Student engagement with self-instructional course materials

A thesis presented in partial fulfilment of the

requirements for the degree of

Master of Education

in

Distance and On-line Learning

At Massey University, Extramural,

New Zealand

Peter Cowie

2010

Abstract

This study is concerned with understanding how students engage with self-instructional materials on campus and at a distance within the context of the hybrid course offered at ABC College. This study examines the interrelationship of (a) time engaged with course materials, (b) the perceived value of course materials, (c) student approaches to engagement and (d) the integration of the course materials into the student learning experience in order to construct an understanding of student engagement with course materials.

This study employed multiple case studies which formed a holistic collective case study. Data on student engagement with the course materials was collected using a questionnaire instrument. The resulting data was analysed using descriptive statistics to create a picture of how students engaged with the course materials. Correlation statistics were used to identify possible relationships between the items. Emerging themes were then explored in focus groups. Subsequent analysis of the focus group data explored the causation and interrelationships between themes resulting in an understanding of student engagement with the course materials.

The findings from this study suggests that student engagement with self-instructional course materials (readings, learning guide, multimedia, etc.) are the result of complex interactions between a student's preferred approach to engagement, their locus of control and the method of integration of the course materials. The majority of participants preferred to engage with the course materials using a deep approach. Participants with an external locus of control reflected the assumptions and approaches they perceived from the method of integration. Participants with an internal locus of control engaged with the course materials using their preferred approach unless they were convinced that another approach served their needs better. The majority of participants exhibited an external locus of control. When a presentation or supplemental method of integrating was used, participants were more likely to engage with the course materials using a surface approach to engagement. They were also more likely to spend less time engaging with the course materials and place a lower value on the course materials. When a discussion or springboard method of integration was used participants were more likely to engage the course materials using a deep approach to engagement. They were also more likely to spend more time engaging with the course materials and place a higher value on the course materials.

Acknowledgements

This thesis would not be possible without the support, guidance and assistance of key individuals.

I am grateful to Dr Ben Kehrwald, my lead supervisor, for supporting me throughout the thesis. He has taught me the importance of methodology, challenged my thinking, required me to think critically about my data and justify my conclusions. For this I am truly thankful.

I would also like to thank Dr Panos Vlachopoulos and Dr Valerie Margrain, my supporting supervisors. They have both shared their insight and experience often shedding light on the issues I faced from a different perspective. I especially want to thank Dr Valerie Margrain for assisting in the completion of the thesis.

Above all, I would like to thank Carole, my wife, and Logan, my son, who have supported me throughout this journey. Their encouragement and understanding has made this thesis a reality.

Contents

List of tables

List of figures

Chapter 1: Introduction

1.1 The Rationale of the Study

Blended and distance learning course materials, in the form of learning guides, books, articles and multimedia, have become an integral part of the undergraduate student's learning experience (Bonk, Kim, & Zeng, 2006). In some cases the traditional distinctions between campus and distance study have been blurred. New ways of teaching have emerged which draw from both traditions. However, student engagement still remains an important factor in academic success (Carini, Kuh, & Klein, 2006). The quality of a student's engagement with the ideas and concepts being presented in a course significantly influences the extent of their learning (Coates, 2006b; Entwistle & Ramsden, 1982; Kuh, Cruce, Shoup, Kinzie & Gonyea 2008).

In 2009, ABC College[1] developed a form of blended learning which it labelled 'hybrid'. Each hybrid course was taught using a common set of self-instructional course materials developed by a lead academic and the instructional designer. The course materials consisted of a learning guide, a textbook, a book of readings, an online learning environment and a range of multimedia components such as interviews with academics, interactive learning objects and additional course resources. The course materials were designed to be used by both on-campus and distance students. Each hybrid course was taught on two campuses, Gisborne[2] and Hamilton, and also offered via distance. Each instance of the course was taught by different faculty members drawing from the one set of course materials. In conjunction with the introduction of the hybrid courses, the percentage of teaching time per course was reduced. For example, under the old course structure, campus students enrolled in a 15 credit course had 54 hours of contact time and were expected to spend 96 hours on self-study and assignments. Under the new course structure, students enrolled in a 15 credit course had 30 hours of contact time and were expected to spend 120 hours on self-study and assignments. As a result of these developments, campus students were increasingly required to spend a substantial proportion of their study time engaging with ideas and concepts presented in course materials outside of class. For distance students, the status quo is maintained in that

[1] ABC College is a New Zealand private tertiary provider offering degree level course in a range of disciplines. The names of the institution, lecturers and students have been changed to protect their identity

[2] Pseudonyms have been used through this paper to protect the identity of the institution, lecturers and students.

the majority of their study time was spent engaging with course materials.

The decision to hybridise courses at ABC College was made in an attempt to address some of the issues the institution faced offering courses across two campuses and via distance. However, to date it has been a largely unproven strategy. While a substantial body of literature exists that discusses student engagement for campus based or distance courses, the researcher has been unable to locate any studies which examine student engagement within the context of a hybrid course as defined by ABC College. The literature that explores student engagement does so in the context of either campus or distance education as separate and independent entities (Biggs, 1987; Coates, 2006a; Entwistle & Ramsden, 1982; Vermunt & Van Rijswijk, 1988). As a result ABC College does not have any measures or systems in place to record or analyse the effectiveness of hybrid courses. With significant resources being allocated to the hybridisation process it is important for the College to realise improvements in student success and satisfaction and increased administrative efficiency.

Anecdotal evidence from students and lecturers has suggested mixed reactions to the hybrid course materials. In general, the distance students have appreciated having up to date and well designed learning materials. There were some students who had difficultly adapting to the different style of materials used in the hybrid course. For campus students, some have appreciated receiving the course pack and actively used it as part of their study programme, while other students used the course materials sporadically without any clear idea of how the course materials reflected and complemented the lectures. Some students completely ignored the hybrid course materials. One lecturer even commented to the researcher that students resented receiving the CD and course materials. They didn't see the point in them. The anecdotal evidence concerning the use of the hybrid course materials was collected from impromptu conversations with students and faculty, emails and messages or impressions relayed through other parties. This anecdotal evidence raised important questions as to how students were using the hybrid course materials. A more rigorous examination of student engagement with the hybrid course materials was necessary in order to develop an understanding of how students engage with the hybrid course materials and inform future development and use of these materials.

1.2 Research Aim

This study aims to understand how students engage with self-instructional materials on campus and at a distance within the context of the hybrid course offered at ABC College. This study examines the interrelationship between (a) time engaged with course materials, (b) the perceived value of course materials, (c) student approaches to engagement and (d) the integration of the course materials with the student learning experience in order to construct an understanding of student engagement with self-instructional course materials. The key questions for this research are as follows.

- How much time do students engage with the course materials?
- What is the perceived value of the course materials?
- How do students approach engaging with the course materials?
- How are the course materials integrated into the student learning experience?
- What are the interrelationships between time engaged, value, approach and integration?

1.3 Outline of the Method

This study was based on the constructivist research paradigm. It sought to understand student engagement from the students' perspective (Denzin & Lincoln, 2000). It used a case study methodology in which multiple case studies form a holistic collective case study (Yin, 2009). This study employed two methods of data collection; a questionnaire and focus groups. The questionnaire data was analysed using descriptive statistics to summarise the data collected on each case and correlation statistics were used to identify statistically significant differences between items within each case and between cases. Analysis of the questionnaire data informed the development of the discussion guide for the focus groups. The focus groups were analysed using qualitative thematic analysis (Miles & Huberman, 1994). Each case was analysed independently before cross case analysis was performed.

1.4 Limitations of the Study

This study is a small scale exploratory case study. This study collected data from a small sample of students in a particular context. Findings from this study were used to construct an understanding of how students engage with self-instructional course materials in this programme. As a result, the theory of student engagement developed in this study is context

bound. It needs to be tested and refined before it can be applied to other contexts. However, the theory developed in this study does point to a number of interesting areas which need further exploration.

1.5 Overview of the Thesis

Chapter one introduces the study. It describes the context, impetus and aims of the study. It also overviews the methodology employed and discusses the limitations of the study. It concludes with an overview of the study.

Chapter two presents a synthesis and discussion of the relevant research literature which informs this study. It begins by defining student engagement and then proceeds to develop a conceptual framework for studying student engagement. The internal and external dimensions of student engagement are analysed within this conceptual framework. The chapter concludes by demonstrating how the literature foreshadows the research questions.

Chapter three describes the approach, methodology and research design employed in this study. In particular it focuses on the design and analysis of questionnaire and focus group instruments. It articulates the methods used to construct an understanding of the data collected. This chapter also addresses ethical considerations which arose during the study.

Chapter four presents the results from the questionnaire data. The analysis in this chapter is structured using the key research questions. This chapter concludes with a discussion of how the findings from the questionnaire data inform and foreshadow the focus groups.

Chapter five, six and seven present the results for the Gisborne, Hamilton and Distance cases respectively. The analyses in these chapters are structured using the key research questions. Each chapter concludes with a summary of the findings from that case.

Chapter eight presents an integrated discussion of the findings from all the cases. The discussion is structured around the key themes of (a) Time spent engaging with the course materials, (b) Perceived value of the course materials, (c) integration of the course materials, and (d) approach to engagement with the course materials. It concludes with a presentation of the key implications of the findings and identifies areas for further research.

Chapter 2: Literature Review

This chapter presents a synthesis and discussion of the relevant research literature which inform this study. It begins by defining student engagement and then proceeds to develop a conceptual framework for studying student engagement. The internal and external dimensions of student engagement are analysed within this conceptual framework. The chapter concludes by demonstrating how the literature foreshadows the research questions.

2.1 The Definition of Student Engagement

Broadly, student engagement encompasses students' in-class and out-of-class experiences. As described by Fredricks, Blumenfeld, and Paris (2004), student engagement is a meta-construct in which to draw diverse student experiences into a coherent whole. While this definition of engagement is too broad to be useful in this study, it does highlight that engagement is about *student experience*. Student experience has both *active* (what the student does) and a *passive* (what is done to the student) components (Fredricks, et al., 2004).

Barnett (2003) discusses student experience in terms of engagement and separateness. Barnett points out that engagement requires "mutual listening, to reciprocity, and dialogue but conducted in a willingness to change" (p. 253). He notes that engagement requires students to actively interact with ideas and with others. According to Barnett, mutual listening, reciprocity and dialogue cannot occur in the fullest sense when students interact with the learning materials because the interaction is only one sided. However, there is a sense that students engage in an inner dialogue as they probe, reflect and question the ideas and concepts presented in the course materials. Barnett's definition highlights the fact that engagement is as much about a student's *attitude* as it is about their interaction.

Coates (2006a) notes that older definitions of student engagement tend to be based on behaviouralist assumptions. These definitions typically describe student engagement as 'time on task' or 'academic learning'. For example Astin (1985) states that ‘‘it is not so much what the individual thinks or feels, but what the individual does, how he or she behaves, that defines and identifies involvement’’ (p. 298). Astin equates engagement with specific behavioural activities. If these specific behavioural activities are present a student is said to

have engaged with the course. Barnett (2003) and Astin (1985) both agree that there are behavioural aspects to student engagement, but Barnett attributes the behavioural aspects to constructive cognitive processes and attitudes.

Recent definitions of student engagement view it as a complex activity, linked to students' belongingness, motivation, community, finances and the activities of student learning, which involves the student in actively engaging in the construction of knowledge. Pace (1979) states that engagement is as much about the effort a student exerts as it is about the activity a student engages in. Two students can complete the same activity but have very different levels of engagement because one student exerts more effort than the other student.

Hu and Kuh (2001) extend Pace's concept of 'quality of effort' and incorporate it into their definition of student engagement. They define student engagement as "the quality of effort students themselves devote to educationally purposeful activities that contribute directly to desired outcomes" (Hu & Kuh 2001, p. 3). Students may be busy, but the activities they undertake can only be termed *engagement* if they are directly linked to their achieving the intended learning outcomes. For example, a student may take copious notes of a lecture on the development of constructivism. Taking notes is an educationally purposeful activity that requires some effort, but this does not mean that the student is engaged. If the student took notes in order to regurgitate the material for an exam, they have not engaged at any depth with the lecture because it does not help the student achieve the learning outcome for the lecture. If, however, a student uses the notes to review the lecture looking for links between the ideas present, seeking to create a coherent whole and linking these ideas with previous lectures, the student would be engaging at a deep level because it requires significant effort on the student's part. This activity is educationally purposeful because it helps them achieve the learning outcome for the lecture.

Coates (2006b) draws upon Hu and Kuh (2001) when defining student engagement "as an individual's involvement with the educationally relevant activities and conditions that are instrumental to their learning." (Coates, 2006b, p. 5). Coates' definition of student engagement highlights the *internal* and *external* dimensions of student engagement. The internal dimension examines engagement from the student's perspective within the immediate context of a learning activity. It describes the cognitive process in which students

engage as they are learning. It positions the researcher to describe and analyse from the perspective of the student's experiences (Marton, 1981). In contrast, the external dimension examines student engagement from a macro perspective seeking to understand what factors outside the student increase or decrease the likelihood of engagement as defined by externally observable phenomena. While both the internal and external dimensions of student engagement are important, this study is specifically concerned with examining how students engage internally with the hybrid course materials. *As a result it only examines aspects of the external dimensions which directly affect internal student engagement*.

For the purposes of this study, student engagement is defined as *the extent of an individual's involvement with activities that are instrumental to their learning*. Barnett (2003), Coates (2006a, 2006b), Fredrick, et al. (2004), and Hu and Kuh (2001) highlight four aspects of student engagement: 1. effort, 2. attitude, 3. purpose, and 4. activity. Together they describe the complex phenomenon of student engagement. Key indicators for each aspect of student engagement were identified from the literature (table 2.1). The amount of time a student spends engaging with the course materials is an indication of effort. The perceived value of course materials in assisting students to achieve the course objectives is an indication of a student's attitude toward the course materials. The approach a student use to engage with the course materials is an indication of their understanding of the purpose of the course materials. The integration of the course materials into the student's learning environment is an indication of their activity. Each aspect of student engagement cannot be studied independently because they are interrelated. This means that there is interplay between all the indications and aspects.

