education

The project's contribution to supporting students' transition into higher education (including transition into postgraduate studies) is in its regard for *what students bring to new contexts* ("the skills that candidates possess") and *an appreciation for the differences between contexts* ("developing the concept of contextualized performance").

6. Full project report available online

<www.altc.edu.au/project-research-skill-development-questions-anu-2007>
<www.altc.edu.au/resource-research-skill-development-questions-anu-2009>
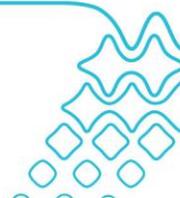
Australian Writing Programs Network (CG6-42)

1. Overview

The Australian Writing Programs Network (AWPN) project focused on building and maintaining an interactive website (<www.writingnetwork.edu.au>) to assist Australian research students and their supervisors in the field of creative writing research. The website has three main design elements: a discussion forum; a searchable database of relevant knowledge; and a site for online training. Through the website and its various components, the project sought to establish a support network among research students and supervisors in their transition into a creative writing research culture. The website continues to operate post project. Project period: January 2007 – August 2008.

2. Design, methodology

The project was undertaken in three stages: (1) research into the potential user community (its needs, abilities, aspirations); (2) incremental building and testing of the website, with trials leading to the incorporation of additional elements; and (3) refining and completion of the website, including online workshops, community-building activities and publications about the Writing Network.

3. Findings, resources, outcomes

Findings and outcomes from the AWPN project include: identification of experts in the field, including an examiners' database; identification of past and current creative writing research students; input into the establishment of a new creative writing research degree at Massey University (New Zealand); interaction between supervisors about supervisory 'best practice'; and workshops on supervising creative writing research degrees.

4. Dissemination

The website itself acts as a means for disseminating the project's findings and outcomes, providing both access to resources and opportunity to engage online with others about the AWPN and its findings. Other ways in which the project's findings were disseminated include: distribution of the final report to Australian universities; distribution of promotional brochures to potential creative writing research students; one book chapter; 12 conference paper presentations; 12 planned conference and seminar presentations. Details of these can be found on the website.

5. Implications for student transition into higher education

The AWPN project sought to contribute to the transition of the discipline into a field of research. Creative writing research degrees are a recent addition to the discipline and to the Australian higher education sector in particular, and the difficulties faced in their introduction include the absence of relevant supervision expertise. Current supervisors tend to have expertise in creativity or have research expertise in cognate areas but they rarely have expertise in both. The website assists supervisors and their students in their *transition into a research culture*, in the context of a research higher degree in creative writing.

6. Full project report available online

<www.altc.edu.au/project-australian-writing-programs-network-uc-2006>
<www.altc.edu.au/resource-australian-writing-programs-network-uc-2008>

Future-proofing the creative arts in higher education: scoping for quality in tertiary creative arts learning, teaching, and research training (DS7-624)

1. Overview

The project aimed to increase understanding of PhD and professional doctorate programs in the creative and visual arts. In particular, it focused on thesis submission models, the benchmarking of standards of "high quality" supervision practices, training in research practices, thesis examination and student outcomes. Project period: 2007–2009.

2. Design, methodology

There were four main phases of research for this project: (1) a survey of documents from both Australian universities and DEEWR relating to admission guidelines, program handbooks, and datasets of enrolment statistics; (2) 20 interviews with creative arts research degree coordinators, supervisors and examiners; (3) four focus groups with current doctoral students, recent graduates and supervisors; and (4) roundtable consultations with stakeholders (including postgraduate coordinators and representatives from related disciplines).

3. Findings, resources, outcomes

Findings include: linkages between this project and other ALTC projects; the augmentation of the understanding of Australian creative arts postgraduate context with the experience of international contexts; a broad range of statistical data on the creative arts doctorate in Australia, including enrolment rate, student load, current admissions procedures, student progress, course structure, examination procedures and assessment practices.

4. Dissemination

Dissemination of the research findings included eight conference presentations (four of which were anticipated at the time the project report was written, 2009); a project website (<www.creativeartsphd.com>); a discussion list to promote ongoing dialogue on the issue and to share resources; distribution of the Project Report; and a "significant presence" at the Australian Council of University Art and Design Schools (ACUADS) 2009 Conference.

5. Implications for student transition into higher education

The project sought to contribute to the transition of the discipline into a field of research, and to assist supervisors and their students in their *transition into a research culture*.

6. Full project report available online

<www.creativeartsphd.com>
<www.altc.edu.au/project-futureproofing-creative-arts-melbourne-2007>
<www.altc.edu.au/resource-future-proofing-creative-arts-melbourne-2009>
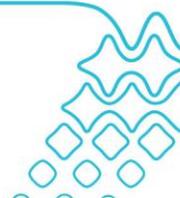
Australian Law Postgraduate Network (LE6-03)

1. Overview

The project aimed to improve the supervision of research students in faculties of law in Australian universities, including improving supervisors' and research students' knowledge and exposure to a range of research methodologies. The project emphasised collaboration between universities (its research leaders, supervisors and students) via a website (<www.alpn.edu.au>) as a way of facilitating this improvement. The project was undertaken in a context of very low enrolment in research degrees by law students, related to the lack of available and suitably qualified supervisors and examiners, and the intellectual isolation of law research students from the academy and each other. Project period: 2006–2008.

2. Design, methodology

The project was designed in two stages involving: (1) the development of a website devoted to the supervision of law research students; and (2) the addition to the website of interactive resources and tools for supervisors and research students.

3. Findings, resources, outcomes

Outcomes from the project include: an online supervision training package; online databases of expert supervisors and examiners by area of expertise; a listing of past and current PhDs in the field; a listing of visiting scholars and their contact details; a research bulletin for law supervisors and students, published quarterly online; and an online discussion forum for supervisors.

4. Dissemination

Dissemination of the project's resources was made possible via the project website. The project also produced a range of conference papers, presentations and a refereed journal article.

5. Implications for student transition into higher education

The project sought to contribute to the transition of the discipline into a research culture. The website was primarily aimed at assisting supervisors but it also supported their students in their *transition into this culture*.

6. Full project report available online

<www.altc.edu.au/project-australian-law-postgraduate-network-une-2006>
<www.altc.edu.au/resource-website-development-legal-postgradute-une-2008>

Towards a pedagogy of supervision in the technology disciplines, Professor Christine Bruce (2008 ALTC Teaching Fellow)

1. Overview

The fellowship focused on pedagogies of higher degree research (HDR) supervision in the technology disciplines, in one Australian university (QUT). It was premised on a belief in supervision as an exercise in teaching and learning rather than a research exercise and as a site for research education rather than research training. Fellowship period: 2008–2009.

2. Design, methodology

The fellowship's approach was informed by a constructivist understanding of knowledge and a developmental phenomenographic approach to its generation. The fellowship was undertaken in three phases: (1) exploratory conversations: 22 interviews and two workshops with technology discipline supervisors, focused on the teaching and learning of supervision; (2) development of a pedagogical framework for technology discipline supervision, based on analysis of interview and workshop data and tested in seminar conversations and with stakeholders; and (3) raising awareness of the framework, through seminars, workshops and conversations.

3. Findings, resources, outcomes

The fellowship produced four main resources: (1) *Resource for Supervisors*; an "easy reading" version of the pedagogical framework for technology discipline supervision; (2) *Student Resources for the use of Supervisors*; a simplified version of (1) with materials for supervisors to use with students; (3) 44 themed, short case studies or vignettes, to stimulate discussion among supervisors; and (4) four papers: two that detail methodological and conceptual aspects of the fellowship and two that detail its findings, including a framework of nine pedagogies of supervision in the technology disciplines.

4. Dissemination

Dissemination of the fellowship's findings, resources, outcomes focused on supervisors, research students and senior administrators in Queensland University of Technology Faculties of Built Environment, Engineering, and Science and Technology. Dissemination was via: (1) staff development seminars for supervisors; (2) a research student workshop; (3) future program discussions with Deans, Assistant Deans and the Dean of Graduate Studies; and (4) a South East Queensland meeting of ALTC Citation and Teaching Excellence award winners in the technology disciplines.

5. Implications for student transition into higher education

The fellowship contributes to understandings of student transition into higher education in its recognition that teaching and learning extends beyond formal classrooms and that a variety of pedagogies are appropriate in higher education, in response to *different contexts and purposes*.

6. Full fellowship report available online

<www.altc.edu.au/altc-teaching-fellow-christine-bruce>
<www.altc.edu.au/resource-towards-pedagogy-supervision-qut-2009>

Development and evaluation of resources to enhance skills in higher degree research supervision in a cross-cultural context (CG7-507)

1. Overview

This project focussed on the supervision of international HDR students, and cross-cultural issues that emerge through supervisory practices. It addressed this issue from the point of view of both supervisor and candidate, and from the perspective of what institutions can do to support candidates. It also responded to a paucity of relevant recent literature on the subject. Project period: 2007–2010.

2. Design, methodology

The project was conducted in four main phases: (1) a planning phase, including ethics approval, research design, and the reference group; (2) a research phase including a literature review, data collection (which involved semi-structured interviews and focus groups with HDR candidates and supervisors), and data analysis; (3) a development phase involving content development, design and technical development; and (4) evaluation.

3. Findings, resources, outcomes

The project found that in cross-cultural contexts, specific factors increase or intensify the complexity of supervision of HDR students. These include: a student's or supervisor's separation from support networks and familiar social and cultural settings; language issues that contribute to difficulties with both written and oral communication; time and financial pressures associated with visa limitations; unfamiliarity with Australian academic and social norms.