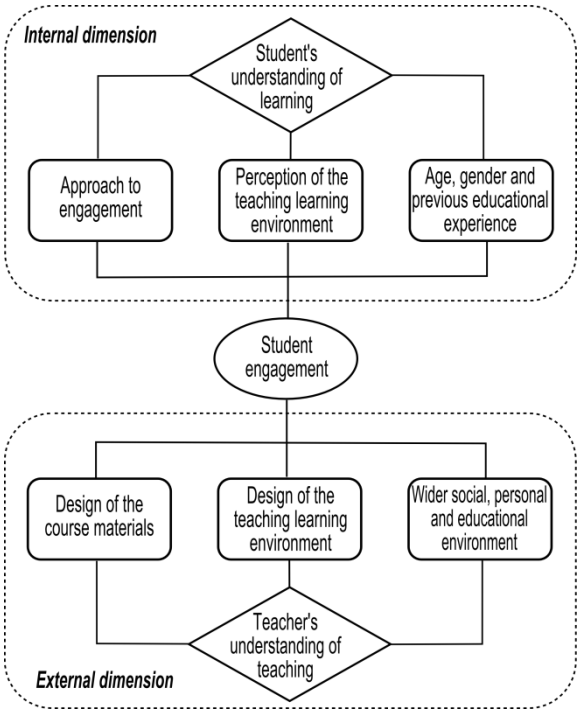
Table 2.1
Indicators of Student Engagement

Aspect	Key Indicator
Effort	The amount of time spent engaging with the course materials
Attitude	The value of various components of the course materials
Purpose	The approach used to engage with the course materials
Activity	The integration of the course materials into the learning environment

2.2 Conceptual Framework for Studying Student Engagement

Student engagement is multi-faceted. It involves the interaction of students with their peers, teachers and the institution within the context of learning. Entwistle (2003) provides a useful framework for understanding the various aspects that result in student engagement or, to use Entwistle's term, the "quality of learning achieved" (see fig. 2.1). The research into student engagement can be divided into two broad categories according which dimension of student engagement is being investigated. Each category approaches the question of student engagement from a different research perspective and employs a different set of methodologies.

Figure 2.1
Conceptual framework for studying student engagement



(Adapted from Entwistle, 2003, p.3)

Biggs (1987), Entwistle and Ramsden (1982), Kember, et al. (1991) and Vermunt and Van Rijswijk (1988) examine student engagement within the context of a student's internal cognitive interaction or approach to study. They investigate student engagement from the perspective of the student. They are concerned with how students approach engagement, how students perceive the teaching-learning environment, and how age, gender and previous

educational experience influences student engagement. They acknowledge that factors outside the student, such as teaching style and student support systems, influence student engagement, but they assert that internal cognitive processes have the most influence on student engagement. These researchers approach the question of student engagement from a constructivist perspective and use qualitative research methods (Biggs, 1987; Entwistle & Ramsden, 1982); Kember, et al., 1991; Vermunt and Rijswijk, 1988).

Pace (1979), Pascarella (1991), Astin (1985), Kuh (2001) and Coates (2006b) examine student engagement within the context of students' external interactions with others and their environment. They investigate student engagement as outside observers. They assert that external factors have the most influence on student engagement. By optimising the external factors the desired level of student engagement can be achieved. These researches make extensive use of quantitative research methods (Astin, 1985; Coates, 2005b; Kuh, 2001; Pace, 1979; Pascarella, 1991).

2.3 Internal Dimension of Student Engagement

Internal cognitive interaction is concerned with how a student relates and engages cognitively with a learning activity. "It is about how [students] experience and organise the subject matter of a learning task; it is about 'what' and 'how' they learn, rather than 'how much' they remember." (Ramsden, 2003, p. 41). The term 'approach to engagement' is used in the literature to describe internal cognitive interaction.

Marton and Saljio (1997) were the first to identify two approaches to engagement: deep and surface. Their research investigated how students developed meaning from unfamiliar texts. Marton and Saljio identified two distinct groups of students. One group was able to identify the conclusions the author drew from the evidence. The other group was able only to describe the isolated parts of the article. Marton and Saljio concluded that the differences between what the two groups of students learnt occurred because of the nature of the relation between the student and the activity of reading.

> [The first group] experienced the learning situation as one that required them to extract personal meaning from the article. They were not dominated by the requirement to answer questions later. They tried to understand the author's underlying structure, or by relating the text to something in the real world or

> in their previous reading. They defined their job as actively making sense ... From their perspective, the text was not an end in itself, but a means to understanding the author's message: 'The whole aim of the article was what I was thinking of.' (Ramsden, 2003, pp. 42-43)
>
> [In contrast, the] second group were not looking for the meaning of the text embodied in the intention of the author. They could not understand the article because they did not intend to understand it. They concentrated on its constituent parts rather than the whole in relation to the parts. They defined their job as if they were empty vessels into which the words of the page would be poured ... They were not personally involved in the task. They saw it as an external imposition – a job they had to complete for some purpose outside themselves. (Ramsden, 2003, p. 42)

The approaches to engagement that these two groups displayed were subsequently labelled 'deep' and 'surface' respectively. While the original concept of deep and surface approaches to engagement were originally applied to reading academic texts, Entwistle and Ramsden developed this concept by identifying cognitive strategies which could be applied in a range of contexts (Entwistle & Peterson, 2004).

Table 2.2
Approaches to engagement

Surface approach	**Deep Approach**
Focus on the 'signs'	Focus on what 'is signified'
Focus on discrete elements	Relate and distinguish new ideas and previous knowledge
Memorize information and procedures for assessment	Develop an understanding of the process
Unreflectively associate concepts and facts	Relate concepts to everyday experience
Fail to distinguish principles from evidence	Organise and structure content
External emphasis	Internal emphasis

(Ramsden, 1988, p. 19)

Webb (1997) and Haggis (2003) have challenged the validity of the deep/surface conceptual framework for describing the internal dimension of student engagement. Webb (1997) has questioned the usefulness of the framework because of the looseness with which it has been applied by some researchers. Webb also argues that the approach to engagement dichotomy of deep/surface is too reductionist to be meaningful. Haggis (2003) notes the conceptual slip evident in some literature from the deep approach to engagement/learning to deep learning and finally into deep learners. Haggis asserts that as a result of this conceptual slippage 'approach to engagement' has come to be characteristic of the individual, describes developmental stages in which a student progresses and are synonymous with learning styles.

In response to Webb's critique, Entwistle states that:

> It *is* all too easy, for example, to take a dichotomy and label students with it, forgetting that the original use of the term 'approach' carried with it the implication that it was a response to the content and perceived demands of a specific task on a particular occasion. [Author's emphasis] (Entwistle, 1997, p. 215)

Entwistle goes on to argue that the reason the approach to engagement dichotomy has been so pervasive and powerful is because it resonated with educators as a means to understand the students they were teaching. Instead of being reductionist, it allows educators to explore the complexity of student learning.

In response to Haggis' critique, Marshall and Case (2005) argue that a student's approach to engagement is the relationship of the student to the learning context. Ramsden (2003) stresses that a student's approach to engagement is not dependent on the nature of the task or the individual. Any learning task given to a student can be engaged with at a surface or a deep level. A student's approach to engagement does not describe developmental stages in which a student progresses as Haggis asserts. Any student is capable of engaging at a surface level on one learning task and then engaging at a deep level on another identical task (Marshall & Case, 2005). Marshall and Case (2005) also assert that a student's approach to engagement is not synonymous with learning styles. The difference in approach is due to the students' conception of knowledge and learning, their motivation or learning orientation and their *perception* of the task, not the task itself (Entwistle & Peterson, 2004).

A student's approach to engagement is as a result of a complex set of underlying assumptions (see table 2.3) (Entwistle & Peterson, 2004). At the most fundamental level, a student's approach to engagement is guided by their conception of knowledge. Perry (1970) was the first to suggest that a student's conception of knowledge developed, moving from dualism toward relativism, as they progressed through tertiary education. Each stage of conceptual development was marked by a change in the way students engaged. Perry's ideas were subsequently developed by other researchers (Baxter Magolda, 2006; Belenky, 1986; King & Kitchener, 1994) and applied to student engagement by Entwistle and Peterson (2004). A student's conception of knowledge is significant because it helps explain the cognitive thought

processes of student which is evidenced in their approach to engagement.

Table 2.3
The underlying assumptions that result in a student's approach to engagement

Conception of knowledge	Dualism	Relativism
Conception of learning	Reproducing	Seeking understanding
Approach	Surface approach	Deep approach
Result	Limited understanding	Thorough understanding

(Adapted from Entwistle & Peterson, 2004, p.420)

Saljio (1979) discovered that student's conception of learning paralleled their conception of knowledge (see figure 2.3).

> The earlier conceptions are rooted in specific learning experiences, and so the recurrence of similar situations may re-activate those conceptions, even when later ones have also been developed. Saljio suggested that people with a fully developed conception of learning become aware of the different purposes for which alternative process of learning can be used, and so become consciously aware of their learning and able to adopt process appropriate to the varying tasks. This awareness can be seen as an emergent property of a developmental trend in conceptions of learning. (Entwistle & Peterson, 2004, p. 411)

A student's conception of learning influences their orientation to learning by providing students with a rationale and framework for engagement. Learning-orientation is the "collection of purposes which form the personal context for the individual student's learning" (Beaty, Gibbs, & Morgan, 1997, p. 76). Learning-orientation focuses on *what* students are trying to achieve in their study as opposed to goal-orientation which focuses on *why* students are studying. The distinction between learning-orientation and goal-orientation is significant because it helps explain why two students can engage in a learning task using different approaches. For example, two students may be motivated to achieve a high grade in an assignment because they want to secure a lucrative position when they graduate (goal-orientation). However, these students can have very different conceptions of the same learning task (learning-orientation). Student A conceives the learning task as reporting a synthesis of the current understanding of the topic. Student B conceives the learning task as critically examining a range of current understandings and reaching a conclusion which they believe is best attested to by the data. Both students produce a written essay. In some cases they may even be awarded similar grades. However, these students have very different

experiences of student engagement as a result of their learning orientation. Student A's conception of learning is towards the reproducing end of the spectrum. As a result, student A engages with the course materials using a surface approach, looking of pieces of information which they can use to construct a coherent essay. In contrast, student B's conception of learning is towards the understanding end of the spectrum. As a result, student B engages with the course materials using a deep approach, seeking to understand the relative strengths and weaknesses of different positions and seeking to make an informed choice as to which understanding best fits the data.

Table 2.4
Internal dimension of student engagement

Conception of knowledge	**Dualism**			**Relativism**	
	Knowledge as absolute, provided by authorities	Multiple perspectives, opinions of equal value	Awareness of knowledge as provisional	Evidence used to reason among alternatives	Commitment to a personal reasoned perspective
Conception of learning	**Reproducing**			**Seeking understanding**	
	Acquiring factual Information	Memorising what has to be learned	Applying and using knowledge	Understanding what has been learned	See things in a different way
Approach	**Surface approach**			**Deep Approach**	
	Focus on the 'signs'			Focus on what 'is signified'	
	Focus on discrete elements			Relate and distinguish new ideas and previous knowledge	
	Memorize information and procedures for assessment			Develop an understanding of the process	
	Unreflectively associate concepts and facts			Relate concepts to everyday experience	
	Fail to distinguish principles from evidence			Organise and structure content	
	External emphasis			Internal emphasis	
Result	**Limited understanding**			**Thorough understanding**	

A student's internal cognitive interaction is as a result of their conception of knowledge which parallels their conception of learning which guides their approach to engagement (see table 2.4). A synthesis of the research by Ramsden (1998; 2003), Martin and Saljio (1997) and Entwistle and Peterson (2004) suggests that students who have a dualistic conception of knowledge have a reproducing conception of learning which leads to a surface approach to engagement with results in a limited understanding. In contrast, students who have a

relativistic conception of knowledge have a conception of learning which seeks understanding which leads to a deep approach which results in a thorough understanding. The two internal dimensions presented are extremes on a continuum. Most students would lie somewhere between these two extremes.

2.3.2 Student perceptions of the teaching-learning environment

A student's perception of the teaching-learning environment has been found to be a significant factor in engagement. Laurillard (1979) and Ramsden (2003) note that a student's approach to engagement varies depending on the learning context. Students can and will engage using a surface or deep approach based on clues they receive from their context and the students' own perception of the task. There is also a clear relationship between a student's approach to engagement and a student's perception of teaching (Meyer, 1991). Students tend to reflect the approach to engagement that they perceive is being valued through the teaching. When students who would normally use a deep approach perceive that a surface approach is valued by the teacher the result is often frustration and disillusionment (Lindblom-Ylanne & Lonka, 1999). In contrast, students who normally use a surface approach but are required by the teacher to engage at a deeper level experience an initial cognitive dissonance which leads to a deepening of their approach (Entwistle & Peterson, 2004).

2.3.3 Age, gender and prior educational experience

Age, gender and prior educational experience have been proposed as possible factors that influence the way a student engages. Biggs (1987) noted that the deep approach tended to increase with a student's age but decline with years of study. This conclusion was investigated in detail by Vermunt and Rijswijk (1988) in their research on distance student engagement using an instrument derived from the ASI which is considered superior to the SPQ instrument used by Biggs (Richardson, 2000). They concluded that age was not a factor. This research was subsequently repeated by Vermunt (2005) on campus students and reached the same conclusions. Biggs (1987) reported that men tended to score higher in the surface scale than women, but there was no statistically significant difference in the deep scale due to gender. Without a clear correlation on both surface and deep scales, Biggs results are inconclusive. Vermunt and Rijswijk (1988) and Vermunt (2005) ruled out gender as a factor in engagement. It should be noted that Biggs used the SPQ instrument which is now considered dated and superseded by the ASI (Richardson, 2000). Research undertaken by Vermunt and Rijswijk

(1988) into distance student engagement concluded that age, gender, and prior education are not factors which significantly influence engagement. Vermunt (2005) subsequently repeated his research on campus student with the same results.

2.4 External Dimension of Student Engagement

2.4.1 Design of self-instructional course materials

The design of the course materials influences how students engage with the course materials (Noel Entwistle & Ramsden, 1982; Lockwood, 1998; Nichols, 2008). The hybrid course materials are designed to be self-instructional course materials. Lockwood (1998) defined self-instructional course materials as a unified set of resources, designed expressly to facilitate students learning independently, which share a common set of characteristics (see Table 2.5). A discussion on the design rationale is beyond the scope of this study. For a detailed presentation of the design principles used in the design of the self-instructional course materials, see Lockwood (1992, 1994, 1995, 1998, 2000).

Table 2.5
Distinctive features of self-instructional course materials

Self-instructional materials are:

- Individual learning-focused
- Self-paced learning
- Private learning
- Available at any time
- Available at any place
- Available to any number
- Standardised content
- Expert content
- Updatable content
- Structured teaching
- Active learning
- Frequent feedback
- Explicit aims and objectives
- Individualised tutoring

(Lockwood, 1998, p. 3)

Entwistle and Ramsden (2003) noted that certain design characteristics encouraged surface or deep approaches to engagement (see Table 2.6)

Table 2.6
Design features which encourage surface and deep approaches to engagement

Surface approaches are encouraged by…

- An excessive amount of material in the curriculum
- Lack of independence in studying
- Previous experiences of educational settings which encourage surface approaches

Deep approaches are encouraged by…

- Clearly explained meaning and relevance to students
- Clearly stated academic expectations
- Opportunities to exercise responsible choice in the method and content of study
- Previous experiences of educational settings which encourage deep approaches

(Entwistle and Ramsden, 2003, p. 80)

2.4.2 The teaching-learning environment

The teaching-learning environment encompasses the explicit and implicit structures, values and teaching techniques used by the teacher within the classroom. The design of the teaching-learning environment is significant because students modify their approach to engagement to reflect the teaching-learning environment (Kember & Gow, 1994; Laurillard, 1993; Postareff, Katajavuori, Lindblom-Ylänne, & Trigwell, 2008; Prosser, Ramsden, Trigwell, & Martin, 2003).