4. Dissemination

This project produced a range of resources designed to support postgraduate research supervisors and candidates in cross-cultural supervisory relationships. These include: five presentations at international conferences; seven presentations at other seminars; multi-media resources that address current cross-cultural issues; resources to assist in group training of supervisors and candidates and for guided self-reflection for individuals; an annotated bibliography of relevant literature and scholarly publications; resources to assist university faculties and departments assess their strengths and increased understanding of relevant current cross-cultural issues for PhD candidates. These resources are available from: <www.altcexchange.edu.au/group/cross-cultural-supervision-project>

5. Implications for student transition into higher education

This project aids understanding of transition to higher degree study in a variety of contexts and for students and staff of diverse cultural backgrounds. It draws attention to the *cultural context* of universities. The different values, knowledges and practices that international students or overseas scholars bring to Australian universities, focus attention on the need to appreciate *context* in HE.

6. Full project report available online

<http://www.altc.edu.au/project-development-evaluation-resources-macquarie-2007>
<http://www.altc.edu.au/resource-development-and-evaluation-resources-enhance-skills-higher-degree-research-supervision-inte>

Building research supervision and training across Australian universities (GI7-631)

1. Overview

Focused on Australian and New Zealand universities, the project sought to identify existing training for supervisors of higher degree by research (HDR) students and to identify these supervisors' current and future training needs. The project was undertaken in a context of heightened attention on supervision quality (influenced by the international student market) and the increasing importance of research graduates, given government and corporate ambitions to be more competitive in the global knowledge economy. Project period: 2007–2010.

2. Design, methodology

The project was undertaken in two stages: (1) a symposium of experts in the field of HDR supervision; and (2) a scoping study (involving an online survey and interviews with key research leaders, coordinators and supervisors) identifying current research education programs, practices and priorities, and perceived future needs.

3. Findings, resources, outcomes

Findings from the project highlighted the changing context of research education, with implications for the roles and responsibilities of supervisors and their training. The project named these implications for four key areas: professionalisation and formalisation of research education; growth and diversity in research education; changes for supervision practices; and changes for supervision development.

4. Dissemination

Findings from the project were disseminated: (1) through reports directly to project participants and to institutions, benchmarking each institution's survey data against the sector as a whole; (2) online, with reports lodged at <www.first.edu.au>; (3) through presentations at two conferences; and (4) through presentations to peak bodies in the field (the Australian Council of Deans and Directors of Graduate Studies, and the Doctoral Research Education Network).

5. Implications for student transition into higher education

The project highlights the importance of supervision in relation to research students' success, particularly in its focus on "changes for supervision practices". Significant for students' transition are references (albeit oblique) to supervision *pedagogies that are transparent, visible and explicit*.

6. Full project report available online

<www.altc.edu.au/project-building-research-supervision-uts-2007>
<www.altc.edu.au/resource-building-research-supervision-and-training-across-australian-universities-uts-2010>

Zen and the art of transdisciplinary postgraduate studies: identifying, encouraging and evaluation quality Associate Fellow Professor Cynthia Mitchell (2006 ALTC Associate Fellow)

1. Overview

The fellowship sought to identify formative practices and summative criteria that could be used to assess the quality of research outputs of students engaged in inter-disciplinary (ID) and trans-disciplinary (TD) research. The fellowship was undertaken in a context of increasingly complex and interrelated social problems that require drawing on a variety of disciplines, theories and methodologies, often with different understandings of the social world. The practices and criteria were developed to inform the work of supervisors and their students and examiners. Fellowship period: 2006–2009.

2. Design, methodology

The fellowship was guided by a collaborative orientation to action research that was undertaken in three stages: (1) the distillation of criteria from the international research literature and from current practice; (2) co-creation of summative criteria and formative practices; and (3) development and trial of guidance materials.

3. Findings, resources, outcomes

Outcomes of the fellowship included: (1) a document (*ID TD PG Quality Criteria*) detailing seven summative quality criteria of ID and TD research; (2) a document (*Ideas for Good Practice*) of 50 ideas for good practice to guide supervision of ID and TD student research; (3) workshop resources for academic developers offering sessions for ID/TD supervisors; and (4) one journal article and one conference paper.

4. Dissemination

The fellowship's action research approach facilitated the dissemination of its findings and outcomes, at the point of their development and via participants involved in the process. This included workshops and presentations at various institutions and to the Deans and Directors of Graduate Schools (DDoGS) who also received the fellowship documents (*ID TD PG Quality Criteria* and *Ideas for Good Practice*) and the workshop resources.

5. Implications for student transition into higher education

The value of the fellowship for student transition into higher education is in the challenge to the dominance and exclusivity of traditional knowledge structures and content in higher education: that is, the *recognition of different knowledge parameters* and the *legitimation of different forms of knowledge*.

6. Full fellowship report available online

<www.altc.edu.au/altc-associate-fellow-cynthia-mitchell>
<www.altc.edu.au/resource-transdisciplinary-postgraduate-studies-uts-2009>

Dancing between diversity and consistency: evaluating assessment in postgraduate studies in dance (PP6-45)

1. Overview

The Dancing between diversity and consistency project was aimed at developing disciplinary-specific guidelines for the examination of masters and doctoral theses (both written and multi-modal) in dance. It was undertaken in a context of the difficulties of assessing embodied knowledge ("danced thought") within the conventions of higher education and the inadequacy of criteria provided to examiners of dance theses to enable them to do so. In developing new examination guidelines, the project sought to achieve a balance between diversity and consistency. Project period: 2007–2008.

2. Design, methodology

The project was executed in two stages: (1) preliminary workshops with key experts in the field; (2) semi-structured interviews with 40 examiners, seven deans and directors, three administrators and 32 HDR students and graduates in dance and related creative arts disciplines.

3. Findings, resources, outcomes

The project produced: fundamental definitions and guidelines for dance-specific variations to the Australian Council of Deans and Directors of Graduate Studies' publication on doctoral studies; papers on issues encountered in the research; a bibliography for future research in the area; and a database of Australian dance theses.

4. Dissemination

Findings from the project were disseminated in three main ways, via: (1) a website (<www.dancingbetweendiversity.com>) including: guidelines for examining dance research theses, discussion papers addressing various topics in more detail, the full project report, a bibliography, a database of completed dance theses, and exemplar video clips to stimulate discussion on the documentation of thesis practice components; (2) a printed booklet containing documentation from the website in abbreviated form, including the guidelines; and (3) conference papers and journal articles that analyse the data generated by the project.

5. Implications for student transition into higher education

The value of the project to student transition into higher education is its regard for diversity and consistency: that is, how *alternative knowledge forms* can be translated into higher education; specifically, how *embodied knowledge* can be recognised within existing conventions of higher education.

6. Full project report available online

<www.altc.edu.au/project-dancing-between-diversity-ecu-2006>
<www.altc.edu.au/resource-dancing-between-diversity-consistency-ecu-2009>

Current ALTC projects and fellowships

A collaborative multi-faceted approach to address the gaps between student expectation and experience at university (CG9-1158)

The project tracks students as they progress through their transition (i.e. first) year in HE, and compares university entrance scores with student expectations, experiences, grades, transfers, and attrition rates. The creation of an interactive university expectations and experiences website, school visits by both academic and professional staff, and possible changes to university activities, is intended to help disseminate the findings of this work to "the people who need it most": potential and commencing university students. See: <http://www.altc.edu.au/project-gaps-between-student-expectation-and-experience-adelaide-2009>

Strengthening alignment between secondary and tertiary biology education and enhancing student transitions in the sciences (PP10-1816)

The project aims to align the biology curriculums offered in secondary schools and universities, with the intention of improving the opportunities for success in higher education among entry level students with diverse backgrounds. The project intends to foster dialogue between the two sectors, and develop a collaborative network that will inform curriculum development to address the immediate needs arising from the national curriculum. It is hoped that an interactive website that promotes constant dialogue and refinement will help maintain consistency of educational standards. See: <http://www.altc.edu.au/project-strengthening-alignment-between-secondary-and-tertiary-biology-education-and-enhancing-stude>

Thriving in transition (SP10-1828)

The project addresses the characteristics and processes of successful transition for rural and remotely located students planning a career as a health care professional. It seeks to contribute to understanding of the pathways and trajectories appropriate to challenging circumstances and produce guidelines and training to assist with both the nature and timing of interventions to provide students with the best opportunity to thrive. See: <http://www.altc.edu.au/project-thriving-transition-2010>

Supporting student transition to a futures-oriented professional identity, Professor Ieva Stupans (2009 ALTC Teaching Fellow)

The fellowship aims to develop curriculum initiatives around professionalism, lifelong learning and leadership skills. The work is situated within a discipline context (of pharmacy) but intends to develop a framework for staged achievement which can be adapted to other allied health and nursing programs. Fellowship activities will include seeking views of industry, academics and students, forums, mapping of curriculum, collaborative development of teaching strategies and interstate workshop-style dissemination, with the intent that a national context for the program is developed. See: <http://www.altc.edu.au/altc-teaching-fellow-ieva-stupans>

Practical leadership for developing and sustaining first-year learning environments that facilitate the success of a diverse student population, Professor Keithia Wilson (2010 ALTC National Teaching Fellow)

The fellowship aims to develop, document and disseminate an integrated whole-of-school approach to supporting the transition and success of diverse commencing student cohorts across their first year of study. It emphasises co-curricular and curricular strategies, and local contexts and cohorts, and intends to document the leadership capabilities, facilitation skills and conceptual frameworks required by staff to implement its "systems approach" to the first year experience. See: <http://www.altc.edu.au/altc-national-teaching-fellow-keithia-wilson>

Literature review of Student Transition into Higher Education

Student transition (change navigated by students in their movement through formal education) has a long history of examination in the international research literature (Ecclestone, Biesta & Hughes 2010), dating back at least to the introduction of compulsory primary schooling and which gathered importance as increasing numbers of students made the transition from primary to secondary school. As an object of research, student transition into higher education (HE) has similarly grown as more and a greater proportion of people have taken up university study.

Student transition studies are part of a broader research endeavour focused on life transitions, although this broader field remains dominated by an interest in student transition (Ingram, Field & Gallacher 2009). This dominance has increased with the growing importance of lifelong learning in late modernity (Field 2010; Giddens 1990; Bauman 2001). Further, most of the life transition research is concentrated on children and youth. Hence:

> when it comes to adult life, research on transitions is still relatively underdeveloped. There is a comparatively mature literature on transitions among young people, and particularly on the transition from youth to adulthood and from school to work … [Of the limited research focused on adult transitions] by far the largest body of work has concerned movement into higher education. (Ingram et al. 2009: 3-4)

One reason for this emphasis on HE in adult transition research is the most recent wave of HE expansion in OECD nations, aimed at shifting HE systems from mass (16 per cent to 50 per cent) to universal (50+ per cent) participation (Trow 1974; 2006). The Bradley *Review of Australian Higher Education* (Bradley, Noonan, Nugent & Scales 2008) and the Australian Government's targeted response (*Transforming Australia's Higher Education System* 2009) is just one example of this aspirational expansion, delivering more and different kinds of students into university. Others include but are not restricted to HE expansion agendas in the UK (target: 50 per cent of 30 year olds with a degree by 2010; Quinn 2010), in Ireland (target: 72 per cent of 17-19 year olds participating in HE by 2020; Bradley et al. 2008: 20) and in the USA (target: 60 per cent of 25 to 34 to hold college degrees by 2020; Kelly 2010: 2).

This policy imperative to enrol increased numbers of HE students from diverse backgrounds and have them graduate and contribute to a global knowledge economy, has also drawn attention to the need to improve student engagement and retention (for example, see the Australian Government's Indicator Framework for Higher Education Performance Funding; DEEWR 2009). That is, student transition into HE has expanded beyond its traditional focus on access (see Belyakov, Cremonini, Mfusi & Rippner 2009) – which "until recently generally meant the study of recruitment, with a particular focus on constraints – often described as barriers – to recruitment" (Ingram et al. 2009: 4) – to include the outcomes of study (Osborne & Gallacher 2007: 11). Among HE institutions, practitioners and researchers, this expansion has increased the centrality and importance of student transition in HE (Heirdsfield et al. 2008; Hultberg et al. 2009; Kift, Nelson & Clark 2010), often expressed in the context of the first year in higher education (FYHE) and the first year experience (FYE), and increasingly, undergraduate study more generally.

Yet, despite the increased attention, and perhaps because of recent additions to its purview, "there is no agreed-upon definition of what constitutes a transition" (Ecclestone et al. 2010: 5). Indeed, in many studies (including the ALTC projects reviewed in this Report) transition is rarely explicitly considered, despite the fact that "different conceptualizations and theories … lead to different ideas about how to

manage or support transitions" (Ecclestone et al. 2010: 5). This is not to say that researchers are unaware of different forms of transition:

> Many researchers have discussed how transitions have changed – how they no longer follow a traditional linear path – but much of this research on youth transitions does not really provide an alternative to the linear model that is fundamentally different (te Riele, 2004; Valentine and Skelton, 2007). Instead research often provides supporting case studies that suggest how transitions are now radically different, without taking the opportunity to add to transition theory. (Worth 2009: 1051)

In contributing to this theorisation, this Report defines transition as *the capacity to navigate change*. This imagines more for transition than just "a process of change over time" (Colley 2007: 428). The capacity to navigate change includes the resources to engage with change, without having full control over and/or knowledge about what the change involves. Its navigation alludes to the mutuality of agency and structure in transitions (Ecclestone 2009; Ecclestone et al. 2010); navigation evokes agency in relation to structure. Conceptually, transition is related to the social capacities of mobility, aspiration and voice (Sellar & Gale 2011; Smith 2009) and shares their intended outcomes: to enable people to access, benefit from and transform economic goods and social institutions. In this respect, transition is a central plank in the current social inclusion in HE agenda, particularly given the *Risk Society* (Beck 1992) and *Liquid Modernity* (Bauman 2000) that now characterise advanced economies. Like mobility (Bauman 1998), the capacity to navigate change has become a marker of social distinction.

While not always explicitly named in the research literature, it is possible nonetheless to discern three distinct ways (summarised in Table 2 below) in which transition is conceived:
1. as *induction*: sequentially defined periods of adjustment involving pathways of inculcation, from one institutional and/or disciplinary context to another (T_1);
2. as *development*: qualitatively distinct stages of maturation involving trajectories of transformation, from one student and/or career identity to another (T_2); or
3. as *becoming*: a perpetual series of fragmented movements involving whole-of-life fluctuations in lived reality or subjective experience, from birth to death (T_3).

Given their potential to "lead to different ideas about how to manage or support transitions" (Ecclestone et al. 2010: 5), these three conceptualisations frame the discussion of student transition in HE research that follows.[1] A common element in each is reference to a life period or stage (bounded by time and/or circumstance, variously defined), which is characterised by change (also variously defined).

In its reference to how students experience transition, the research also draws attention to 'knowledge', particularly 'academic capital' (Bourdieu 1988). In this it confirms Bernstein's observation, that "educational knowledge is a major regulator

---

[1] Drawing on Ecclestone (2006), Colley (2007) provides an alternative and succinct account of *four* ways in which transition is conceptualised in the research literature. However, our reading of this literature is that there is little difference between Colley's first and second categories, which are better grouped together, apart from references to "shifts in identity" (Colley 2007: 429) in her second category which we think are better located in her third. Colley's third category, then, is our second; her fourth, our third. The two approaches to transition by ALTC projects/fellowships identified earlier in this Report can be characterised in terms of Colley's first two perspectives, one portraying the transition 'problem' as "deviance", the other as "deficit" (Colley 2007: 430). Again, in our account, these represent subtle differences within the one perspective.

of the structure of experience" (2003: 85). Hence, underlying questions that inform the review below of these three conceptions of student transition into HE, include: "How are forms of experience, identity and relation evoked, maintained and changed by the formal transmission of educational knowledge and sensitivities?" (Bernstein 2003: 85).[2]

Transition as Induction (*T₁*)

The classic definition of transition is of "a fixed turning point which takes place at a preordained time and in a certain place" (Quinn 2010: 122). For students transitioning into HE, this means "the move from upper secondary school to higher education" (Hultberg et al. 2009: 48), although:

> Clearly, all students new to Australian universities, whether from local or international high schools, colleges or other post-secondary institutions, or whether returning to study as mature-aged learners, face a period of transition. (Beasley & Pearson 1999: 303)

As well as recognising that school is not the only source of university students, *T₁* researchers distance themselves from a transition-as-access orientation (Belyakov et al. 2009), rejecting a 'point' of transition for commencing students in favour of the "smooth transition" (Gill et al. 2011: 63) evoked by metaphors (often replicated in policy documents) such as "journey" and "pathway" (Furlong 2009; Wyn & Dwyer 2000; Pallas 2003; see also, Field 2010; Quinn 2010). This transition pathway or 'period' is conceived as a linear progression through a number of "phases", including:

> Pre-transition (or Beginning to Think About University), Transition (or Preparing for University), Orientation Week, First Year Student Induction Programs, The Middle Years, and The Capstone or Final Year Experience. (Burnett 2007: 24)

The shift in emphasis from a "pivotal moment of change" to a transitional period has focused *T₁* researchers' attention on "what students learn once they enter" (Quinn, 2010: 119), rather than on student experiences prior to entry. Rather than a point that separates these experiences, student transition into HE is understood as the domain of the first year experience (FYE). Indeed, *T₁* student transition research suggests that the first year is "arguably the most critical time" (Krause 2005: 9): it can "inform a student's success or failure in tertiary settings" (Burnett 2007: 23).

Hence, "understanding the first-year experience plays a critical role in managing transitions to tertiary study" (Krause & Coates 2008: 495). It is frequently portrayed by *T₁* researchers as "a complex and often difficult period of a young student's life" (Krause & Coates 2008: 499), particularly for students from 'diverse' backgrounds (Kift 2009; Kift & Nelson 2005; McInnis, James & McNaught 1995). The solution to these difficulties lies in students' *induction* (Hultberg et al.; see also Terenzini et al. 1996; Harrison 2006; Bennett, Kottasz & Nocciolino 2007), requiring "varying degrees of adjustment to Australian university culture in general and the conventions and expectations of students' individual disciplines in particular" (Beasley & Pearson 1999: 303). Transition, then, is best managed by institutions (Kift & Nelson 2005; Krause & Coates 2008), although (for *T₂* researchers in particular; see below) this also places significant onus on students regarding their commitment and motivation to study, engagement with learning, interaction with

---

[2] More pointedly, Quinn (2010: 126) asks: "Is the contemporary [HE] student to be an intellectual, a professional in the making, an instrument of the knowledge economy, a consumer? Is the university here to reproduce society or provide a refuge from it? In making that transition into HE is the student entering into a compact which validates them as a compliant citizen?"

staff and participation in out-of-class activities (Kift et al. 2010; Nelson, Kift & Harper 2005; Krause & Coates 2008; Burnett 2007).

T_1 researchers justify an institutional response to or regard for student transition in pointing out that "access [to the HE curriculum] without support is not opportunity" (Tinto 2008). Of course, there are other justifications:

> High levels of student attrition may be viewed as a waste of institutional resources, particularly in a climate of limited financial, and other, resources in many institutions. Unhappy initial experiences for students and high levels of attrition can damage the reputations of individual institutions. (Hillman 2005: 2)

Institutional activity and research directed at supporting the adjustments required of students, represent what Wilson (2009) has characterised as first and second generation FYE approaches: (1) university student support services (including "course advice and student decision-making" support; Krause & Coates 2008: 499) and other co-curricular activities (including orientation activities; see Gill et al. 2011 for a typology of these); and (2) curricula activities, including the "core practices of education" (i.e. curriculum, pedagogy, assessment; Wilson 2009: 10) as well as the broad 'curriculum' of institutions (Nelson, Kift, Humphreys & Harper 2006; Kift 2009; Kift et al. 2010). Almost all of the ALTC projects and fellowships summarised earlier in this Report can be characterised as informed by one or other of these approaches.