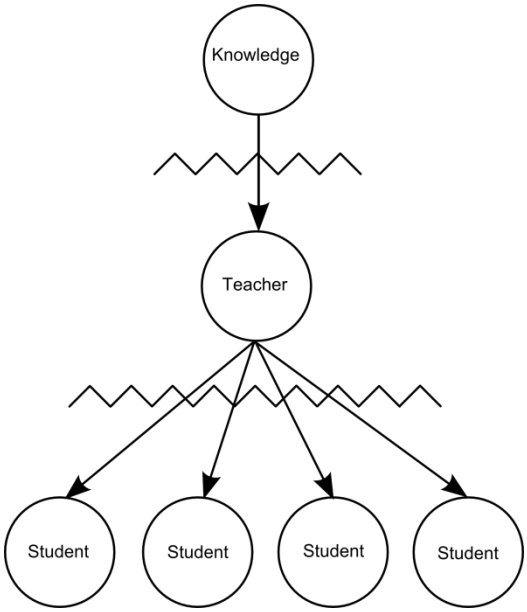
Greeno, Collins and Resnick (1996) identify three models of learning: (1) associative, (2) cognitive and (3) situative, each with their own underlying assumptions (see table 2.7).

Table 2.7
Underlying assumptions in the models of learning

	Associative	Cognitive	Situative
Conception of knowledge	Dualism	Relativism	Relativism
Conception of learning	Reproducing	Seeking understanding	Seeking understanding within a learning community
Role of the teacher	Gate-keeper, transmitter	Guide	Guide
Role of the student	Knowledge recipient	Knowledge constructor	Knowledge co-constructor

The associative perspective has a dualistic conception of knowledge. It views knowing as the connections between concepts acquired as a result of stimulus (Greeno et al., 1996). According to this perspective, concepts or skills need to be divided into their smallest discrete units and logically arranged so that students acquire the foundational concepts or skills before progressing to more complex units (Mayes & de Freitas, 2004). The teacher acts as the expert collecting the knowledge components and packaging them up into propositions that can be transmitted to students in the learning process (Palmer, 1998) (see fig. 2.2). The teacher and students are involved in a feedback loop to ensure that the students have made the correct associations between the units. “Many of the methods with the label 'constructivist' – constituting the currently accepted consensus on pedagogy amongst educational developers in HE – are indistinguishable from those derived from the associationist tradition“ (Mayes & de Freitas, 2004, p. 8).

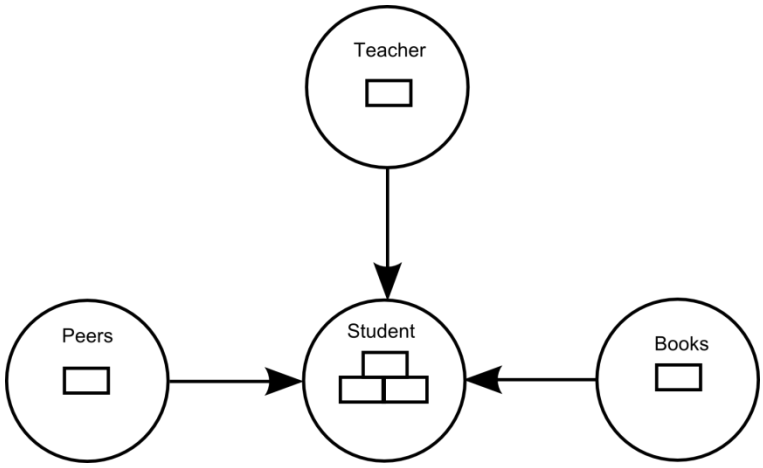
Figure 2.2
Associative perspective



(Palmer, 1998, p. 103)

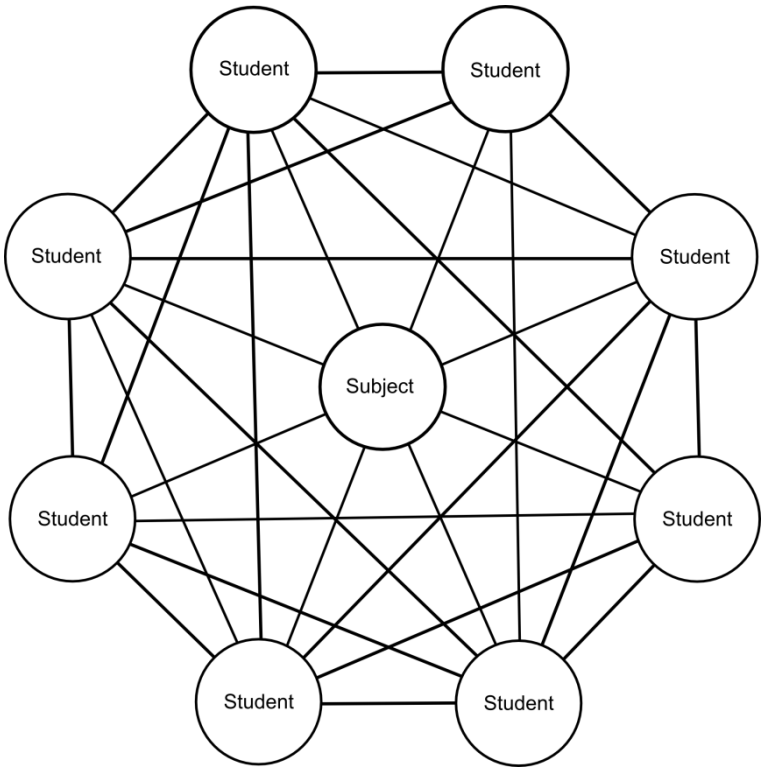
The cognitive perspective has a relativistic conception of knowledge. It "treats knowing as having structures of information and processes that recognize and construct patterns of symbols in order to understand concepts and to exhibit general abilities, such as reasoning, solving problems, and using and understanding language" (Greeno et al., 1996, p. 18). The cognitive perspective requires the student to be actively involved in the process of knowledge construction. The student accesses knowledge from a variety of sources which they then construct into a coherent understanding (see fig. 2.3). The cognitive perspective emphasises the process of knowledge construction. As this process "becomes more expert-like and fluent so the component skills become automatised. Thus, conscious attention is no longer required to monitor the low-level aspects of performance and cognitive resources are available for more strategic levels of processing" (Mayes & de Freitas, 2004, p. 9).

Figure 2.3
Cognitive perspective



The situative perspective shares much in common with the cognitive perspective. Its point of difference is that it emphasises knowledge and learning as socially constructed phenomena (Greeno et al., 1996). As a result, the individual student needs to be viewed as part of a wider learning community. Palmer visualised the associative perspective as a community of truth (see figure 2.4). The subject being taught/studied was the centre or focus of the learning processes. Each knower, student and teacher, has direct access to the subject and can interact with it as they interact with each other gradually constructing up a more sophisticated understanding of the subject.

Figure 2.4
Situative perspective



(Palmer, 1998, p. 105)

2.4.3 Wider social, personal and educational environment

The National Survey of Student Engagement (NSSE) is the largest and longest running study of student engagement in tertiary education. It focuses on the wider social, personal and educational environment that contributes to student engagement. In 2007 it surveyed 1,458,000 students from over 1,000 tertiary institutions across the United States and Canada (NSSE, 2007). The NSSE uses a set of five scales to measure student engagement which are based on Chickering and Gamson's (1987) “Seven Principles for Good Practice in Undergraduate Education” (Kuh, 2001).

The NSSE (2002) study notes a strong positive correlation between the level of student engagement and a supportive institutional environment. It argues that students who experience opportunities to socialise with other students, who have a positive personal relationship with the academic teaching staff and who have academic support when needed engage at a deeper level. Coates (2006a) states that a supportive institutional environment only has an indirect effect on student engagement. A supportive environment creates the opportunities for students to engage, but does not actively promote engagement.

The NSSE and other leading studies into student engagement affirm that faculty-student interactions are one of the key determiners of student engagement (Astin, 1985; Baxter Magolda, 1987; Kuh & Hu, 2001; Pascarella, 1991). Kuh and Hu discovered that “faculty-student interaction encourages students to devote greater effort to other educationally purposeful activities” (2001, p. 329). Faculty-student interaction also functions as a cognitive apprenticeship inducting students into the value and methods of the academic disciplines (NSSE, 2002).

The level of academic challenge is an important factor in student engagement. The complexity and challenge of learning activities should fall within the student's zone of proximal development (Vygotsky, 1978) which is just above their current level of cognitive development (Gardiner, 1994). Students spend more time engaging in educationally significant activities when there is a higher expectation from faculty and the institution (Kuh, 2003). However, studies indicate that students spend on average half the amount of time specified by faculty (Hayek & Kuh, 2002; Kuh, 2003). The time spent engaging in educationally significant activities increases with years of tertiary study (Belcheir, 2003).

The NSSE project some interesting relationships between minority/disadvantaged groups and student engagement. Female students spend more time engaging in educational significant activities (Kuh, 2003). Students of lower ability benefit significantly more from higher levels of engagement than students of average or above average ability (Kuh, et al., 2008). Distance students have a higher level of engagement and achieve higher marks than campus based students (Chen, Gonyea, & Kuh, 2008; Robinson & Hullinger, 2008). Distance students are on average older than campus based students, and are more likely to study part time (Chen, et al., 2008). The different demographics between campus and distance students may be a factor observed differences between these two groups.

Kuh (2003) notes that the level of engagement varies more within institutions than between institutions. This is significant because it indicates that the wider social, personal and educational environment is not the key factor influencing student engagement.

The NSSE project highlights a number of areas which, while outside the scope of this study, do impact on student engagement. These areas need to be revisited in light of the conclusions reached in this study to investigate whether they can inform an understanding of student engagement with the course materials.

2.5 Foreshadowing the Research Questions

In this study, student engagement is defined as the extent of an individual's involvement with activities that are instrumental to their learning. According to the current literature on student engagement there are four aspects of student engagement: 1) effort, 2) attitude, 3) purpose, and 4) activity (Barnett, 2003; Coates, 2006a, 2006b; Fredrick, et al., 2004; Hu & Kuh, 2001). There is an internal dimension, the cognitive process of the student as they engage, and an external dimension, the interaction of the learning environment with those cognitive processes, to student engagement with the course materials. Effort, attitude and purpose are internal dimensions of student engagement. The internal dimensions cannot be measured directly. Instead key indicators, which can be measured, provide clues as to the cognitive processes of students when they engage with the course materials. The key indicators of the internal dimension are the amount of time spent engaging with the course materials (Pace, 1979), the perceived value of the course materials (Coates, 2006a) and the approach to the course materials (Entwistle & Ramsden, 2003). The activity aspect of student engagement describes what a student does when they engage with the course materials (Coates, 2006a). A key indicator of this aspect is the integration of the course materials into the learning environment. The key to building an understanding of student engagement with the course materials is examining the internal and external dimensions and exploring the interrelationship between the internal and external dimensions. The research questions were designed examine each of these key indicators. The first three research questions examine the internal dimension of student engagement with the course materials, while the fourth examines the external dimension of student engagement. The final question seeks to understand the interrelationship between all the aspects of student engagement, specifically the internal and external dimensions.

Chapter 3: Research Design

This study is concerned with understanding how students engage with self-instructional materials on campus and at a distance within the context of the hybrid course offered at ABC College. The key questions for this research are as follows.

- How much time do students engage with the course materials?
- What is the perceived value of the course materials?
- How do students approach engaging with the course materials?
- How are the course materials integrated into the classroom learning experience?
- What are the relationships between time, value, approach and integration?

This chapter outlines the context, approach, methodology and methods used to answer these key questions.

3.1 Context

This study was conducted at ABC College. ABC College is a private tertiary provider in New Zealand. It has two campuses and operates a distance programme. ABC College has approximately 400 fulltime equivalent students enrolled in undergraduate humanities/liberal arts degrees. There is diverse student demographic in terms of age, ethnicity and previous education experience. Half of the student population enter ABC College with the intention of pursuing a career related to their study. The other half of the student population attends ABC for personal development.

In 2009, ABC College developed a form of blended learning which it labelled 'hybrid' in order to ensure a consistently high quality of courses on offer at each campus and at a distance, to increase administrative efficiency and to provide a richer learning experience. Central to each hybrid course was a common set of self-instructional course materials developed by a lead academic and the instructional designer. The course materials consisted of a learning guide, a textbook, a book of readings, an online learning environment and a range of multimedia components such as interviews with academics, interactive learning objects and additional course resources. The course materials were designed to be used by both on-campus and distance students.

The decision to create hybrid courses required a significant investment by the College. With significant resources being allocated to the hybridisation process it is important for the College to realise improvements in student success and satisfaction and increased administrative efficiency.

3.2 Research Approach

A research paradigm is a basic set of beliefs which guide and direct all aspects of the research (Guba & Lincoln, 1998). These beliefs cannot be proved, but are taken as given. All decisions made and conclusions drawn are based on these beliefs. The choice of a research paradigm needs to be consistent with the research questions, the type of information needed to answer the research questions and the researcher carrying out the investigation (Guba & Lincoln, 1998).

This study is based on the constructivist paradigm because it seeks to understand student engagement from the student's perspective. Schwandt (1998) states that researchers working from a constructivist paradigm "share the goal of understanding the complex world of lived experience from the point of view of those who live in it" (p. 221). This study places the researcher as an active participant in knowledge creation, not as a passive observer looking in from the outside. It requires the researcher to engage with the participants in an iterative process as part of the knowledge creation process.

This study is primarily qualitative because it seeks to *understand* how students engage with course materials “in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them” (Denzin & Lincoln, 2000, p. 3). Student engagement with the course materials is context bound and needs to be examined within its context to make sense. Because the focus of the student is the internal dimension of the student engagement, students need to be able to discuss and make sense of the processes they engage in as part of developing an understanding of how students, collectively, engage with the course materials.

3.3 Methodology

This study employs multiple case studies which form a holistic collective case study (Yin, 1994). A case study methodology was chosen because it is ideally suited to answer research questions that focus on understanding a contemporary event over which the researcher has no control (Yin, 2009). In addition a case study methodology allows the investigation of a "contemporary phenomenon within its real-life contexts, especially when the boundaries between phenomenon and context are not clearly evident" (Yin, 2004, p. 13).

The unit of analysis for this study is a single location or mode of delivery. There are three cases in this study, (1) Gisborne, (2) Hamilton, and (3) Distance. At times, the Gisborne and Hamilton cases are combined into a Campus case in order to examine the mode of delivery. Each case is a bounded set which is clearly defined. For example, students in the Distance case only took part in the distance version of the course and do not attend lectures at either of the two campuses. These cases share much in common. What distinguishes each case is the students' experience of engagement due to the students' context of mode or location.