While many T_1 or induction transitionists would see these as distinctive, albeit complementary, approaches (e.g. Wilson 2009), others – those who hold to a broad 'curriculum' perspective – take a cumulative or "holistic approach," arguing that transition from a second generation FYE orientation combines "intentionally blended curricular *and* co-curricular" activities (Kift et al. 2010: 10; emphasis added). There are good reasons for institutions to take a whole-of-university-life approach to student transition. For instance: "social integration and academic performance have both been identified as strong predictors of attrition from study;" both are required for "the successful integration of first year students" (Hillman 2005: 1). Indeed, for Kift, addressing student transition with a one-two combination[3] of transition activity provides the optimum institutional approach:

> when first generation co-curricular and second generation curricular approaches are brought together in a comprehensive, integrated, and coordinated strategy that delivers a seamless FYE across an entire institution and all of its disciplines, programs, and services. (Kift 2009: 1)

This 'joined-up' institutional approach to the FYE is embodied in what Kift and her colleagues (e.g. Kift 2009; Kift & Nelson 2005; Kift et al. 2010; see also Kift & Field 2009; Kift 2008; Nelson et al. 2006) refer to as 'transition pedagogy': a rational and comprehensive approach to curricula design that is:

- *Coherent* (institution-wide policy, practice and governance structures);
- *Integrated* (embedded across an entire institution and all of its disciplines, programs, and services);

---

[3] Kift (2009) and Kift et al. (2010) have also referred to the 'combination' of co-curricular and curricular activities as a third generation approach to the FYE, with the addition of a 'whole-of-institution' emphasis. While this 'joined-up' institutional approach represents a distinctive strategic move in T_1 approaches, reminiscent of social inclusion policy in the UK (Colley 2007: 429), it does not provide a significant conceptual difference to their previous conceptualisation (of how to approach the FYE) and is probably better described as their second-generation account writ large.

- *Coordinated* (a seamless FYE that is institution-wide, rather than separate, 'siloed' initiatives);
- *Intentional* (an awareness that curriculum is what students have in common and using curriculum to influence the experience of all students);
- *Cumulative* (a long-term approach to learning; gradual withdrawal of scaffolding);
- *Interconnected* (curriculum principles that stand out in the research as supportive of first year learning engagement, success, and retention); and
- *Explicit* (with links between what is taught, why, and its assessment).

Explicit, rigorous and coherent pedagogies, curricula and assessment have long been advocated as a primary and central strategy for supporting students from diverse backgrounds (e.g. Delpit 1995; Lingard et al. 2001). However, in a context of increasing diversity of students transitioning to university, what appears missing from T_1 research and policy is a "third generation" approach to the FYE (Gale 2009: 14; Kift, 2009: 16): specifically, a "southern theory of higher education" (Gale 2009; see also Sellar & Gale 2011), which advocates spaces in HE institutions for diverse knowledges and ways of knowing (Said 1979; Connell 2006, 2007; Sefa Dei 2008, 2010), not simply institutional spaces for different kinds of students.

This regard for what students embody raises the more general point (alluded to by Bernstein (2003); above), which is not well understood or considered by T_1 researchers: that is, "the terms of the transition are set by others" (Quinn 2010: 119). Student transition from an induction perspective is a matter of fit, "between the individual's and the institution's characteristics" (Thomas 2002: 427) but in a context where the transition is "institutionally-managed" (Nelson et al. 2006: 2). From this point of view, successful transition requires of students "navigation of institutionalised pathways or systems" (Ecclestone et al. 2010: 6), albeit with support provided to assist their navigation. There is little acknowledgment that:

> educational institutions are able to determine what values, language and knowledge are regarded as legitimate, and therefore ascribe success and award qualifications on this basis. Consequently, pedagogy is not an instrument of teaching, so much as of socialization and reinforcing status … individuals who are *inculcated* in the dominant culture are the most likely to succeed, while other students are penalized. (Thomas 2002: 431; emphasis added)

T_1 researchers are yet to make this "hidden curriculum" (Lynch 1989) explicit and hence yet to respond with transition strategies that move beyond students' socialisation and inculcation into dominant norms.

Transition as Development (T_2)
An alternative definition of student transition evident in the research literature is focused on identity (Terenzini et al. 1996; Jackson 2003); specifically, "a shift from one identity to another" (Ecclestone et al. 2010: 6). The classic example of identity change portrays youth or adolescence as a "stage" in which individuals make "the transition from childhood to adulthood" (Baron, Riddell & Wilson 1999: 484). In the context of HE, "transition is a time during which students develop their identity as a university student" (Krause & Coates, 2008: 500), although being a university student itself is also a transitional stage: that is, preparation for "becoming somebody" (Ecclestone 2009: 12; Ecclestone et al. 2010: 7); a scientist, musician, nurse, teacher, etc (e.g. Rice, Thomas & O'Toole 2009; Webb 2005). In this sense, transition is about students' transformation or development, from one life stage to another.

Evident in this account are a number of similarities with, and differences from, conceptions of transition as induction. For example, like inductionists, developmentalists imagine transition as a linear, albeit developmental, process:

The processes by which young people come to identify with, and become members of, a study community have been likened to the processes by which individuals ascend from youth to full adult status in traditional societies, or by which migrant peoples are accepted into a new community: the stages of separation (from the previous group), transition (interaction with the new group), and finally incorporation or integration into the new group. It is during these first two stages—separation and transition—that the first year tertiary student may be at greatest risk in terms of withdrawing from study altogether or from a particular institution (see Tinto, 1988 for a detailed discussion of these stages). (Hillman 2005: 1)

Clearly, for T_2 researchers the idea that transition is developmental is closely related to the notion that development happens not so much in 'periods' but in 'stages'. That is, rather than a "smooth transition" (Gill et al. 2011: 63) along pathways, the developmental process is stilted or, in developmental psychology terms, "discontinuous" (e.g. see Werner 1957). The differences between stage and period can appear subtle, given that both are bounded by time (e.g. the first year). However, at issue is the role ascribed to time. In conceiving of transition as a stage – the first year in higher education (FYHE), for example – T_2 researchers regard time as contributing to an individual's development (e.g. time in the 'right' company, good use of time, etc.), but time itself only loosely determines when that development begins or is completed. Hence, the time available might be exhausted but this does not guarantee transition to the next stage.[4] Whereas, in conceptions of transition-as-period, time makes no significant contribution to the first year experience (FYE), except to record when it begins and ends. It is time *in situ* that distinguishes transitional periods.[5]

Differences between the approaches of induction and development transitionists are also evident in the respective metaphors they utilise to describe transition. While T_1 researchers employ images of "pathways", T_2 researchers prefer "trajectory" as a way of signalling "a series of stages, linear, *cumulative* and non-reversible" (Baron et al. 1999: 484; emphasis added). While "pathways are well-travelled sequences of transitions that are shaped by cultural and structural forces … A trajectory is an attribute of an individual, whereas a pathway is an attribute of a social system" (Pallas 2003: 168).

These different conceptions of transition have different implications for when, how long and what kind of strategies to employ in supporting student transition into HE. For example, programs that "encourage students to consider carefully ... the suitability and desirability of the career pathways associated with their [course] choices" (George, Lucas & Tranter 2005: 145), by providing first year students with information, introductions to campus and staff, and "icebreaker" activities with fellow students (Gill et al. 2011), are informed by a view of transition as induction. Whereas, transition programs that have first year students shadowing student mentors[6] (Wasburn 2008; Heirdsfield et al. 2005, 2008; Keup & Barefoot 2005) and courses featuring a field placement or "service learning" component (Jamelske 2009), derive largely from a regard for transition as a developmental stage.[7]

---

[4] Indeed, critics of transition stages point out that often "the rhythms of the young people's learning lives do not synchronise with the set time frames offered to them" (Quinn 2010: 122).
[5] See Colley (2007; 2010) on how time is differently conceived in and formative of transition types.
[6] Critics suggest that mentoring is "about the maintenance and reproduction of the existing hierarchy and the status quo, [with] the primary beneficiary [being] the institution" (Margolis & Romero 2001: 80).
[7] Some examples of T_2 programs can be found in ALTC projects and fellowships summarised in this Report, specifically in aspects of Project DS6-598 and the ongoing Ieva Stupans Fellowship.
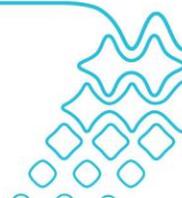
Whether period or stage, T_1 and T_2 researchers agree that the first year can be difficult for students. Inductionists in particular draw attention to the situational difficulties: "It is not only a change of the type of study situation, with higher demands on students' use of time, but also a new social situation: moving away from home, financial stress, new friends, etc." (Hultberg et al. 2009: 48).[8] However, for developmentalists, the difficulties tend to be internal to individuals rather than external:

> One of the reasons students find transition to university so tumultuous is that it often challenges existing views of self and one's place in the world. Many students from disadvantaged backgrounds, for example, experience significant culture shock on entering an institution whose practices and traditions are alien to them (Forsyth and Furlong 2003). Transition is a time of identity re-shaping and coming to terms with whether expectations about university life have been met, or need to be revised, or, in fact, if the mismatch between expectation and reality is too great to warrant persistence. (Krause & Coates 2008: 500)

In short, the fundamental difference between induction and developmental approaches to student transition into HE lies is their differing psychological orientations: whether the transition 'problem' is best addressed at the level of institutions (an *organisational* psychology of student transition) or at the level of individuals and groups (a *developmental* and *social* psychology of student transition). Researchers inspired by the first hold to a "vision of a pathway along which learners can be led to goals that are predefined, neat and orderly. This is closely tied with a vision of the person as an integrated, identifiable, and thus manageable, citizen" (Quinn 2010: 127). Whereas, researchers with a developmental perspective regard the FYHE as "a valuable time for promoting changes in thinking, particularly in relation to beliefs about learning and knowing" (Brownlee et al. 2009: 600), which are required to "awaken intellectual curiosity" (Jamelske 2009: 377).