This study is a small scale exploratory case study. The findings in this study are context specific. However, the theory of student engagement developed from this case study may be applicable outside of this case study. Stake (1995) argues that small scale case studies, such as this one, are too context specific for generalisations to be made. Yin (2009) counters this argument by asserting that case studies rely on analytical generalisation not statistical generalisation. "In analytical generalization, the investigator is striving to generalize a particular set of results to some broader theory" (Yin, 2009, p. 37). This means that the understanding of student engagement with self-instructional course materials developed in this study can inform the wider discussion of student engagement. This study has literal replication, between Gisborne and Hamilton campus students and theoretical replication, between campus based students (Gisborne and Hamilton) and distance students (Yin, 2009).

3.4 Overview of the Research Design

This study is concerned with understanding how students engage with the self instructional course materials used in the hybrid courses during one academic semester in 2009. Consistent

with a case study methodology, this study employed multiple methods of data collection.

In phase one, a questionnaire was used to collect data on how students engaged with the course materials. The questionnaire instrument allowed standardised quantifiable information to be collected which was analysed using descriptive statistics to create a picture of how students engaged with the course materials. Correlation statistics were then used to identify possible relationships between the items. Due to the limitations of the questionnaire instrument, causation and interrelationship between the items could not be established. Marshal and Case (2005) state that the use of inventories to measure student engagement yields limited understanding due to the limitations of the inventory to record complex thought processes. To overcome this limitation, subsequent qualitative research was required.

In phase two of this study, focus groups were employed to collect rich data on student engagement with the course materials. The tentative understandings developed in phase one were explored in depth via four focus groups (see appendix J for the focus group discussion guide). Two focus groups were run for Gisborne students and one each for Hamilton and Distance students. The campus focus groups were held onsite and the distance focus group was run using ABC College's learning management system (LMS) to ensure convenient access for all participants. The participants were self selecting and no attempt was made to balance gender, age, educational experience, ethnicity or educational achievement. Subsequent analysis of the focus group data explored the interrelationships between themes resulting in an understanding of student engagement with the course materials. This understanding was then tested against data from both phases of the study to ensure it was consistent with the data.

Table 3.1
Research Timeline

March – June 2009	Hybrid courses are taught for the first time
August 2009	Questionnaire data collected
September 2009	Focus group data collected

3.5 Ethical Considerations

This study addressed the following ethical considerations.

1. *Access* to the participants of this study was sought and approved by the Vice-Principal (Academic) of ABC College.

2. *Potential conflict of interest* existed for the researcher because he was working in a position of responsibility that was related to the participants in the study (Posavac & Carey, 2007). The researcher was the instructional designer who helped develop the course materials used in the hybrid courses. He had a vested interest in the course materials which could have potentially resulted in a biased interpretation of the data. To mitigate this potential bias the research questions were developed to feed into the development of the second generation of hybrid courses. Due to this conflict of interest, this study underwent a full ethics committee review by Massey University Human Ethics Committee (MUHEC) (09/36).

3. *Potential ethical conflict.* The initial research design focused exclusively on students' experiences engaging with the course materials. Subsequent analysis of the focus group data revealed that lecturers' use of the course materials in class significantly affected student engagement with the course materials outside of class. A number of focus group participants reported less-than-exemplary teaching techniques in relation to the use of the course materials for one lecturer in particular. This data was crucial to building an understanding of how students engage with the course materials. This caused an ethical issue in that the lecturer could potentially be harmed if they were identified by their immediate supervisor. This ethical issue was discussed at length with my supervisors and clarification was sought from MUHEC. The following steps were taken to mitigate the risk of harm to lecturers, (a) limited dissemination of published thesis, (b) confidentiality of the institution, (c) confidentiality of the site, (d) confidentiality of gender, and (e) confidentiality of courses.

4. *Confidentiality*. The online questionnaire was anonymous to ensure the confidentiality of the students. Students in the focus groups were assigned a pseudonym to protect their identity. Participants were recruited using emails (see appendix A and D) sent out through the learning management system. The email invitation sent out contained the participants' information sheet (see appendix B, E and F). To ensure the confidentiality of lecturers, each course and lecturer was assigned a pseudonym.

5. *Informed consent*. Participants were sent an information sheet outlining the purpose

of the questionnaire, the data collection and handling procedures so that the participants could make an informed choice about participation (Posavac & Carey, 2007)(see appendix B, E and F) The contents of the on-line questionnaire information sheet was also included on the opening page of the on-line questionnaire. Submission of the on-line questionnaire was considered informed consent.

Participants for the focus group were recruited via the questionnaire and emails sent out through the learning management system. At the end of the questionnaire responses, students were invited to participate in the focus group by clicking on a hyperlink that automatically generates a form-driven email to the researcher. This email was not associated in any way with the students' responses in the questionnaire, thereby ensuring anonymity. Students were also recruited through emails sent out through the college's learning management system. The email invitation for the focus group included a participants' information sheet outlining the purpose of the focus group, the data collection and handling procedures so that the participants could make an informed choice about participation (see appendices E and F). Before the start of the focus group, students were required to sign a consent form (see appendix G). Participants also had an opportunity to correct the transcript before they signed a consent form releasing the transcript (see appendix H).

6. *Data security*. All electronic data was kept in secure password protected files on ABC College computers. Hard copy data was kept in the secure archives of ABC College. All data, electronic and hard copy, was logged for destruction after a period of five years using the ABC College document destruction service.

3.6 Questionnaire

3.6.1 Design and administration of the instrument

Data on students' experiences of engagement with the hybrid course materials was collected through an online questionnaire. The questionnaire consistent of five sections and a total of 37 items (see Appendix I).

Table 3.2
Sections within the questionnaire

Section	Content
1	General information (items 1-4)
2	Time engaged with course materials (items 5-9)
3	Perceived value of course materials (items 10-21)
4	Approach to course materials (items 22-33)
5	Integration of course materials with campus lecturers (items 34-37, campus student only)

The literature suggests that age and gender can be ruled out as significant factors on student engagement. As a result the questionnaire instrument used in this study did not collect data on age and gender. The questionnaire instrument did collect data on prior educational experience because the literature on this factor was inconclusive.

The 12 items used to measure a student's approach to course materials were adapted from the ASSIST instrument (Tait, Entwistle, & McCune, 1998). The three most common instruments to measure approach to engagement are the Approaches and Study Skills Inventory for Students (ASSIST), the Inventory of Learning Styles (ILS) (Vermunt, 1998) and the Reflections on Learning Inventory (RoLI) (Meyer, 2001). These instruments share similar items and were developed using a similar theoretical framework. The items from the ASSIST instrument were chosen because they provided a succinct measure of cognitive approaches to engagement and are considered by a number of researchers to be the most up-to-date and developed of the instruments (Richardson, 2000).

The surface and deep items were combined into a single scale by inverting the results from the surface items and combining the results. The internal validity of the scale was tested using Cronbach's alpha (Bryman & Cramer, 2004). The approach scale returned a Cronbach's alpha score of .677 which indicates that the scale has internal validity (Bryman & Cramer, 2004).

To increase validity, the questionnaire was trialled on a small number of students to identify ambiguous wording, ease of use and time taken (Bryman & Cramer, 2004). Feedback from these students resulted in the refinement of the questionnaire instrument.

The questionnaire was administered on-line to allow for efficient data collection and ease of use for participants (Babbie, 1990; Robson, 2002). Students were contacted using ABC College's learning management system thereby ensuring anonymity. Students were sent an email invitation with an attached information sheet outlining the purpose and nature of the research. The questionnaire was open for two weeks. A reminder email was sent out at the end of week one.

The questionnaire used a secure website to collect the data. The participants accessed the questionnaire via an embedded link in the invitation email. A consent form was included as part of the questionnaire. All data was stored in an electronic format and password protected. The data will be kept for a period of 5 years in the ABC College archives before being destroyed.

3.6.2 Analysis of questionnaire data

The purpose of the questionnaire was to identify areas to explore in the focus groups. To achieve this, descriptive statistics were compiled on each case to summarise the data (Healey, 2007). Chi-squared and one-way ANOVA tests were conducted to identify statistically significant differences between items within each case and between cases. The level of significance was set at ≤ 0.05 to correspond with the standard level of significance for small scale social research (Healey, 2007). Cramer's V and Spearman's rho tests were conducted to ascertain the strength of association for statistically significant differences (Healey, 2007). Table 3.3 and 3.4 were used to interpret the strength of association for these tests.

Table 3.3
Strength of association – Cramer's V (Healey, 2007, p. 262)

<0.10	Weak
0.11 – 0.30	Moderate
>0.30	Strong

Table 3.4
Strength of association – Spearman's rho (Healey, 2007, p. 284)

<0.10	Weak
0.11 – 0.30	Moderate
>0.30	Strong

Due to the limited sample size and the use of convenience sampling no inferences could be made about the total population (Healey, 2007).

The statistical analysis of the questionnaire data was carried out using SPSS (version 16).

3.7 Focus Groups

3.7.1 Rationale

In phase two, qualitative data was collected using focus groups.

> A focus group is carefully planned and moderated informal discussion where one person's ideas bounce off another's creating a chain of informative dialogue. Its purpose is to address a specific topic, in depth, in a comfortable environment to illicit a wide range of opinions, attitudes, feelings or perceptions from a group of individuals who share some common experience relative to the dimension under study. The product of a focus group is a unique form of qualitative information which brings understanding about how people react to an experience or product. (Anderson & Arsenault, 1998, p. 200)

The focus groups allowed participants to reflect on and communicate their experience and perspectives on a particular topic. This study was concerned with how students engage with the course materials. Therefore the student experience and perspective are of paramount importance. Focus groups provided an effective means to collect data on participant experience and perspective.

Focus groups also allow participants to crystallise their understanding of their experiences and perspectives by engaging in dialogue with other participants. This dialogue allows them the opportunity to explore their experiences and perspectives in greater depth by comparing and contrasting them with those of other participants. Rabiee (2004) notes that the dialogue generated between participants often creates richer and deeper data than can be obtained from one-on-one interviews.

3.7.2 Design and administration of the instrument

In total four focus groups were conducted, two in Gisborne, one in Hamilton and one for Distance. Each focus group consisted of 4-8 participants enabling effective participant interaction (Krueger, 2009; Punch, 2005). Ideally the focus group composition would reflect the population of the study in course completed, age, gender, ethnicity, and academic expertise (Barbour, 2007). In reality, trying to achieve a balance in all these variables was not possible.

Students were recruited through the questionnaire, in phase one, and an email invitation sent out through ABC College's learning management system. At the end of the questionnaire students were given the option of registering their interest in the focus groups. This expression of interest was not linked in any way with the questionnaire data, thereby ensuring students' anonymity. Students were also sent an email invitation to the focus groups (see Appendix D) along with a focus group information sheet (see Appendix E and F). Students who participated in the focus groups signed a consent form before starting the focus group (see Appendix G).

The Gisborne and Hamilton focus groups were conducted on site by the researcher. Each focus group lasted 90 minutes. Discussion questions were developed, based on the analysis of the questionnaire data in phase one (see appendix J). These questions were designed as discussion starters allowing for the exploration of relevant themes as they developed within the focus group (Barbour, 2007; Krueger, 2009).

The Distance (DIS) focus group was conducted on-line using asynchronous discussion via Moodle (ABC College's learning management system). Synchronous on-line discussion via chat or a Connect Pro meeting were explored as possible options for hosting a distance discussion group. The discussion boards using the College's learning management system was the preferred option because it allows students to participate in a familiar environment with minimal technical requirements using a variety of internet connection speeds (Anderson, 2003). All distance courses at ABC College require students to have internet access and use on-line discussion facilitated by the discussion boards on the learning management system. The Distance focus group was conducted over a two week period during the mid-semester break

to allow students ample opportunity to contribute to the discussion while not encroaching on their studies.

The following e-moderation techniques were used to facilitate the discussion (Salmon, 2000). The questions were adapted from the campus focus group questions (see appendix J) and were designed to be open end and the starting point for the discussion. Students were encouraged to explore other topics they considered relevant to the study. A new question for discussion was introduced every two days (see the table 3.5). Participants were asked to spend 20 minutes every two days throughout the two week period engaging with the online discussion. Discussion questions were developed based on the analysis of the questionnaire data in phase one. The researcher monitored the discussion twice a day to allow for quick response times of questions or clarifications. Participants were also able to contact the researcher by email to discuss any issues or questions in private.

Table 3.5
Distance focus group discussion schedule

	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
Week 1	Q		Q		Q		
Week 2	Q		Q		Q		

Q = New question for discussion

The Gisborne and Hamilton focus groups were recorded and transcribed. The on-line discussion from the Distance focus group was collated into a transcript. The names of the participants were changed to protect anonymity. Each participant was sent a copy of the transcription for their approval (see Appendix H).

3.7.3 Focus group data analysis

In keeping with the case study methodology, each case's data was analysed independently before cross case analysis took place (Yin, 2009). The framework for analysing the data collected in the focus groups used the following process, (a) data reduction, (b) data display and examination, and (c) conclusion drawing and verification (Keeves & Sowden, 1997). The

focus groups generated a substantial amount of data that needed to be reduced to manageable levels. This is achieved by the summarising and coding the data by emerging themes (Grbich, 2007). The first round of coding used *a priori* codes based on the key research questions. *In vivo* codes were developed in subsequent rounds using the following processes (Keeves & Sowden, 1997):

1. *Noting patterns and themes*. Through repeated examination of the data patterns and themes were identified through recurring key words, student experiences and understanding of experiences. Some of these patterns were readily apparent while others required a degree of inference. The identification of some patterns resulted in apparent conflict between patterns which required further investigation before they could be resolved.
2. *Clustering*. Groups of students who shared similar experiences were identified. These groups were compared to uncover the underlying causes of the shared experience. Of particular note were the outlier students who did not fit any particular group.
3. *Splitting and combining categories*. Categories were split, combined and reorganised to investigate whether a different categorising scheme yields richer understandings.
4. *Noting relations* involved examining the factors, direct and indirect, which contributed to student engagement. These factors were identified through noting patterns, clustering and splitting and combining themes.
5. *Constructing a causal chain* involved the examination of the contributing factors in order to develop a logical sequence which could result in the experience of student engagement evidenced in the data.

Emerging themes were displayed in a variety of schemes allowing the researcher to examine each theme as a whole as well as the interrelationships between themes. Once each case was analysed independently, cross-case analysis was performed using variable and case orientations (Miles & Huberman, 1994). To begin with the key themes of *time, perceived value, approach* and *integration* were used to examine the interrelationships between the cases. Each theme was examined to discover which aspects of the theme were replicated in other cases and which aspects of the theme presented conflicting understanding across the cases (Yin, 2009). A synthesis of each theme was then created (Miles & Huberman, 1994). The

variable orientated cross case analysis described above resulted in a clear understanding of each theme in isolation but was unable to uncover the complex interrelationships between the themes that were finely nuanced in each case (Miles & Huberman, 1994). As a result case orientated cross case analysis was undertaken. This lead to the development of theories to explain the data. These theories were then subjected to scrutiny through the following processes (Keeves & Sowden, 1997).

- *Triangulation* involves verifying the conclusions through other means. The theories generated from the analysis were checked against the data from the focus groups and the questionnaire. This led to iterative cycles of theory development, exploration and validation.
- *Weighting the evidence*. This study relies heavily on students being able to articulate their understanding of their experience of engagement with the course materials. The data collected from students was of varying quality. Data collected from students who were able to clearly and reflectively articulate their experience was given greater weight than data from those students who are not articulate. The two methods of data collection resulted in different levels of richness. The data collected from the focus groups were given more weighting because they are richer.
- *Examining the outlier case(s)* is an important method of validation because any conclusion should be able to explain the reason for the outlier case. Examining the outlier case resulted in previously hidden information coming to light which was then incorporated into a more sophisticated understanding.
- *Checking out rival explanations*. This study involved the creation of rival explanations which are then examined and refined in iterative cycles. The final explanation chosen fit the data better than the other competing examinations.

The theory of how students engage with the course materials developed in this study is the best explanation of the data collected. It is not the only explanation. Other theories were explored and rejected because they did not explain the data as well. Further research needs to be conducted to ascertain if this theory can be generalised outside of its immediate context.

Chapter 4: Questionnaire data and analysis

Chapter four presents selected questionnaire data and a complete analysis of the questionnaire data. A full summary of the questionnaire data can be found in Appendix I. The questionnaire collected data on how students engaged with the hybrid course materials and informed the discussion guide for the subsequent focus groups. The questionnaire collected data on (a) time engaged with course materials, (b) the perceived value of course materials (c) student approaches to engagement and (d) the integration of the course materials with the classroom learning experience (campus students only).

The questionnaire data was analysed using descriptive statistics to summarise the data collected on each case. It also used Chi-squared and one-way ANOVA tests to identify statistically significant differences between items within each case and between cases. Cramer's V and Spearman's rho tests were used to ascertain the strength of association in statistically significant differences. All statistical tests were performed using ≤ 0.05 as the level of significance. The statistical analysis of the questionnaire data was carried out using SPSS (version 16). The tests were then used to identify emerging themes using the qualitative data analysis outlined in chapter three. This led to the development of tentative hypotheses which were subjected to scrutiny through triangulation, weighting the evidence, examining the outlier case and checking out the rival explanation (Keeves & Sowden, 1997). The tentative hypothesis presented in this chapter did not explain how students engaged with the course materials. They did provide avenues for further exploration in the focus groups. The focus group discussion guide was developed in light of the analysis of the questionnaire data.

4.1 Description of Cases

Students who had completed at least one hybrid course in semester 1, 2009 were invited to participate in the questionnaire. Overall, 80 students completed the questionnaire of a total population of 282 resulting in an overall response rate of 21%. Responses were distributed across the Gisborne, Hamilton and Distance campuses (see table 4.1).

Table 4.1
Response rate for the questionnaire

	GIS	HAM	Distance	Overall
Sample	33	15	32	80
Population	221	60	101	282
Response rate	15%	25%	32%	21%

Participants across the three cases had similar levels of prior experience studying at tertiary level. The questionnaire data revealed that there were no significant differences between the cases in terms of prior experience of undergraduate study (items 2-4) (p=.073, p=.834, p=.971). About half of the participants (52%) had completed at least one semester of tertiary study before 2009 (item 4). Just over half of participants (55%) were first time participants at ABC College (item 2). Distance participants reported a greater length of time studying at ABC College (item 2) without significant changes in the number of courses completed prior to 2009 (item 3), consistent with the part-time nature of distance study. This suggests that the educational experience of participants in the three cases were approximately the same. Therefore any differences evident between the cases were as a result of other factors and not educational experience. This is significant because prior educational experience is often cited as a factor influencing the level of participant engagement.

4.2 Time Engaged with Course Materials

Overall, 64% of participants reported completing the course within the allocated 150 hours (item 7). 23% reported spending a little over the allocated 150 hours, with a further 13% reporting that the course took them significantly more than 150 hours. Those participants who only read the sections of the course materials that were directly related to the assignments were more likely to complete within the allocated 150 hours (items 7, 10) (p=.008, V=.304). These results suggest that participants who complete the course in the allocated 150 hours may self regulate the amount of time they engage with the course materials. There is no direct association between feeling overwhelmed and the reported time to complete a course (items 12b, 7) (p=.638). This suggests that the strategic decisions that participants made as to which parts of the course materials to engage with were as a result of rational thought and not as a reaction to an emotional sense of feeling overwhelmed.

Participants who reported spending longer each week engaging with the course materials (item 5) tended to score higher in the approach scale (item 12) (p=.004, r=.317). The approach scale measures the internal cognitive interaction of students as they engage with the course materials. The scale starts at -18 (strong surface approach) and goes to +18 (strong deep approach). The correlation between the amount of time engaged with the course materials and the approach scale suggests that a deep approach to engagement with the course materials requires a greater investment of time than a surface approach. However, a comparison between the Gisborne and Hamilton cases suggests that a greater amount of time spent engaging with the course materials does not always result in a deep approach (see table 4.2). Hamilton participants reported spending a greater amount of time engaging with the course materials than Gisborne participants, but scored substantially lower in the approach scale. This suggests that there are other factors apart from time which influences a participant's approach to engagement.

Table 4.2
Time spent engaging with the course materials per week compared to the approach scale

	GIS	HAM
Up to 3 hours	39%	13%
3-5 hours	39%	33%
More than 5 hours	21%	53%
Approach scale	4.48	1.87

Participant expectations of the amount of time that should be spent engaging with the course materials (item 8) closely match their reported time engaging with the materials (item 5) (p=.009, V=.009). This indicates that participants self-regulate their time and put in only as much as they perceive the materials warrant. Distance participants spend significantly more time per week engaging with the course materials than campus participants (item 5) (p=.000). This can be accounted for because distance participants engage with the materials as their primary means of instruction whereas campus participants are expected to attend class as well as engage with the materials.

4.4 Perceived Value of Course Materials

Nearly half of all participants (48%) engaged with most or all of the course materials (item 10) (see table 4.3). Distance participants engaged with significantly more course materials than

campus participants (p=.001, r=1.000). Distance participants were more likely to engage with a larger portion of the course readings (p=.010, v=.376) and the multimedia (p=.010, v=.376) than campus participants. There was no significant difference between campus and distance in relation to the amount of engagement with the learning guide. This is important because the readings and multimedia present a qualitatively different type of material than the learning guide. The learning guide contains introductions, instructions and summaries of the content that will be covered in the module written by the lecturer. The intent of the learning guide is to provide the context, a summary of the lecturer's understanding of the subject and to guide the participant in their engagement. In contrast, the readings and multimedia contain arguments, discussions, and primary source material from a range of perspectives. The intent of the readings and multimedia is to provide material that participants can critically reflect on. Based on the amount of the course material engaged with (item 10), it would seem that, when time is at a premium, campus participants strategically select material that presents the lecturer's understanding of the subject and interpretation of the data.

Table 4.3
Amount of the course materials engaged

Cronbach's alpha =.678	None		A little (about ¼)		Some (about ½)		Most (about ¾)		All	
	f	%	f	%	f	%	f	%	f	%
Learning guide	4	5	18	23	12	15	23	29	23	29
Compulsory readings	0	0	6	8	19	24	30	38	25	32
Optional readings	10	13	27	34	23	29	13	16	7	9
Multimedia	14	18	20	25	13	16	9	11	24	30
Overall	28	9	71	22	67	21	75	23	79	25

Table 4.4
Value scale

Cronbach's alpha =.612	Not valuable		Limited value		Somewhat valuable		Valuable		Very valuable	
	f	%	f	%	f	%	f	%	f	%
Learning guide	2	3	8	10	17	21	33	41	20	25
Compulsory readings	1	1	4	5	15	19	33	41	27	34
Optional readings	4	5	16	20	25	31	29	36	6	8
Multimedia	13	16	17	21	15	19	17	21	18	23
Overall	20	6	45	14	72	23	112	35	71	22

Table 4.5
Correlation with value scale

	p	r
Reflect on what is read	.026	.360
Accept what is presented without questioning it	.019	-.053
Read only what is required for assignments	.001	-.359
See the course materials as unrelated	.000	-.395
Amount engaged	.000	.696

Table 4.4 and 4.5 indicate that there is a strong association between the value associated with the course materials and the way a participant engages with the course materials. The data indicates that participants who value the course materials are more likely to engage in cognitive processes which indicate a deep approach (see table 4.5). They are more likely to reflect on what they read, critically question the information being presented in the course materials, engage with a greater portion of the course materials and make connections between the components of the course materials. Conversely, participants who place a lower value on the course materials are more likely to engage in cognitive processes which indicate a surface approach. They are more likely to read without critical reflection, accept ideas presented in the course materials without questioning them, read only what is required for assignments and are unable to see the connections between the various components of the course materials. The association between value and approach to engagement is evident across the cases. However, there is a significant difference between campus and distance perceptions of value (item 11) (p=.045).

Distance participants value the course materials more than campus participants. In particular, distance participants place a higher value on the compulsory readings than campus participants (item 11B, 11C) (p=.047, v=.347). The compulsory readings are chosen to allow the students to interact with a breadth of current scholarship on a particular subject. They are often sympathetic to the lead academic's position, but examine the topic from a number of different positions.

Distance participants also place a higher value on the multimedia than campus participants (item 11D) (p=.018, v=.358). In the multimedia presentations, the lead academic is interviewed on a range of key topics. These interviews allow the lead academic to present their position and interact with the ideas presented in the rest of the course materials. The interviews are designed to help participants make connections between the various components of the course materials in order to form a coherent understanding of the topic. For campus participants, the function of the multimedia is replicated in the classroom. This may explain why campus participants place less value on the multimedia.

4.5 Approach to Course Materials

The approach scale (table 4.6) indicates how participants engage with the course materials. It returns a score ranging from -18 (strong surface approach) to +18 (strong deep approach). It consists of twelve items (Cronbach's alpha=.677) adapted from the items which make up the deep and surface scales in ASSIST instrument (Tait et al., 1998). The surface items adapted from the ASSIST were inverted in order to be added to the deep items to form an integrated scale.

Table 4.6
Approach scale

(Cronbach's alpha =.677)	Mean	SD
All participants	5.35	5.535
Distance	7.88	3.850
Campus (Gisborne and Hamilton combined)	3.67	5.872
Gisborne	4.48	5.954
Hamilton	1.87	5.449

Table 4.6 shows a significant disparity between campus (x=3.67) and distance (x=7.88) approaches to engaging with the course materials. Distance participants are more likely to stop and reflect on what they are reading (item 12F) (p=.026, v=.340) than campus participants. They also are more likely than campus participants to questions things they read (item 12H) (p=.039, v=.323). In contrast, campus participants are more likely to try to memorise the material presented (item 12D) (p=.017, v=.356). They more readily accept the ideas presented in the course materials without questioning them (item 12L) (p=.050, v=.312).

Within the Gisborne case, there is a strong correlation between the amount of time spent engaging with the course materials per week (item 5) and the approach scale (p=.038, r=.385). The approach scale indicates the extent to which a participant uses a deep or surface approach to engagement. It is interesting to note that there is only a weak relationship between the approach scale and the total amount of time taken for the course (item 7) (p=.051, r=.062). The extension of this point is that a participant who takes more time working through the materials per week should require more time to complete the course overall. However, the data indicates that is not the case for a number of participants. There is a group of participants who spend longer engaging with the materials each week than their fellow participants, but who report completing the course in or under the allotted 150 hours. These participants all evidenced a high score on the approach scale indicating a deep level of engagement. This suggests that some participants who use a deep approach spend longer engaging with the course materials, but manage to use less time writing their assignments and as a result report no substantial increase in overall time. It is also important to note that, for Hamilton participants, there was no statistically significant correlation between the amount of time spent engaging with the course materials per week (item 5) and the approach scale. This suggests that an increase in the amount of time spent engaging with the course materials does not automatically lead to a deeper approach to engagement with the course materials. Instead, a deeper approach to engagement with the course materials is more likely to result in a greater amount of time spent engaging with the course materials.

Overall, participants who take the deep approach are more likely to use the course materials in future studies (item 9E) (p=.005). Participants who take the deep approach are more likely to read the optional readings (item 10C) (p=.018).

The significant disparity between the approach to engagement by campus and distance participants could be the result of two factors. The data indicates that time is an important factor in the level of engagement. Participants who have adequate time engage to a greater extent which leads to an increased perception of value and an increased level of engagement. The integration of the course materials into the classroom experience is also an important factor in the level of engagement. Campus participants who spend the same amount of time engaging with the course materials as their distance counterparts tend to score lower on the approach to engagement scale than distance participants. This pattern is also evident when comparing Gisborne campus participants and Hamilton campus participants. This suggests that there is something about the away the course materials are integrated into the classroom learning experience which affects participants' approach to engagement with the course materials.

4.6 Integration of Course Materials

In both the Gisborne and Hamilton cases, 67% of participants reported that the lecturer expected them to engage with most or all of the course materials (item 15). While the expectations of the amount of the course materials engaged with is similar in the Gisborne and Hamilton cases, the pattern of engagement is different. Gisborne participants tended to engage with the course materials (item 16) before (76%) or after class (70%), while Hamilton participants engaged during class (73%) or before class (87%). Gisborne participants were given considerably less guidance in the form of specific instructions from their lecturers on what to engage with and when (45% often or always) than Hamilton participants (90% often or always) (item 14). Gisborne lecturers were also less likely to use the course materials in their teaching (66% often or always) than Hamilton lecturers (87% often or always) (item 13). This difference in the pattern of integration may be significant in explaining the difference in approach between Gisborne and Hamilton participants.

4.7 Foreshadowing the Focus Groups

The analysis of the questionnaire data identified the following emerging themes which were explored in the focus groups.

1. *Integration*. The analysis of the questionnaire data suggests distance and campus students integrated the course materials into their learning experience differently. Distance participants tended to spend more time engaging with the course materials and engage at a deeper level than campus participants. They place a higher value on the course materials than campus participants. The analysis of the questionnaire data also identified a difference between the integration of the course materials in Gisborne and Hamilton cases with a corresponding difference in the approach scale. The differences between distance and campus, and Gisborne and Hamilton may offer clues as to the integration of the course materials affects student engagement with the course materials. The following aspects of integration were identified as areas to explore in the focus groups, a) How do lecturers integrate the course material in class?, b) What explanation do lecturers give on how to use the course materials?, c) Do participants understand the design of the course materials?, and d) Are campus participants disadvantaged because they are required to attend class thereby reducing the amount of time they can engage with the course materials?