Missing from this account is recognition that beliefs about learning and knowing, which currently dominate HE, are socially exclusive and require students to adopt identities that do not always follow their life trajectories (Quinn 2010; see also Sellar & Gale 2011). A more socially inclusive regard for university student identities in T_2 research and practice would acknowledge that: "the curriculum itself should reflect and affirm working-class students by ensuring that working-class histories and perspectives are presented with respect rather than marginalised and ignored" (Quinn 2010: 125-126). More typically, for students from under-represented backgrounds, the HE curriculum constitutes "a challenge to one's identity and a threat to familiar ways of knowing and doing" (Krause 2006: 1). There are obvious implications for student transition: "If a student feels that they do not fit in, that their social and cultural practices are inappropriate and that their tacit knowledge is undervalued, they may be more inclined to withdraw early" (Thomas 2002: 431).

Transition as Becoming (T_3)
A third view of student transition into HE is, in many ways, a rejection of transition as a useful concept, at least in how the term is often understood within HE (see T_1 and T_2 above). T_3 researchers (for the purposes of the categorisation here) argue that "we need to change the terms of the discussion and recognise that the concept of transition itself does not fully capture the fluidity of our learning or our lives" (Quinn 2010: 127).

---

[8] Quinn's (2010: 120) research suggests that the situational differences between school and university for disadvantaged students are not always as dramatic and crisis inducing as inductionists claim.
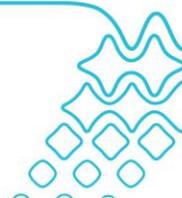
Much of the impetus for this reconceptualisation of student transition into HE has come from the life transition literature more generally. While it has found traction among some HE researchers in the UK, for the most part others have ignored it. Indeed:

> The study of transitions has been largely conducted in isolation from wider analyses of occupational and social mobility … The separation of transitions and mobility has left a disconnect between transitions theorists and some of the wider sociological concerns seen in the analysis of mobility, class structure and processes of class formation. (Smith 2009: 371)

Informed by a critical sociology of education and critical cultural studies, T_3 researchers emphasise the complexities of life and the interdependence of "public issues" and "private troubles" (Mills 1959; see also Field 2010: xxi). They take issue with T_1 and T_2 accounts that represent student transition into HE as (i) a *particular* time of crisis, (ii) part of a *linear* progression, and as (iii) universally experienced and normalised. While they recognise that "it is not enough to say that transitions are no longer neat and linear, or to briefly mention their complexity" (Worth 2009: 1051), these provide points from which to develop a more dynamic account of student transition.

On the issue of crisis, for example, T_3 researchers accept the "anxiety and risk" (Field 2010: xix) experienced by some students in "the challenges faced by transition (and particularly first year students) trying to navigate the unchartered waters of their new university experience" (Nelson et al. 2005: 2). Although, they do not necessarily accept the implied problematic of transition or that transition into HE is a time of crisis for all students. On the contrary:

> transitions can lead to profound change and be an impetus for new learning, or they can be unsettling, difficult and unproductive. Yet, while certain transitions are unsettling and difficult for some people, risk, challenge and even difficulty might also be important factors in successful transitions for others. (Ecclestone et al. 2010: 2)

In short, T_3 scholars reject the view that transitions are always times in which people experience crisis and that these are bracketed by relatively stable life experiences (Baron et al. 1999: 484). For instance, the to-ing and fro-ing between home and university – between different identities (Kimura et al. 2006: 70) – has to be negotiated on a daily basis, not merely in moments of crisis (Hughes, Greenhough, Yee & Andrews 2010). "So, transition rather than being a rare event is actually an everyday feature" (Quinn 2010: 124). Similarly, the idea that life is experienced in a linear way (e.g. high school, university, the world of work; or childhood, youth, adulthood) "is too static a viewpoint … We constantly change, we transform, and we move backwards and forwards, we do not coalesce either before or after even the most momentous life crisis" (Quinn 2010: 127). For example, university students:

> do not view work and study in the linear sequential way implied by the conventional career paradigm and by the policy formulations based upon it. Images about 'pathways' and linear transitions from school via further study and then into the world of work and an independent adult way of life *do not reflect the actual experience.* (Cohen & Ainley 2000: 83-84; emphasis added)

The absence of students' experiences and understandings from HE policy and practice is informed by normative accounts of student transition (Elder, Kirkpatrick Johnson & Crosnoe 2003), which represent variations from the norm as "deviant", "deficient" (Colley 2007: 430), "unruly" and "inadequate" (Quinn 2009: 126). Such norms and their variations frustrate student transition. They focus attention on different students, on their difference, rather than on the changes to be made by

institutions and systems in order to accommodate difference. They mobilise narratives and histories that render students voiceless, unable to speak "in one's own name" (Couldry 2009: 580; see also Sellar & Gale 2011). For example, knowledge – the central narrative of HE – and ways of knowing associated with under-represented groups are often unspeakable in HE (Said 1979; Connell 2006, 2007; Sefa Dei 2008, 2010). This "yoking together of the speakable with transition, inevitably leaves those with lives that are marginal [to institutional narratives] and [with] incoherent [genealogies] unable to make the transition to fully 'educated person'" (Quinn 2010: 123).

T_3 researchers also challenge universal representations of university life, as if all universities are the same. In fact, HE institutions are now highly differentiated (Gale 2011; Marginson 2008) "and so too is the type of education students will receive on entry" (Quinn, 2009: 126).

In short, T_3 scholars argue that the normative and the universal do not capture the diversity of student lives, their experiences of university or of universities themselves. It is impossible, then, to speak of student transition into HE in the singular, in the same way that "there is no such thing as *an* identity, or *a* discrete moment of transition … [S]ubjectivity and flux" (Quinn 2010: 127; emphasis added) better describe the contemporary experience of navigating extended periods of formal education (Smith 2009), multiple career paradigms and life patterns (Cohen & Ainley 2000), and "the fluid experience of time" (Worth 2009: 1051). Student transition into HE is less about isolated and stilted movements, from one context or identity to another:

> Instead it must be understood as a series of flows, energies, movements and capacities, a series of fragments or segments capable of being linked together in ways other than those that congeal it into an identity. (Grosz 1993: 197-198)

T_3 researchers describe this rendition of transition as "a condition of our subjectivity" (Quinn 2010: 123) and liken it to 'becoming'; a concept with a rich tradition in social theory and philosophy (see for example Deleuze & Guattari 1987; Grosz 1999, 2005; Semetsky 2006). 'Becoming', as it is conceived here, rejects notions of the linearity and normativity of life stages implicit in much student transition research, diverting attention away from:

> transformation from one identity to another and attends instead to what Deleuze and Guattari call "multiplicities" composed of heterogeneous singularities in dynamic compositions … To put this another way, Deleuze and Guattari have described the [transition] movement as "rhizomatic", a term that refers to underground root growth, the rampant, dense propagation of roots that characterizes such plants as mint or crabgrass. Each rhizomatic root may take off in its own singular direction and make its own connections with other roots, with worms, insects, rocks or whatever. (Sotirin 2005: 99-100)

This has significant implications for notions of the self, identity, life stages and transitions generally: "Becoming explodes the ideas about what we are and what we can be beyond the categories that seem to contain us … [It] offers a radical conception of what a life does" (Sotirin 2005: 99). If education systems, structures, institutions and procedures do not take account of the multiplicities of student lives that enter HE, then transition practices will be less effective. Indeed, T_3 researchers argue that the "failure to prioritize the actual views, experiences, interests and perspectives of young people as they see them" (Miles 2000:10), particularly "the lived reality for disadvantaged young people" (Barry 2005: 108) but also university students generally, has been counterproductive. It has led to an overly "structural perspective on transitions" (Miles 2000:10). Certainly, HE "must have structures and

processes … but ultimately it needs greater openness and flexibility. It should mirror the flux of our being, rather than trying to subjugate it with rigidity" (Quinn 2010: 127).

For Quinn, being more open and flexible means that:

> Institutions should not hide the fact that withdrawal is a possibility, but rather be open about its implications. They should offer better opportunities to change course and provide more meaningful information about individual subjects to enable students to make well-informed choices. Personal planning of 'non-traditional pathways' into and through HE should be facilitated, which remove the distinction between full- and part-time mode and permit less than full-time study on all courses. Opportunities and support for students to change modes of study from full- to part-time and vice versa should be easily available. (Quinn 2010: 125-126)

In the same way, T_3 researchers argue (see also above) that HE also needs to be more accommodating of diverse knowledges and ways of knowing (Gale 2009). For some (Quinn 2010: 124) this means "exclud[ing] what Foucault terms 'subjugated knowledges'"; for others it involves unsettling "the centre-periphery relations in the realm of knowledge" (Connell 2007: viii). From a social inclusion and widening participation perspective:

> it is about the need for a curriculum that provides room for different ways of thinking about, and different ways of engaging with knowledge, and indeed inserting different kinds of understandings that perhaps have not been part of Australian higher education before. It is about how we structure the student learning experience in ways that open it up and make it possible for students to contribute from who they are and what they know. (Gale 2009: 12)

Appreciating who students are and "how they identify themselves" (Gale 2009: 11) – specifically, appreciating the dynamic compositions of their heterogeneous singularities (Sotirin 2005: 99) – is at the heart of understanding student transition as becoming. For T_3 scholars, the appropriate response is to adjust HE systems and practices, including their knowledge systems and practices, to make them more open and flexible.