2. *Relationship between approach, time and value*. The analysis of the questionnaire data suggests that there may be a relationship between approach, time and value. Participants who engaged using a deep approach tended to spend more time engaging with the course materials and placed a higher value on the course materials than participants who used a surface approach. The relationship between approach, time and value was identified as an area for exploration in the focus groups

Chapter 5: Gisborne focus group data and analysis

Data for the Gisborne case was collected using two focus groups. There were eight participants in the first group and four participants in the second. The focus group discussion guide can be found in appendix J. In 2009, all Gisborne campus students who completed at least one hybrid course in semester 1 were invited to participate in the focus group.

5.1 Time Engaged with the Course Materials

Time pressure was a significant factor influencing how participants engaged with the course materials. Participants noted that the time pressure was not unique to the hybrid courses. The need to cover a large amount of content without perceived time to reflect and explore ideas contributed to the feeling of time pressure. This time pressure was compounded by work and family commitments. Some participants admitted not dedicating the required ten hours per week per course to study due to outside commitments and, as a result, experienced time pressure.

> Facilitator: Does the amount of material in these courses, the hybrid courses, compare to other courses. Is this a college-wide issue or is it just these particular courses that are overloaded with material?
>
> Sue: I think any course is always a stretch. Other courses are fairly comparable.
>
> Heidi: It is frustrating from a student's point of view … there is all this stuff available to me, but I just can't do it. There is a feeling from a lot of students that they are missing out on a lot of their studies because they can't get around to everything, but that is impossible. Most of us are working quite a bit outside of this as well.

Heidi's comment of frustration at not being able to do everything was a recurring theme in the Gisborne case. The course materials were designed so that campus participants would be required to spend two to three hours a week engaging with them. Either the amount of course materials was unrealistic for the time allowed, so participants were engaging with the course materials in a manner which was not intended, or participants were not allocating enough time to their studies due to other commitments.

The amount of time spent engaging with the course materials was closely associated with the participants' understanding of the purpose of the course materials, the ease of use of the course materials and the immediate link between the course materials and the assignments.

Steve: In [Course F] I have been going through [the course materials] simply because it is straight forward. The assignment relates to what is in the material. You have to basically go into it and draw some stuff out of it. That is good. In other courses [the course materials] seem like optional reading material and I think it just comes down to time.

Participants commented that they were more likely to invest time engaging with the course materials when they could perceive a clear link between the course materials and the learning outcomes for the course and the assignments. Where the link was tenuous or unclear, participants viewed the course materials as optional.

5.2 The Perceived Value of the Course Materials

5.2.1 Discovering the design of the course materials

Participants in the Gisborne case reported that they struggled to understand how the hybrid courses were designed and consequently how to engage with them. This was despite a ten page introduction to the course materials which explained how they were to be used. Participants reported experiencing disorientation at the start of the course due to the amount of material in the course pack, unclear explanations, and the introduction of a new format for presenting the material.

Martin: I found the whole layout of the course materials so confusing. I did not understand how the numbering of the modules related to the classes. I kept on flicking though the materials to find where the lecturer was up to. Sometimes you only had the briefest little outline. If you were trying to study from the materials you would say, "You go, hold on! This actually doesn't make sense to me. I don't know where this fits in." So I got completely confused by the materials. I found my notes way more helpful. So I just sat there and wrote.

Leslie: The hardest thing I found when I started college was figuring out expectations. That was the biggest stress.

Facilitator: So what difference would it make to you if you knew the purpose?

Leslie: More clarity … I think half the anxiety is try to get the right thing. It's like the first few weeks of college where you are figuring out what the assignments are, what the reading expectations are. In those first few weeks there is a lot of information to take in. The clearer and the simpler it is the quicker we can actually get into the flow.

Some participants reported that they overcame this disorientation through self-exploration of the course materials and through observing their lecturer modelling how to engage with the material. Participants also highlighted issues around the consistency of the use of the course materials between courses.

All participants reported an initial disorientation period lasting two to three weeks as they familiarised themselves with the course materials. Participants with prior tertiary experience reported the same level of initial disorientation as participants with no prior tertiary experience. By the end of week three, participants reported either ignoring the materials completely because they did not understand how to engage with them or engaged effectively with them because they understood how to use them.

The participants identified the following questions which they considered important at the start of any course using hybrid course materials: (1) What is the purpose of the course materials?, (2) How are the course materials laid out?, (3) How do I engage with the course materials?, (4) How do the course materials relate to the classroom experience?

Participants reported that this initial sense of disorientation resulted from unclear explanations, mixed messages and unfamiliar formatting. Most participants reported little or no explanation from their lecturer as to the underlying structure of the course materials or how to engage with the course materials. The participants did not gain a clear understanding from the lecturer of how to integrate the course materials into the classroom experience. It appeared to the participants that the lecturers assumed that they would work out for themselves the best way to use the materials.

Facilitator: Did the lecturer explain what the materials were for? Did they just hand them out? What happened on the first day?

Peter: The lecturer just said, "There's a box at the back where you can pick-up a pack." That was it.

James: [Lecturer D] didn't know. He said ask the e-learning team. Here's your reading stuff, here's your course stuff and here is your CD's. I think he was hoping that the whole thing was straight forward because the whole technological thing and how things were set out he was not entirely sure. It was like that all the way through the course. He wasn't entirely sure of

that stuff.

In one course the participants reported that the lecturer did attempt some explanation of how to use the course materials, but participants considered this too brief. In this particular course the initial disorientation was intensified because the lecturer gave additional course resources which were very similar to the course pack. Participants were unsure why they received additional resources which were similar to the original course resources. The lack of clarity increased frustration levels and resulted in most participants ignoring both sets of course materials.

Sue: It was frustrating that in [Course C] we were given a course pack that was this chunky [2cm] and then [the lecturer] gave out weekly notes each lecture as well.

Leslie: There was an issue with the course materials. I followed the weekly handouts not realizing that the course materials were doing the same thing. Why would you have two things doing the same thing?

John: And then he skipped between the two. He had got readings out of the pack and then would go back to notes he had written and then you would end up with all these bits and pieces that I didn't even know what I was doing.

Participants noted a heightened sense of anxiety as a result of encountering a new format in the course materials. Most participants were used to lecturers providing course materials which served one function, such as lecture notes or readings, which was clearly identified by the lecturer. In contrast, the components within the hybrid course materials each served a different function. These functions where not clearly articulated by the lecturers. While the function of each component was explained in the course materials, most participants looked to the lecturer for direction and guidance on how to use the course materials. As a result most participants were unsure how to engage with the course materials.

Some participants also commented that providing all the course materials at the start of the course increased the anxiety levels because they felt the pressure of having to complete everything immediately.

Heidi: But it would be good if the first class the lecturer explained how the course is organised just to simplify our lives. We have so many readings

to do, so many assignments to do and for you to try and figure out some new format of material when you are just used to making your own notes or being given hand out stuff and it can take a little while. I think as a student you can't really be bothered with it.

By the end of week three, participants either ignored the materials for the reminder of the course or engaged with them confidently. The majority of participants (8 out of 12) who engaged with the course materials did so because they had gained an understanding of the underlying structure of the course materials by observing their lecturer. A minority of participants (4 out of 12) were able to discover the underlying structure of the course materials by exploring the course materials themselves.

Facilitator: What helped you to figure out the structure of the course materials?

Anne: [Lecturer D]'s class because he actually used them effectively. At certain points in the course he specifically referred to something that was in the material. He interacted with the materials. That's what made the difference. That is when I slowly started to make the connection.

James: My experience was similar, but by contrast, being by nature an inquisitive sort of person I got the disc out and had a burrow round.

5.2.2 The value of the course materials is dependent on their integration

Participants reported that the value of course materials depended on how the lecturer integrated them into the classroom learning experience.

Facilitator: So did you use the course materials? Did you find them relevant?

James: I think it depends on the class. For example if I was doing [Course D] and I didn't have the material I think I would feel a little lost because there is so much content that you can't cover it all by just coming to class. And in class you do want to talk to people and hear people's opinions about what they are engaging with and I think in that class it was important to have the material as well as having it explained in class by the lecturer and people's interactions.

Steve: In [Course C] you could have just gone to the lectures. He repeated everything that was in front of you.

The participants reported three different approaches to the integration of the course materials into the classroom experience. They have been labelled the *presentation approach*, the *springboard approach* and the *discussion approach*. Most lecturers used a consistent approach to integrating the course materials. In the presentation approach the lecturer followed the course materials closely and at times read from them word for word. In the springboard

approach, the lecturer used the course materials as a springboard to critically examine the content presented, to extend to the concepts beyond what was in the materials, to synthesise multiple concepts and to discuss the implications of what was presented. This took the form of a 40 minute presentation followed by a 20 minute discussion in each hour block. In the discussion approach, the lecture expected the class to engage with the course materials before class and come prepared to discuss it. The entire class was devoted to discussion. Participants commented that when lecturers used a presentation-only approach they saw little value in the course materials and, as a result, most participants ignored the materials. When the lecturer used a spring board or discussion only approach participants placed a higher of value on the materials.

5.2.3 The course materials provide a framework for engagement

The majority of participants noted that one of the most valuable aspects of the course materials was that they provide a framework or guide for the entire course.

> Sue: [The course materials] also feels like a bit of a guide. Where the lecturer might be saying it to you, it is right there in front of you. They can say this is that part of the module that I am doing. It keeps you on track.
>
> ---
>
> Steve: And the [Course C] for me I had to continually look at that stuff to see what it was all about. Is still haven't got it sorted out in my head. That stuff is so difficult I can look back and see that is that. I had to refer to it all the time, so I'm glad I had the course materials.
>
> ---
>
> Anne: Sometimes I take notes in class and when I look back at them and the lecturer says that's not what I said three weeks ago. Oh my gosh! I'm working from a totally wrong assumption. Okay I know I have a whole wad of stuff that has been given to me … at least I've got a basis to start from … It takes the anxiety off it.

Participants noted that the course materials allowed them to develop a global perspective on the content and the argument of the course. Participants commented that this enabled them to examine new information and perspectives in the light of the course framework and integrate them into their understanding of the course materials. Participants noted that this global perspective was developed as they came back again and again to the course materials. The framework of the course materials was especially helpful in understanding difficult or

confusing concepts.

5.2.4 The course materials increase accessibility

The hybrid courses provided all the course materials in one pack at the start of the course. Participants commented that they perceived that a hybrid course involved more reading than a non-hybrid course which distributed the course materials throughout the semester. Most participants expressed an initial feeling of apprehension at the amount of the course materials. On reflection, the participants noted that the amount of materials in a hybrid course was comparable to non-hybrid courses, but it felt as if there was a greater amount because they received the complete course pack at the start of the semester. Participants commented that they appreciated having the complete course pack at the start of the semester because it meant they could plan their study time in advance, working around major assignments. Participants also commented that they tended to ignore resources that were handed out throughout the semester because it disrupted their anticipated study schedule. Participants appreciated having all the resources available in one convenient pack. It enabled participants to make use of any available study time because the course materials were self-contained. Participants' study patterns or outside commitments meant that accessing course resources from the library or internet was not always possible.

Facilitator: So are you saying in some respects the reading expectation is the same in other courses as hybrids, but it is a little more obvious in hybrids because it is sitting there in front of you?

George: Yeah. You just ignore the other one.

Heidi: In non-hybrid courses you start with nothing and build up as you go … Course materials are handed out that you didn't know about it. You end up not reading them.

Leslie: I find it easier having the course materials. You know what is there and you can pick and choose what to do when you have the time.

Mark: You need to have the readings in the pack or in the textbook … If you have to go find it in the library and get it out for 2 hours you aren't going to do it

Peter: The problem with the library is that the resources aren't always available anyway.

Participants reported that the course materials needed to be supplied in printed format for them to be used. Participants expressed that printed materials allowed for greater flexibility of study location and length. All but one participant avoided reading on screen. When participants were require to read electronic course materials they either printed them off or

ignored them. All the participants were willing to pay a small fee to cover the costs of printing to ensure that all the course materials were provided in printed form.

5.2.5 The course materials provide flexibility

Participants reported that the course materials provided participants the flexibility to customise their learning to suit their language ability, learning style and technological adeptness.

Martin: I appreciate the course materials. I can understand one thing when I can read it three or four times to understand.

Sue: I like the course materials because I am a visual learner. I'm not an auditory learner.

Mark: As part of my note taking I often copy some of the course materials straight across into my lecture notes and that is very helpful. I can highlight and cut bits out.

Participants with English as a second language appreciated the course materials because they allowed them to prepare for class and to review a class. These participants often needed to read technical course readings multiple times, with the aid of a dictionary, to understand the concepts presented. Visual learners appreciated having the notes because it provided the course content in the mode with which they find easiest to engage. Technologically savvy participants appreciate having the course materials in electronic format because it enabled them to integrate the course materials into their normal study routines.

5.3 Approach to Engagement

The participants articulated a clear understanding of their conception of learning. They viewed their studies as an opportunity to develop their thinking within the context of their studies.

Peter: The purpose of an undergraduate degree is not to give you content, it's part of it. It is the ability to think well. What I want to do is go into management consulting from a [___] degree which is impossible, but the value is not that the content I have learned can help me in management, but the ability to think well and to think differently is important. And you can apply those things to the [____] and learn from that. That is the purpose of university. It is to teach you how to think.

Some participants reported frustration when their conception of learning was not realized in the use of the course materials. These participants complained that the course materials communicated ideas without requiring them to critically engage with the topic.

Facilitator: Did the materials help to develop those skills or did you view them as a giant content dump?

Anne: A giant content dump.

Sue: I think [the course materials] do help. But I think perhaps, for my type of personality, just being given the material and having to go and sit in a class and having the notes read to me would tick me off because I would not be able to enjoy the class.

5.4 Integrating the Course Materials

Participants noted that the course materials were integrated into the classroom learning experience using a variety of approaches depending on the lecturer. The lecturer's understanding of how the course materials should be used by the participant was not explained or self-evident to the participants at the start of the course.

John: The biggest thing I found about the course was that some lecturers take a different view of how [the course materials] work – so some of them ignored the materials completely … Others went off the premise that we had read the materials and came to class knowing what we are talking about, but none of the lectures explained this to us … The lecturers needed to have the same understanding of how do the course material work.

Participants taking more than one course reported that they were often confused as to which approach to take. This confusion was exacerbated in the course that was co-taught. Participants reported that they needed one consistent approach to the course materials and one which was applied consistently across all courses.

While the participants valued having a consistent approach to the course materials they were adamant that they did not want the lecturer's voice to be lost. They valued the relational aspect of class time and did not want the course materials to restrict the lecturer from sharing their thoughts, opinions and experiences.

Steve: I came to this college for the lecturers not for the course materials. The classes I chose were because of who was teaching them. The relational side and understanding how they teach is what I wanted. You can't make the notes too restrictive because they must complement the teaching style. That's why they are there.

The participants reported three different approaches to the integration of the course materials into the classroom experience. They have been labelled the *presentation approach*, the *springboard approach* and the *discussion approach*. Most lecturers used a consistent approach to integrating the course materials.

In the presentation approach the lecturer followed the course materials closely and at times read from them word for word. Participants who experienced this approach tended to ignore the materials before and during class. They reported lower levels of engagement than the second approach, although there were fewer than 50 students.