Table 2: A typology of student transition into higher education

Conceptions of student transition	Transition metaphors	Types of transitional change: from one to another	Transition dynamics	Illustrative transition activities / emphases / systems
Transition as Induction (T₁)	Pathway; Journey; Milestones	Inculcation: sequentially defined *periods* of adjustment From one institutional and/or disciplinary *context* to another	• Navigating institutional norms and procedures • Linear, chronological, progressive movement • Relatively fixed structures and systems • Crisis as culture shock (contextual familiarity)	• Orientation / familiarisation with campus (facilities etc.) and significant staff • 'Just-in-time' information re procedures, curriculum content, assessment requirements • First year seminars • 'Transition pedagogy'
Transition as Development (T₂)	Trajectory; Life stage;	Transformation: qualitatively distinct *stages* of maturation From one student and/or career *identity* to another	• Navigating sociocultural norms and expectations • Linear, cumulative, non-reversible movement • Discrete, singular, consecutive identities • Crisis as critical incident (identity forming)	• Mentoring programs • Service learning and field placements • Career and research culture development activities / emphasis • Championing narratives of student and career trajectories by successful students and staff
Transition as Becoming (T₃)	Whole of life; Rhizomatic	Fluctuation: perpetual *series* of fragmented movements Lived reality or *subjective* experience, from birth to death	• Navigating multiple narratives and subjectivities • Rhizomatic, zigzag, spiral movement • Flexible systems / fluid (ephemeral) identities • Crisis as neither period/stage specific or necessarily problematic	• Flexible student study modes, including removal of distinction between full and part-time study and min./max. course loads • Flexible student study pathways, including multiple opportunities to change course and enter, withdraw and return to study throughout life • Pedagogy that integrates learning support *within* the curriculum • Curriculum that reflects and affirms marginalised student histories and subjectivities

Conclusion

At least four conclusions about student transition into HE can be drawn from this review of the national and international research literature (including the ALTC projects and fellowships reviewed earlier in this Report):

1. *Student transition into HE can be defined in three distinct ways – as induction, transformation and becoming – each of which lead to different transition policies, programs and research endeavours.* Often these conceptual preferences are not well articulated or recognised, so that research, policies and programs in the field (including the ALTC projects and fellowships reviewed in this Report) tend to be predicated on taken-for-granted concepts and normative assumptions regarding preferred and ideal student experiences and trajectories.

2. *Much research, policy and practice re student transition into HE is disconnected from the extensive research literature on youth and life transitions and from education and social theory.* This limits how student transition is conceived and, hence, limits the research, policies and practices that flow from these conceptions. Some researchers in the UK are drawing on these broader literatures to reconceptualise transition in a way that reflects students' lived realities and with the potential for new approaches to transition research, policy and practice. However, most Australian researchers, policy makers and practitioners with interests in student transition remain disconnected from these advances in the field.

3. *The dominant conception of student transition into HE tends to lead to research, policy and practice that are largely system driven and system serving.* University students are expected to make the transition into HE while conforming to institutional requirements. The possibility of broader systemic or structural change to meet the needs of a diverse student population tends to be marginal. Inasmuch as institutional practices change, these are limited to devising ways to enable students to more successfully navigate pre-existing and dominant structures and practices, including dominant knowledge structures and practices (embodied in formal and informal curriculum, pedagogy and assessment).

4. *To date, the field of student transition into HE has focused narrowly on undergraduate students, particularly those in their first year, who are undertaking courses in a select cluster of disciplines.* This is particularly evident in the ALTC projects and fellowships reviewed in this Report. Those with explicit interests in transition focus almost exclusively on the first year and the ALTC collection as a whole is limited to the disciplines of mathematics, the sciences (particularly health, physics and the computer and technology sciences), and the creative arts (writing, visual, dance), while transition studies in the social sciences, humanities, cultural studies, and some sciences (e.g. medicine) are absent. This concentration on 'vertical' (Lam & Pollard 2006) or 'diachronic' (Bransford et al. 2006) transitions – transitions across time and similar contexts (e.g. from school to university) – is partial, given the limited interest in transition issues prior to students' first year in HE *and* in their later years of undergraduate and postgraduate study. Whereas 'horizontal' (Lam & Pollard 2006) or 'synchronic' (Bransford et al. 2006) transitions – transitions within the same time frame and between different contexts (e.g. from one course or university to another; from home to university to home) – are missing altogether from analyses in the Australian field.

In short, student transition into HE, as a field of research, policy and practice, is in its infancy in Australia and in many other OECD nations. A more sophisticated approach is now needed to move the field forward. Suggestions for doing so are indicated in the Report's Recommendations below.

Recommendations

The following recommendations for further development or work in the field of student transition into HE are informed by the review of the national and international research literature (including the ALTC projects and fellowships reviewed earlier in this Report). The recommendations largely mirror the review's conclusions regarding this literature.

Recommendation 1: declare how transition is defined
Future projects in the field of student transition into HE should explicitly *identify how transition is defined within the project.* This will assist in focusing project work and provide readers and recipients of project outputs with understanding regarding what informs these and with the wherewithal to subject them to critique. It will also require locating the project in relation to definitions within the field and/or contribute to redefining the field.

Recommendation 2: draw on related fields and bodies of knowledge
Future projects in the field of student transitions into HE should draw on the extensive research literature from related fields, particularly in relation to youth and life transitions and education and social theory. This has the potential for projects to make connections with how (student) transitions are elsewhere experienced and theorised and to reinvigorate the field with new and innovative ideas. It also will enable projects to draw on and contribute to the considerable bodies of knowledge in arenas such as education (vis-à-vis curriculum, pedagogy and assessment), cultural studies (of knowledge production and legitimation), and social theory (e.g. exploration of the implications for student transition of conditions such as 'liquid modernity', the 'risk society', 'becoming', etc.).

Recommendation 3: foreground students' lived reality
Future projects in the field of student transition into HE should be cognisant of students' lived reality not just institutional and/or systemic interests. This includes research, policy and practice aimed at making HE (at the level of classrooms and courses through to institutions and systems) more flexible and responsive to students. It also includes projects aimed at redressing the marginalisation of certain forms of knowledge and ways of knowing.

Recommendation 4: broaden the scope of investigation
Future projects in the field of student transition into HE should add to the corpus of investigations on the full range of 'vertical' and 'horizontal' transitions. This includes projects with vertical foci beyond the 'first year' (e.g. prior to HE entry, the latter years of undergraduate and postgraduate study, the first year of work, etc.) as well as horizontal interests (e.g. from home to university, from one course or university to another, etc.). It also includes projects focused on discipline areas (e.g. the social sciences, humanities, cultural studies, some areas of science, etc.) not yet represented in student transition studies, for their potential to bring new insights into how student transition is experienced, conceived and addressed.

References

Australian Government (2009). *Transforming Australia's Higher Education System*. Canberra: DEEWR.

Baron, S., Riddell, S., & Wilson, A. (1999). The Secret of Eternal Youth: Identity, risk and learning difficulties. *British Journal of Sociology of Education, 20*(4), 483-499.

Barry, M. (2005). *Youth Policy and Social Inclusion*. London: Routledge.

Bauman, Z. (1998). Time and Class. *Arena Journal, 10*, 69-83.

Bauman, Z. (2000). *Liquid Modernity*. Cambridge: Polity Press.

Bauman, Z. (2001). *The Individualized Society*. Cambridge: Polity Press.

Beasley, C. J., & Pearson, C. A. L. (1999). Facilitating the Learning of Transitional Students: strategies for success for all students. *Higher Education Research & Development, 18*(3), 303-321.

Beck, U. (1992). *Risk Society: Towards a New Modernity*. London: Sage.

Belyakov, A., Cremonini, L., Mfusi, M. X., & Rippner, J. (2009). *The Effect of Transitions on Access to Higher Education*. Washington, DC: Institute for Higher Education Policy.

Bernstein, B. (2003). *Class, Codes and Control Volume III – Towards a Theory of Educational Transmission*. Milton Park: Routledge.

Bennett, R., Kottasz, R., & Nocciolino, J. (2007). Catching the early walker: An examination of potential antecedents of rapid student exit from business-related undergraduate degree programmes in a post-1992 university. *Journal of Further and Higher Education*, *31*(2), 109-132.

Bourdieu, P. (1988). *Homo Academicus*. Cambridge: Polity Press.

Bradley, D., Noonan, P., Nugent, H., & Scales, B. (2008). *Review of Australian Higher Education: Final Report*. Canberra: Commonwealth of Australia.

Bransford, J., Stevens, R., Schwartz, D., Meltzoff, A., Pea, R., Roschelle, J., Vye, N., Kuhl, P., Bell, P., Barron, B., Reeves, B. & Sabelli, N. (2006). Learning theories and education: toward a decade of synergy. In P. Alexander & P. Winne (Eds.), *Handbook of Educational Psychology* (pp. 209-244). New Jersey: Erlbaum.

Brownlee, J., Walker, S., Lennox, S., Exley, B., & Pearce, S. (2009). The first year university experience: using personal epistemology to understand effective learning and teaching in higher education. *Higher Education, 58*(5), 599-618.

Burnett, L. (2007). *Juggling first year student experiences and institutional changes: An Australian experience.* Paper presented at the 20th International Conference on First Year Experience, July, Hawaii, USA. Retrieved 7 June 2011, from http://www98.griffith.edu.au/dspace/bitstream/10072/32622/1/51648_1.pdf

Cohen, P., & Ainley, P. (2000). In the Country of the Blind?: Youth Studies and Cultural Studies in Britain. *Journal of Youth Studies, 3*(1), 79-95.

Colley, H. (2007). Understanding time in learning transitions through the lifecourse. *International Studies in Sociology of Education, 17*(4), 427-443.