> James: I personally felt really ripped off with [Course C] because the lecturer read through the notes. I felt that I could sift though the notes. Why am I paying to be here? … I wanted him to teach. He is employed to be a lecturer. I want him to lecture. I didn't want him to go through notes. I can do that in my own time.

Participants hypothesised that the reason this lecturer took the presentation-only approach was because of the excessive content demands of the course. These participants had earlier completed a similar course taught by this lecturer which was more engaging.

> Sue: When [the lecturer] taught a similar course I think that he did one of the best classes I did. [The lecturer] was very free. [The lecturer] gave us the notes too, but there were a lot of discussion times.
>
> Facilitator: So looking at the two courses, can you identify what the difference was?
>
> Sue: Maybe there was too much content … It did end up being a bit of a squeeze.

In the springboard approach, the lecturer used the course materials as a springboard to critically examine the content presented, to extend to the concepts beyond what was in the materials, to synthesise multiple concepts and to discuss the implications of what was presented. This took the form of a 40 minute presentation followed by a 20 minute discussion in each hour block. Participants had a clear preference for the springboard approach because, in their view, it facilitated their learning better than the straight presentation approach. Participants reported higher levels of engagement before and during class despite the fact that the class in question had close to 150 students.

> Mark: [Lecturer D] does 40 minutes of putting it all out there and explaining the course materials and then he has a good 15-20 minutes of discussion. He opens it up, but he doesn't let anyone ask questions while he is teaching.

Here I am. This is the information. Now talk to me about it. And that is really good.

Heidi: I enjoy [Lecturer D]'s style because we get to engage with what he is doing. It is not like we are just receiving more information. We are thinking about it and having an opportunity to voice our opinions about it. Opinions might differ in class and things might get very heated, but it is actually really good because if we are all sharing the same opinion we might be sharing our ignorance and not get to grow. If you prepare and read the material and the lectures do not completely tied up to the material but goes beyond it, I think that students would get a lot from that.

George: In [Lecturer D]'s class there were out takes and there were interviews. The interviews complemented the lesson but they weren't necessarily part of the lesson. However, he did refer to the materials. He said, "Go away and have a look at this. You could find it interesting". There were other bits that were involved in the lesson. There was a kind of overlap which I think you need with that type of material.

Some participants were also more motivated to engage with the course materials before class because they saw that the course materials laid the foundation for the class.

Heidi: I've found that if you do the readings before class you can engage with the class better. Like the times that I didn't do any preparation and I came to class, yes I do get something out of class and I do learn things, but I'm not engaging with the material on as deep a level as I did prepare and I did read the material before class.

Participants who occasionally missed engaging with the course materials prior to class did not perceive that they had learnt as much as when they did engage with the course materials beforehand.

Peter: I think the springboard paradigm is the one for here. The notes can only take you so far. Learning is difficult because of the amount of content we need to wade through. Learning becomes easier if you can interact with someone who can guide you. If they say, "I hope you have done some of this pre-reading because it will help you to understand where I am going today. I'm going to take this reading and go here with it. I want to present a couple of ideas that will challenge what you have read and let you wrestle with that a bit and then can we can engage in dialogue.

A number of participants noted an epistemological shift towards relativism as a result of their lecturer modelling critical thinking while engaging with the course materials. They attribute this epistemological shift to trying out the thought processes modelled by the lecturer when engaging with the course materials.

John: [Lecturer D] would talk about thinking [critically]. I'm a first year student

> here but already something has happened in my mind that says I can go to the library and pick out books with a certain amount of confidence because I know they're discussing this from a particular point of view. I can cope with that point of view which may be quite different. And it may not be 100% on track, but I know where that person is coming from … So you have got the content, but you are picking up this is the way you approach this subject, now go do. I've got more confidence than ever.

This suggests that the course materials provide an opportunity for participants to experiment with new thought processes gleaned from observing the lecturer. John observed Lecturer D modelling 'thinking [critically]' while engaging with the course materials in class. In preparation for the next class, John engaged with the course materials that would be discussed, attempting to put into practice what he observed Lecturer D modelling. During class, John could compare his thinking with Lecturer D's and refine his understanding of thinking [critically]. Through repeated exposure, John experienced an epistemological shift in his thinking.

In the discussion approach, the lecture expected the class to engage with the course materials before class and come prepared to discuss it. The entire class was devoted to discussion. Participants preferred this approach over presenting-only because it allowed for classroom interaction, encouraged you to think through issues yourself and rewarded time spent preparing for class. Participants rated this approach below the springboard approach because classes tended to be dominated by two or three outspoken participants and they did not hear enough of the lecturer's 'voice'.

> Anne: [Lecturer E] just answers questions, answers questions and goes totally off on a tangent and at the end goes, "Oh shoot! We have to go over all these slides."

Of the three approaches, the presentation approach was most widely used. One lecturer used the springboard approach. The discussion approach was used for half a course that was co-taught by two lecturers.

5.5 Summary

In the Gisborne case, participants reported that the time requirements for a hybrid course were consistent with other courses of equal credit value at ABC College. Participants noted

that the time pressures they experienced were often as a result of competing time demands from work, family, church or social commitments. The amount of time participants engaged with the course materials was closely linked to their understanding of the design of the course materials and their integration into the classroom learning experience.

Participants valued the course materials because they gave them a framework in which to understand the entire course, increased the accessibility of the content of the course and allowed for greater flexibility in learning styles. However, the extent to which participants valued the course materials was dependent on their understanding of the design of the course materials and their integration into the classroom learning experience.

Participants' approach to engagement with the course materials reflected their understanding of the design of the course and the way in which the course materials were integrated into the classroom learning experience. The design of the course materials was not immediately apparent to participants. A minority of participants were able to figure out the design of the course materials on their own. These participants engaged with the course materials, using a deep approach. Most participants' understanding of the design of the course materials reflected how the lecturer integrated the course materials into the classroom learning experience. When a lecturer used the springboard approach, participants engaged with the course materials using the deep approach. When lecturers used the presentation approach, participants either ignored the course materials completely or engaged with them using a surface approach. When lecturers used the discussion approach, participants engaged with the course materials in a variety of approaches.

Chapter 6: Hamilton focus group data and analysis

Data for the Hamilton case was collected using a focus group consisting of eight participants who completed at least one hybrid course in semester 1, 2009. The focus group discussion guide can be found in appendix J. The majority of participants (6 out of 8) had completed two or three hybrid course in semester 1, 2009. Of the three hybrid courses taught on the Hamilton campus, two were taught by lecturers using course materials designed by someone else and one was taught by a lecturer who designed their own course materials. This allowed the researcher to explore the effect of the lecturer's ownership of the course materials on participant engagement with the course materials

6.1 Time Engaging with the Course Materials

Participants reported a wide range of total time spent engaging with the course materials. Some participants reported making a strategic decision to spend less time engaging with the course materials in some courses in order to spend more time engaging with the course materials in other courses. The strategic decision was based on the perceived value of the course materials. Most participants reported spending more than the ten hours per week allocated to a course. Participants attributed the increase in time spent was largely due to the way the course materials were integrated into the classroom learning experience.

> Aaron: The lecturing style is to basically read aloud for three hours, then get the textbook and read aloud to us. And then, everything there wasn't time for us to read aloud, we are supposed to read ourselves … Some of the [course materials] were read aloud, some weren't. I'm going to have to read the whole thing to try and understand it. I need to spend another three hours after the lecture. You spend eight hours and feel quite dissatisfied with the whole process.

Participants reported having difficulty pacing their studies to ensure an even work-level throughout the semester. At the start of the semester participants spent about half the allocated time on course work. During this period they were able to keep up to date with engaging with the materials. As the semester progressed and assignments were due, participants reported that they often stopped engaging with the course materials in order to focus on the assignments. Few participants used the course materials to front-load the start of the semester and thus to ensure adequate time for assignments at the end of the semester. This could be due to the confusion that many Hamilton participants had concerning the integration of the course materials in the classroom learning experience.

Facilitator: A 15 credit course should take 150 hours. If you average it out it would be ten hours a week. Is that what you spent? Did you spend more?

Jane: More

Aaron: About that

Jeff: I spent a whole lot less

Rod: One thing I have seen is that people, who are new to study, start out at the beginning of the semester doing about five or six hours a week per course and then hit assignments being due because they are loaded in the second term this time, and find to balance that out they need to do a whole lot more work so …

Facilitator: So it is the uneven work levels?

Rod: Yeah trying to even the work load out. Something that would be helpful in terms of improving the materials would be to align them a little more with the assessments ... so perhaps in the learning guide including you should be thinking about your essay this week. You should do this by … you should be starting to do these things … to help people shift that load so that they are spending 10 hours from the start not a lot at the end.

A number of participants reported a lack of understanding as to how the different components of the course materials contributed to the course objectives. As a result these participants thought that some of the course materials were irrelevant to the course and assignments. They subsequently ignored these parts of the course materials when under time pressure and so missed out exploring foundational concepts that were necessary for their assignments. On reflection, a number of participants stated that they would have valued more direction from the course materials to help even out the workload, particularly for first year papers.

6.2 The Perceived Value of the Course Materials

The theme of ownership and lecturer's voice and its relationship to the perceived value of the course materials was a reoccurring theme in the Hamilton focus group. Participants reported that a number of lecturers expressed frustration due to the loss of academic freedom brought about by the use of the course materials. Participants used the terms 'ownership' and 'voice' to describe a lecturer's academic freedom. Participants reported that the frustration expressed by their lecturers over the loss of ownership and voice affected the way they engaged with the course materials.

Participants reported that one way the frustration over ownership and voice was expressed by lecturers we through the reluctance to distribute the course materials to participants. This reluctance was evidenced by supplying incomplete course materials and instructing

participants to ignore the course materials. Participants reported that one lecturer even challenged the validity and relevance of the course materials in the classroom and subsequently developed his own course materials to replace the hybrid course materials.

Facilitator: Which parts of the course pack did you receive?

Jane: He handed out the CDs. We had the materials available to us if we asked for them.

Lisa: He said it was quite complicated and we would be best not looking at them at all.

Jane: He pretty much told us to ignore a lot of the stuff in the course materials because it was not relevant.

Aaron: He spent the first six weeks saying he hated following other people's course materials and then decided he was given the liberty to write his own course materials. So he didn't hand out the hybrid course materials after that.

Participants reported that the frustration expressed by some lecturers caused them to question the value of the course materials. As a result, some participants ignored the course materials. Other participants continued to engage with the course materials because they thought they may be examined on the material. This was because the lead academic who wrote the course materials also set the assignments and exams.

Participants noted that the lecturer frustration over the perceived loss of ownership and voice was not consistent. Participants reported the same lecturer who found the course materials too prescriptive in one course lamented the lack of substantial materials in another course.

Jeff: He got a paragraph from [Lecturer D] and the rest was his.

Lisa: He obviously goes through [Lecturer D]'s material … and says, “That’s probably not going to work, so I'm going to write my own material.”

Rod: Strangely [Lecturer F]'s comments has been, “[Lecturer D]'s course material is too thin. I can't possibly get three hours out of this. I will have to write my own."

The perception of participants was that lecturers in hybrid courses lacked passion and enthusiasm because they were required to follow the lead academic's course materials. However, participants also noted an example of one non-hybrid course which used course materials written by another academic in which the lecturer taught with passion and enthusiasm. So much so that some participants assumed that the lecturer had written the course materials themselves.

Naomi: [Lecturer G]'s class was awesome. This course was written by him.

Graeme: It was written by [Lecturer H]

Naomi: Okay, it was written by [Lecturer H]. So that is my number one reason why I don't like the hybrid course because it feels passionless for the lecturer.

Graeme: And then it is harder to engage. You engage when the lecturer is passionate about the subject. *So, in some respects, it is not so much the materials themselves. There are some issues that need to be addressed, but it is the way they are being used. It is the way the lecturer either feels constrained or free to be themselves.* [Emphasis added]

Graeme's comment suggests that the lack of lecturer enthusiasm, detected by the participants, was caused by the way in which lecturers integrated the course materials into the classroom learning experience. The course materials in this non-hybrid course were similar to those of the hybrid courses. The difference between the two courses was the sense of ownership and 'voice' by the non-lead academic. The non-lead academic expressed their 'voice' in the classroom through integrating the course materials using a method which allowed the lecturer to demonstrate the academic process through interacting with the course materials.

Participants reported that having the course materials in physical hard copy increased their value to participants. Participants enrolled in hybrid courses were supposed to receive a complete set of the course materials in hard copy along with an electronic version. However, in the Hamilton case, this did not always happen. A few lecturers provided part or all of the course materials in printed form. Most lecturers provided none. Participants repeatedly petitioned management to provide all the course materials in hard copy, even offering to pay for the cost themselves. In most cases lecturers did eventually provide the course materials in hard copy. Participants valued the course materials in hard copy because they were easier to read and gave participants greater flexibility.

Shirley: I found this term, this book here, has been absolutely brilliant because I have been able to read ahead and be right ahead with all my reading so I have been actually able to concentrate on my assignments and not do any reading. Last term we didn't have the stuff upfront. We got it progressively every week. Because I didn't have it before hand, I had all this that I needed to read so I couldn't actually … it has been brilliant to have the whole book.

6.3 The Approach to Engagement

Hamilton participants reported a considerable dissonance between their preferred approach to engaging with the course materials and the perceived approach that the lecturers were requiring them to adopt. The participants indicated a clear preference for using the deep approach to engage with the course materials, even if it required then to invest significantly more time than they did. The participants reported feeling compelled to adopt the surface approach to engaging with the course materials because they perceived that this was what the lecturers required. This perception was based on the way the course materials were integrated into the classroom learning experience. The dissonance between the desired approach and the actual approach used to engage with the course materials caused considerable frustration for all the participants. They would have preferred the lecturers to adopt a springboard approach to integrating the course materials into the classroom learning experience.

> Lisa: The issue is that because we have the learning guide there, the lecturing style is to basically read aloud for three hours and then get the textbook and read aloud to us ... Instead we should be told to prepare these readings, look at these so that we can engage with these readings and bring them to class and talk about it in class.
>
> Facilitator: So you would like to see that classroom time being very interactive?
>
> Naomi: Well I think that adults don't learn well, on a whole, sitting and listening to someone read aloud for 3 hours.
>
> Aaron: Give people the chance to preview, to prepare their minds with questions and interact with each other as well as listening is better than listening to something you could read more quickly yourself.
>
> Jane: So the question is how do you use material that is supposed to be completely student centred if it is delivered in a style that is entirely teacher cantered and delivered in the classroom when just the material would work?

In the one course that did use more of a springboard approach, participants reported a deeper engagement with the course materials and a greater sense of satisfaction.

> Rod: In [Course I] they have gone quite free on the way of doing things ... It has been really good just interacting with the material.

6.4 Integration of the Course Materials

The Hamilton participants reported two methods of integrating the course materials into the student's learning experience: (1) Presentation or (2) Supplemental.