Colley, H. (2010). Time in learning transitions through the lifecourse: A feminist perspective. In K. Ecclestone, G. Biesta & M. Hughes (Eds.), *Transitions and Learning through the Lifecourse* (pp. 130-146). London: Routledge.

Connell, R. W. (2006). Northern theory: The political geography of general social theory. *Theory & Society, 32*(2), 237-264.

Connell, R. W. (2007). *Southern Theory: the global dynamics of knowledge in social science.* Crows Nest, N.S.W: Allen & Unwin.

Couldry, N. (2009). Rethinking the politics of voice. *Continuum: Journal of Media & Cultural Studies, 23*(4), 579-582.

DEEWR (2009). *An Indicator Framework for Higher Education Performance Funding – Discussion Paper.* December. Australian Government: Canberra. Retrieved 17 June 2011, from http://www.deewr.gov.au/HigherEducation/Documents/HIEDPerformanceFunding.pdf

Deleuze, G., & Guattari, F. (1987). *A Thousand Plateaus: Capitalism and Schizophrenia* (B. Massumi, Trans.). Minneapolis & London: University of Minnesota Press.

Delpit, L. (1995). *Other People's Children: Cultural Conflict in the Classroom*. New York: The New Press.

Ecclestone, K. (2006). *The rise of transitions as a political concern: the effects of assessment on identity and agency in vocational education.* Working paper for the Teaching and Learning Research Programme Thematic Seminar Series on 'Transitions through the lifecourse'.

Ecclestone, K. (2009). Lost and found in transition. In J. Field, J. Gallacher & R. Ingram (Eds.), *Researching Transitions in Lifelong Learning* (pp. 9-27). London & New York: Routledge.

Ecclestone, K., Biesta, G. & Hughes, M. (2010). Transitions in the lifecourse: The role of identity, agency and structure. In K. Ecclestone, G. Biesta & M. Hughes (Eds.), (pp. 1-15). *Transitions and Learning through the Lifecourse.* London: Routledge.

Elder, G. H., Kirkpatrick Johnson, M. & Crosnoe, R. (2003). The Emergence and Development of Life Course Theory. In J. T. Mortimer & M. J. Shanahan (Eds.), *Handbook of the Life Course* (pp. 4-19). New York: Plenum.

Field, J. (2010). Preface. In K. Ecclestone, G. Biesta & M. Hughes (Eds.), *Transitions and Learning through the Lifecourse* (pp. xvii-xxiv)*. London: Routledge.

Forsyth, A. & Furlong, A. (2003). Access to higher education and disadvantaged young people. *British Educational Research Journal, 29*(2), 205-225.

Furlong, A. (2009). Revisiting transitional metaphors: reproducing social inequalities

under the conditions of late modernity. *Journal of Education and Work, 22*(5), 343-353.

Gale, T. (2009). *Towards a Southern Theory of Higher Education*. Keynote Address, 12th Pacific Rim First Year in Higher Education Conference "Preparing for tomorrow today: the first year experience as foundation". Townsville, 30 June. Retrieved 2 June 2011, from http://www.fyhe.com.au/past_papers/papers09/ppts/Trevor_Gale_paper.pdf

Gale, T. (2011). Student equity's starring role in Australian higher education: not yet centre field. *Australian Educational Researcher, 38*(1), 5-23.

George, R., J. Lucas & D. Tranter (2005). Portfolio Entry: Alternative university access for year 12 students. In A. Brew & C. Asmar (Eds.), *Higher Education in a Changing World. Research and Development in Higher Education*, 28. Proceedings of the 2005 HERDSA Annual Conference. Sydney Australia 3 – 6 July, 142-149.

Giddens, A. (1990). *The Consequences of Modernity*. Stanford, Calif.: Stanford University Press.

Gill, B., Ramjan, L., Koch, J., Dlugon, E., Andrew, S. & Salamonson, Y. (2011). A standardised orientation program for first year undergraduate students in the College of Health and Science at UWS. A Practice Report. *The International Journal of the First Year in Higher Education, 2*(1), 63–69.

Grosz, E. (1993). *Volatile Bodies: Towards a Corporeal Feminism*. Bloomington: Indiana University Press.

Grosz, E. (1999). Thinking of the New: Of Futures Yet Unthought. In E. Grosz (Ed.), *Becomings: Explorations in Time, Memory, and Futures* (pp. 15-28). Ithaca: Cornell University Press.

Grosz, E. (2005). Bergson, Deleuze and the Becoming of Unbecoming. *Parallax, 11*(2), 4-13.

Harrison, N. (2006). The impact of negative experiences, dissatisfaction and attachment on first year undergraduate withdrawal. *Journal of Further and Higher Education*, *30*(4), 377-391.

Heirdsfield, A., Walker, S., & Walsh, K. (2005). Developing Peer Mentoring Support for TAFE Students Entering 1st-Year University Early Childhood Studies. *Journal of Early Childhood Teacher Education, 26*(4), 423-436.

Heirdsfield, A. M., Walker, S., Walsh, K., & Wilss, L. (2008). Peer Mentoring for First-Year Teacher Education Students: The Mentors' Experience. *Mentoring & Tutoring: Partnership in Learning, 16*(2), 109-124.

Hillman, K. (2005). *The First Year Experience: The Transition from Secondary School to University and TAFE in Australia*. Camberwell, Vic.: Australian Council for Education Research.

Hughes, M., Greenhough, P., Yee, W. C., & Andrews, J. (2010). The daily transition between home and school. In K. Ecclestone, G. Biesta & M. Hughes (Eds.), *Transitions and Learning Through the Lifecourse* (pp. 16-31). London & New York: Routledge.

Hultberg, J., Plos, K., Hendry, G. D., & Kjellgren, K. I. (2009). Scaffolding students' transition to higher education: parallel introductory courses for students and teachers. *Journal of Further and Higher Education, 32*(1), 47-57.

Jackson, C. (2003). Transitions into Higher Education: gendered implications for academic self-concept. *Oxford Review of Education, 29*(3), 331-346.

Jamelske, E. (2009). Measuring the impact of a university first-year experience program on student GPA and retention. *Higher Education, 57*(3), 373-391.

Kelly P. J. (2010). *Closing the College Attainment Gap between the US and Most Educated Countries, and the Contributions to be made by the States.* National Center for Higher Education Management Systems. Retrieved 14 February 2011, from http://www.nchems.org/pubs/docs/Closing%20the%20U%20S%20%20Degree%20Gap%20NCHEMS%20Final.pdf

Keup, J. R., & Barefoot, B. O. (2005). Learning How to Be a Successful Student: Exploring the Impact of First-Year Seminars on Student Outcomes. *Journal of the First-Year Experience & Students in Transition, 17*(1), 11-47.

Kift, S. (2008). The *next, great first year challenge: Sustaining, coordinating and embedding coherent institution–wide approaches to enact the FYE as "everybody's business"*. Keynote address, 11th First Year in Higher Education Conference "An apple for the learner: celebrating the first year experience". Hobart, 30 June. Retrieved 2 June 2011, from http://www.fyhe.com.au/past_papers/papers08/FYHE2008/content/pdfs/Keynote%20-%20Kift.pdf

Kift, S. (2009). *Articulating a transition pedagogy to scaffold and to enhance the first year student learning experience in Australian higher education: Final Report for ALTC Senior Fellowship Program.* Strawberry Hills, NSW: Australian Learning and Teaching Council.

Kift, S. & Field, R. (2009). *Intentional first year curriculum design as a means of facilitating student engagement: some exemplars*. Paper presented at 12th Pacific Rim First Year in Higher Education Conference "Preparing for tomorrow today: the first year experience as foundation". Townsville, 30 June. Retrieved 2 June 2011, from http://www.fyhe.com.au/past_papers/papers09/content/pdf/16D.pdf

Kift, S., & Nelson, K. (2005). *Beyond curriculum reform: embedding the transition experience.* Paper presented at the HERDSA, Higher Education in a Changing World, 225-235. Retrieved 1 June 2011, from http://conference.herdsa.org.au/2005/pdf/refereed/paper_294.pdf

Kift, S., Nelson, K., & Clarke, J. (2010). Transition pedagogy: A third generation approach to FYE – A case study of policy and practice for the higher education sector. *The International Journal of the First Year in Higher Education, 1*(1), 1-20.

Kimura, M., Brian, K., Ganga, D., Hudson, T., Murray, L., Prodgers, L., et al. (2006). *Ethnicity, education and employment.* London: University of East London, Continuum – The Centre for Widening Participation Policy Studies.

Krause, K. (2005). *The changing face of the first year: Challenges for policy and practice in research-led universities.* Keynote paper at The University of Queensland First Year Experience Workshop, October.

Krause, K. (2006). *On being strategic about the first year*. Keynote paper presented at First Year Forum, Queensland University of Technology, Brisbane, Queensland, Australia.

Krause, K.-L., & Coates, H. (2008). Students' engagement in first-year university. *Assessment & Evaluation in Higher Education, 33*(5), 493-505.

Lam, M. S., & Pollard, A. (2006). A conceptual framework for understanding children as agents in the transition from home to kindergarten. *Early Years: An International Journal of Research and Development, 26*(2), 123-141.

Lingard, B., Ladwig, J., Mills, M., Bahr, M., Chant, D., Warry, M., Ailwood, J., Capeness, R., Christie, P., Gore, J., Hayes, D. & Luke, A. (2001). *Queensland School Reform Longitudinal Study (QSRLS)*. Brisbane: Education Queensland.

Lynch, K. (1989). *The Hidden Curriculum: Reproduction in education, an reappraisal*. Lewes & Philadelphia: Falmer Press.

Marginson, S. (2008). Global field and global imagining: Bourdieu and worldwide higher education. *British Journal of Sociology of Education, 29*(3), 303-315.

Margolis, E., & Romero, M. (2001). 'In the Image and Likeness …' How Mentoring Functions in the Hidden Curriculum. In E. Margolis (Ed.), *The Hidden Curriculum in Higher Education* (pp. 79-96). New York, NY: Routledge.

McInnis, C., James, R., & McNaught, C. (1995). *First year on campus: Diversity in the initial experience of Australian Undergraduates*. Canberra: AGPS.

Miles, S. (2000). *Youth Lifestyles in a Changing World*. Buckingham: Open University Press.

Mills, C.W. (1959). *The Sociological Imagination*. Oxford, UK: Oxford University Press.

Nelson, K. J., Kift, S. M. & Harper, W. (2005). *"First portal in a storm": A virtual space for transition students.* Paper presented at the 2005 Australian Society for Computers in Learning in Tertiary Education Conference. Brisbane, 7 December. Retrieved June 10 2011, from http://eprints.qut.edu.au/3943/1/3943_1.pdf

Nelson, K., Kift, S., Humphreys, J., & Harper, W. (2006). *A blueprint for enhanced transition: taking an holistic approach to managing student transition into a large university*. Paper presented at the 9th First Year in Higher Education Conference "Engaging Students". Gold Coast, 14 July. Retrieved 2 June 2011, from http://www.fyhe.com.au/past_papers/2006/Papers/Kift.pdf

Osborne, M. & Gallacher, J. (2007). An international perspective on researching widening access. In M. Osborne, J. Gallacher & B. Crossan (Eds.), *Researching Widening Access to Lifelong Learning: Issues and Approaches in International Research* (pp. 3-16). London: Routledge.

Pallas, A. M. (2003). Educational Transitions, Trajectories, and Pathways. In J. T. Mortimer & M. J. Shanahan (Eds.), *Handbook of the Life Course* (pp. 165-184). New York: Plenum.

Quinn, J. (2010). Rethinking 'failed transitions' to higher education. In K. Ecclestone,

G. Biesta & M. Hughes (Eds.), (pp. 118-129). *Transitions and Learning through the Lifecourse.* London: Routledge.

Rice, J. W., Thomas, S. M., & O'Toole, P. (2009). *Tertiary Science Education in the 21st Century – Final Report.* Strawberry Hill, NSW: ALTC. Retrieved 7 June 2010, from http://www.altc.edu.au/project-reconceptualising-tertiary-science-uc-2006

Said, E. W. (1979). *Orientalism.* New York: Vintage Books.

Sefa Dei, G. J. (2008). Indigenous Knowledge Studies and the Next Generation: Pedagogical Possibilities for Anti-colonial Education. *Australian Journal of Indigenous Education, 37*(Supplementary), 5-13.

Sefa Dei, G. J. (2010). *Teaching Africa: Towards a Transgressive Pedagogy.* Dordrecht: Springer.

Sellar, S., & Gale, T. (2011). Mobility, aspiration, voice: A new structure of feeling for student equity in higher education. *Critical Studies in Education, 52*(2), 115-134.

Semetsky, I. (2006). *Deleuze, Education and Becoming.* Rotterdam & Taipei: Sense.

Smith, D. I. (2009). Changes in transitions: the role of mobility, class and gender. *Journal of Education and Work, 22*(5), 369-390.

Sotirin, P. (2005). Becoming Woman. In C. J. Stivale (Ed.), *Gilles Deleuze: Key Concepts* (pp. 98-109). Quebec: McGill-Queen's University Press.

te Riele, K. (2004). Youth transition in Australia: challenging assumptions of linearity and choice. *Journal of Youth Studies, 7*(3), 243–257.

Thomas, L. (2002). Student retention in higher education: the role of institutional habitus. *Journal of Education Policy, 17*(4), 423-442.

Tinto, V. (1988). Stages of student departure: Reflections on the longitudinal character of student leaving. *Journal of Higher Education, 59*(4), 438-455.

Tinto, V. (2008). *Access without support is not opportunity.* Paper presented at the 36th Annual Institute for Chief Academic Officers, The Council of Independent Colleges. November, Seattle, Washington.

Terenzini, P. T., Rendon, L. I., Millar, S. B., Lee Upcraft, M., Greg, P. L., Jalomo Jr, R., & Allison, K.W.. (1996). Making the transition to college. In R. J. Menges & M. Weimer (eds.), *Teaching on solid ground: Using scholarship to improve practice* (pp. 43-74). San Francisco: Jossey-Bass.

Trow, M. (1974). Problems in the transition from elite to mass higher education *Policies for Higher Education* (pp. 51-101). Paris: OECD.

Trow, M. (2006). Reflections on the Transition from Elite to Mass to Universal Access: Forms and Phases of Higher Education in Modern Societies since WWII. In J. J. F. Forrest & P. G. Altbach (Eds.), *International Handbook of Higher Education, Part one: Global Themes and Contemporary Challenges* (pp. 243-280). Dordrecht: Springer.

Valentine, G., Skelton, T. (2007). Re-defining 'norms': D/deaf young people's

transitions to independence. *The Sociological Review, 55*(1), 104–123.

Wasburn, M. H. (2008). One Mentor or Two: An Instrumental Case Study of Strategic Collaboration and Peer Mentoring. *Journal of the First-Year Experience & Students in Transition, 20*(2), 91-109.

Webb, M. (2005). Becoming a Secondary-School Teacher: The Challenges of Making Teacher Identity Formation a Conscious, Informed Process. *Issues in Educational Research, 15*(2), 206-224.

Werner, H. (1957). The concept of development from a comparative and organismic point of view. In D. B. Harris (Ed.), *The concept of development: An issue in the study of human behaviour* (pp. 125–148). Minneapolis: University of Minnesota Press.

Wilson, K. (2009,). *The impact of institutional, programmatic and personal interventions on an effective and sustainable first-year student experience.* Keynote Address, 12th Pacific Rim First Year in Higher Education Conference "Preparing for tomorrow today: the first year experience as foundation". Townsville, 29 June. Retrieved 2 June 2011, from http://www.fyhe.com.au/past_papers/papers09/ppts/Keithia_Wilson_paper.pdf

Worth, N. (2009). Understanding youth transition as 'Becoming': Identity, time and futurity. *Geoforum, 40*(6), 1050-1060.

Wyn, J., & Dwyer, P. (2000). New patterns of youth transition in education. *International Social Science Journal, 52*(164), 147-159.

Further reading

This list is intended to be read in conjunction with the literature review and the reference list. Together they are an extract of a much larger bibliography. These recommendations for further reading attempt to strike a balance between theoretical research, definitive works and practice-based research papers to illustrate the extent and diversity of the literature. *Denotes particularly noteworthy readings.

Appadurai, A. (2004). The Capacity to Aspire: Culture and the Terms of Recognition. In V. Rao & M. Walton (Eds.), *Culture and Public Action* (pp. 59-84). Stanford: Stanford University Press.

Atherton, C. (2006). A-level English Literature and the Problem of Transition. *Arts & Humanities in Higher Education, 5*(1), 65–76.

*Ball, S. J., Maguire, M., & Macrae, S. (2000). *Choice, pathways, and transitions post-16: new youth, new economies in the global city*. New York: Falmer Press.

Burnett, L. & Larmar, S. (2011). Improving the first year through an institution-wide approach: The role of first year advisors. *The International Journal of the First Year in Higher Education, 2*(1), 21–35.

Christie, H. (2009). Emotional journeys: young people and transitions to university. *British Journal of Sociology of Education, 30*(2), 123–136.

*Ecclestone, K., Biesta, G., & Hughes, M. (Eds.). (2010). *Transitions and Learning Through the Lifecourse*. London & New York: Routledge.

Engstrom, C., & Tinto, V. (2008). Access Without Support is Not Opportunity. *Change, 40*(1), 46-50.

*Field, J., Gallacher, J., & Ingram, R. (Eds.). (2009). *Researching Transitions in Lifelong Learning*. London & New York: Routledge.

Henderson, R., Noble, K., & De George-Walker, L. (2009). Transitioning into university: 'Interrupted' first year students problem-solving their way into study *Studies in Learning, Evaluation Innovation and Development*, *6*(1), 51-64.

Higgins, J., & Nairn, K. (2006). 'In transition': choice and the children of New Zealand's economic reforms. *British Journal of Sociology of Education, 27*(2), 207-220.

Hillman, K. (2005). *The First Year Experience: The Transition from Secondary School to University and TAFE in Australia* (No. 40): Australian Council for Education Research.

*Hussey, T., & Smith, P. (2010). Transitions in higher education. *Innovations in Education and Teaching International, 47*(2), 155-164.

Jamelske, E. (2009). Measuring the impact of a university first-year experience program on student GPA and retention. *Higher Education, 57*(3), 373-391.

McInnis, C., James, R., & Hartley, R. (2000). *Trends in the first year experience in Australian universities*. Canberra: AGPS.

*Quinn, J. (2004). Understanding Working-Class 'Drop-Out' from Higher Education

through a Sociocultural Lens: cultural narratives and local contexts. *International Studies in Sociology of Education, 14*(1), 57-74.

Quinn, J., Thomas, L., Slack, K., Casey, L., Thexton, W., & Noble, J. (2005). *From life crisis to lifelong learning: Rethinking working-class 'drop out' from higher education*. York: York Publishing/Joseph Rowntree Foundation.

*Shildrick, T., & MacDonald, R. (2007). Biographies of exclusion: poor work and poor transitions. *International Journal of Lifelong Education, 26*(5), 589-604.

Tinto, V. (2006-2007). Research and practice of student retention: What next? *Journal of College Student Retention*, *8*(1), 1-19.

Upcraft, M. L., Gardner, J. N., & Barefoot, B. O. (Eds.). (2005). *Challenging and supporting the first-year student: A handbook for improving the first year of college*. San Francisco: Jossey-Bass.

Index