In the presentation method lecturers read the course materials to the class with minor digressions to discuss points they considered important. Participants reported that when lecturers chose to integrate the course materials using the presentation method they either ignored the course materials completely and focus solely on the lecturer's presentation, or they ignored the lecturer's presentation and read the course materials in class depending on their preferred learning style – auditory or visual. The majority consensus was that when the presentation method of integration was used the course materials were redundant and had no value unless a participant had missed a lecture.

Facilitator: If you could change one or two things about the materials, what would you change?

Jane: I would get rid of them. I am being completely honest … I would get rid of them.

In the supplemental method of integrating the course material, participants reported that lecturers developed their own set of course materials to supplement or replace the official set of course materials. When this method was employed, some participants reported that they felt compelled to engage with the course materials in order to ensure that they were covering the content on which they were being assessed. While the lecturer's material and the course material covered similar topics and included some of the same readings, participants felt they had to engage with the complete set of both materials in case they missed something. This resulted in a substantial increase in the number of hours spent engaging with the course materials.

Rod: I feel that I need to go to Course I's Moodle site and checking out what they do in Gisborne so I can know that material as well. So there are two sets of material available and I think I need to do both of them.

Facilitator: Does it feel like you are doing two courses?

Rod: Yes

Naomi: It is often quite different material

Facilitator: Do the two sets of material work in well together?

Naomi: They're two separate courses.

The Hamilton participants reported a desire for the third method of integration which was

labelled the springboard method. Participants reported that they wanted the course materials to function as the foundation for the course. Participants wanted to engage with the course materials before class so that, with the guidance of the lecturer, they could then use the class time to discuss the ideas presented in the course materials and wrestle with the issues.

> Graeme: We are all capable students. We can read a textbook. You understand it to a degree, but quite often you need a lecturer to pull things together or give relevant examples to our context. All the information is in there and, because you keep it, you can refer to it. So there is no need to have it duplicated. Having that interaction at a deeper level … especially as I am doing a lot of level 7s[3] so you need to have those connections to my other classes. Only the lecturer can provide the connections.

6.6 Summary

In the Hamilton case, the teacher's 'voice' was of paramount importance. Participants clearly stated that they needed to hear the teacher's 'voice'. They did not equate the course materials with the teacher's voice. However, the impression they received from most teachers was that the teachers themselves equated the course materials with voice. So, by using someone else's course materials their own voice was stifled. This was the case with teachers who adopted the presentation approach to integrating the course materials in the classroom learning experience. Teachers who used the supplemental approach had more voice because they wrote their own materials and used the official course materials as a supplement. However, these teachers still equated their own course materials with their voice.

Participants stated a clear preference to engage with the course materials using a deep approach. Due to time constraints as a result of engaging with multiple sets of course materials (supplemental approach) most participants adopted the surface approach. Some participants chose to ignore the materials completely, particularly if the teacher was using a presentation approach.

The perceived value of the course materials depended on the way the course materials were integrated and the availability of the course materials in hard copy. Participants clearly stated that they would find the course materials more valuable if they were integrated using a springboard approach.

[3] Level 7 on the NZQA framework is equivalent to the final year of an undergraduate/bachelors degree

Chapter 7: Distance focus group data and analysis

The Distance (DIS) focus group comprised eight participants. This focus group was conducted using asynchronous discussion boards within ABC College's learning management system. A new discussion topic was posted every two days over a period of two weeks. The ensuing on-line discussion was moderated by the researcher in accordance with good online discussion practice (Salmon, 2000).

7.1 Time Engaged with the Course Materials

Participants reported a tension between the need for flexibility and structure. All the participants in this case chose to study via distance because it gave them control over the time and place of their study enabling them to fit study into their existing commitments. However, participants clearly articulated that the external structure was vital to ensure their success in their study. Participants appreciated the structure provided by “due dates” and the pacing effect of on-line discussions.

Participants resolved the tension between the need for flexibility and structure by developing a study plan. All participants, in this case, developed a routine in which they set aside regular blocks of time throughout the week. These blocks of time ranged from two hours to a whole day. Aside from these regular scheduled blocks of time, participants also made use of unplanned study time. They were able to do this because they repackaged the course materials into portable units and ensured they had some course materials on hand at all times.

Donna: I would also suggest putting aside blocks of time when you know there are not likely to be family distractions - the longer the block of time the more use it is. I have resorted to earmuffs occasionally while working when the family were home!

Carole: I find I prefer to have several shorter sessions through the week and allow a time at some stage to focus on the more meaty parts. So, for me, I would do an hour here and there up to Thursday. Then, with Thursday being my free day, I would do the rest then. Then I just needed to follow up with posting responses over the weekend.

John: Isolate one day, part of a day, hours of a day (whichever way fits best with work/life balance), and make sure that you develop the discipline to

stick to that timetable.

Participants also resolved the tension between the need for flexibility and structure by working ahead of schedule. A number of participants purchased the course textbook and finished reading it before the course started. Some participants started working through the course materials before the start of the course as they were delivered two weeks before the start of the semester. Other participants chose to work through the mid semester break in order to give them more time working on assignments at the end of the semester. A common theme across all the participants was the need to work ahead of schedule to allow for the unexpected crisis.

> Donna: I like it when a paper has an assigned textbook that we work through, even if not systematically. I often look to see what the text is before I start a paper, and buy it and start reading it, just to get my thinking going … The other bit of advice I would give a first-timer is to start straight away ... Don't wait for the official start date. I usually try to be working a lesson ahead of the schedule as it allows for the unplanned things that happen in life!

Every participant in the Distance case had a clear approach to studying at a distance. They had developed effective routines which allowed them to maximise the effectiveness of the time they invested in study. The methodological approach taken by the participants varied. The common element was that they understood their learning style and applied discipline and rigour.

> Donna: I have a calendar at the desk and go through and mark each date due, and also use the page at the back of the student guide that has the dates for each week. I try to put a copy of the course outline somewhere prominent so that I stay on task and focus on what we are trying to achieve ... There are often so many interesting sidetracks to explore! When I write an essay the essay question is always beside me as I type on the computer, to keep me on topic! I look at the assessments and start either large envelopes or file boxes for each assessment so that, when I come across information that relates to that topic, it can be filed there for later, rather than distracting me from whatever task I was doing when I came across it. I use coloured stickies to mark parts of the lessons that I think with help with assessments.
>
> Carole: I also found keeping a corresponding journal helpful. This gave me something to refer back to for assignments and exam and an opportunity to reflect on some issues more personally. It also meant I had something to base my postings on for the forum.
>
> Donna: I used to talk to my husband each week about what I had been reading as part of the lessons. I found that the process of putting the ideas into my own words helped me to make more sense of it. Plus it was good

revision!

7.2 Perceived Value of the Course Materials

7.2.1 Learning guide

In contrast, with the campus focus groups, the participants in the distance focus group made very little comment on the value of the learning guide. The comments they did make centred around the function of the learning guide as part of the course materials. Participants were divided on what they perceived as the function of the learning guide. Half of the participants envisioned the learning guide as an unpublished textbook produced by the lead academic. These participants noted that the learning guide was often inferior to the assigned textbooks/readings. It lacked conciseness, often restated content in the textbook/readings, and it did not have the academic standing of published books or peer-reviewed journal articles. These participants did engage with the whole learning guide, but would have preferred redundant material to be removed from the learning guide.

> Donna: I used to get annoyed when the learning guide was just a summary of the readings we were asked to do, but have come to realize that this can be helpful. I still do the readings and just add any details that I think relevant in the margins of the learning guide. I didn't find it helpful when the learning guide was just 'cut and pasted' chunks of the readings.

The other half considered the learning guide as a meta-narrative that integrated the various components of the course materials into a coherent whole, giving participants structure and direction as they moved through the course.

> Joshua: I look to the learning guide to provide the overall course structure, guidance as to what the instructor/tutor regards as important, and a synoptic summary of material week-by-week. I expect the textbooks to be a synthesis – presumably as up-to-date, authoritative and balanced as possible – of a wide range of thinking on the course subject matter, which enables one to evaluate different theological positions and develop one's own thinking. It should provide information on related topics, to set the context of the course material, if necessary.

A significant number of these participants only engaged with the elements of the learning guide that provided a meta-narrative for the course. Participants noted that the parts of the learning guide which provided the most valuable meta-narrative was the introduction, the questions or points to consider that accompany each reading and the on-line discussions.

> John: For me, the purpose of the readings and text book are to allow us to explore the topic in more depth – to flesh out the skeleton that the learning guide provides.

7.2.2 Textbook/Readings

Participants appreciated having one assigned textbook which was tightly integrated into the course. This text provided a framework for them to explore and to interact with the ideas presented in the course materials. Courses that used a textbook as a framework to structure the course were preferred over those which did not use a textbook and, instead, relied exclusively on readings. Participants preferred the textbook because it gave them a consistent frame of reference. A set of readings on its own did not provide this frame of reference because the readings were either lifted out of their immediate context or were independent articles which did not form part of a single coherent argument. Participants commented that some of the readings assumed a level of understanding and familiarity with the subject matter they did not possess.

> John: Having one text book to work through was a great bonus. It gave you the chance to know exactly where you were going and you actually felt as if you were getting somewhere as the course worked its way through. I found this more useful than having to read through a number of readings.

Participants reported that once they had worked through the textbook they had gained an overall picture of the subject matter and felt more confident engaging with the readings. Participants appreciated having a set of readings which supplemented the course textbook by providing a range of perspectives and counter arguments.

> Donna: I find it particularly helpful when readings are given that give details of different perspectives ... I now appreciate getting readings from a number of different writers as it helps me to become familiar with different writing styles – and to identify writers that I like or often share viewpoints with. It also helps me when I am doing essays, to identify some of the main writers and thinkers in particular areas.

In contrast, to the campus cases, participants in the distance case reported that they did not find the reading requirements in the course materials onerous.

> Donna: The reading guide was a good balance of helpful reading, without feeling like I was being inundated with material to read. It related well to the lesson material. The reading also offered enough material to instigate further if I had the time or wanted to explore areas in more depth.

7.2.3 Multimedia on the CD

Feelings of isolation due to the physical separation of students with peers and lecturers are a recurring theme in the literature on distance education. Participants reported that the

multimedia fulfilled a key social function in reducing the sense of isolation.

Grace: The videos helped to put a 'human face' on some issues and broke the monotony of reading endless pages of work.

Charles: The videos were also beneficial because they gave you the sense that you were actually part of a class, and not out there on your own.

Participants noted that the multimedia enriched the learning experience by providing information and insight that was not accessible through print media. The interviews helped participants synthesise and critique the ideas and concepts they were being exposed. The demonstrations provided models of good thinking within an authentic context. The electronic reference material provided to participants removed the barriers of distance and allowed Distance participants access to the full range of learning resources available.

Donna: I was pleasantly surprised by most of the material on the CDs, as my previous experience was that much of what was on the CD would have been just as effectively provided as text.

Charles: It was also good because even just listening to someone talk about it can make the readings easier to understand.

Donna: I thought using the demonstrations on the CD was most effective – being able to see and hear the rationale behind it and how to build up the map into quite a refined diagram of a text.

Donna: The virtual library on the CD was particularly helpful for some of the exercises – and as a guide for the type of material that should be used for some of the other exercises.

7.2.4 On-line discussions

The value of the on-line discussions for participants was as a result of the structured reflection required in the activity, not in the dialogue and interpersonal interaction. Participants admitted that they would not have spent as long or engaged as deeply with the material presented in the course if they were not required to discuss on-line.

Brenda: On-line discussions are akin to weekly reflection paper, commenting on someone else's reflections makes me uncomfortable, especially when their thoughts are being publicly graded.

John: The on-line discussion exercise enables you to focus your mind and (in very few words) give an answer to a topic-related question.

Participants reported that the formulation of an initial post, while difficult, provided the richest rewards in terms of learning. The subsequent interaction was of little or no value and was only completed because it was a requirement in the assessment schedule. The majority of participants reported that the small word count for the response post (50 words) and the need

to move on the next module in the course tended to stifle meaningful discussion. A small minority benefited from the ensuing discussion because they had learnt to engage critically with their peers' comments.

> Joshua: I'm happy to post my initial post, but I do find the effort of providing reaction to other students' postings exceeds the benefit that I derive.
>
> John: Initially I was uncomfortable critiquing others' works but I used the opportunity to learn from the others' comments and study up on their views. I now find the whole process very valuable.

Several participants noted that the quality and relevance of discussion questions was crucial for the value of the on-line discussions.

> Donna: For me, *well constructed* questions encourage me to try putting new ideas into my own words (thus reinforcing learning), thinking deeper about the topic and thinking about what the implications might be of the new ideas I am learning about. I gain a huge amount from 'listening' to the conversations online, even when I do not participate, and 'due dates' keep me on time for my study timetable. *Good* questions are also good preparation for some of the longer assessment tasks. The feedback from tutors for the online discussions is essential for me ... whether to me specifically, or the general summaries.

The volume of email traffic generated by the online discussions was a significant factor for most participants. The default setting on ABC's LMS sends out an email to all enrolled participants every time someone posts on a discussion board. Participants reported that because the discussions were emailed to them in real time, they felt they were obliged to read them in real time. This distracted them from other study related activities with the result that it took longer to complete their course work. To cope with the volume, participants either 1) unsubscribed from all the discussion forums and went on-line once or twice a week to read responses and post, 2) restricted the amount of time devoted to reading posts so as not to encroach on other study time, or 3) completely ignored the on-line discussion.

A significant number of participants considered 'lurking', or reading other people's post without posting yourself, to be a form of engagement. Participants, who reported lurking before posting their initial response, looked to confirm their understanding before making their views public.

> Bruce: The on-line discussions are very good, they keep me on track with the materials, give me a chance to see whether I am on the right track or not. And of course it is great to be in communication with other students.

The majority of participants noted that the on-line discussion provided them with effective pacing ensuring that they did not fall behind in the course. This function of on-line discussion was seen as critical to participant success.

> Bruce: I would be definitely worse off without online discussions. In fact my results from my first semester at ABC demonstrate the difference between online discussion courses and non online discussion courses. I passed the three which had clear dates and instructions on online discussion requirements and ended up not completing the others due to leaving those to the last minute.

7.2.5 Format of the course materials

Participants generally found the format of the course materials easy to use and self-explanatory. A minority of participants experienced some confusion surrounding the function of each part of the course pack. This was compounded because some items of the course materials were provided in both hard copy and in electronic format. Some participants did not realise this until later in the course. The majority of the participants appreciated having the learning guide and readings in hard copy because they found it easier to read. Participants emphasised the value of the inclusion in the course materials of extra resources connected with their assignments. This enabled them to have the same access to resources that a campus participant would have.

> Brenda: Most Valuable: 1) probably the videos. It really helped to see what it was that the tutors expected us to do with the information we were supposed to collect, and how they suggested we collect it, 2) The inclusion of readings and resource materials was great, being able to access the correct word searches and other reference details was extremely helpful, 3) The inclusion of all the class notes, readings, assignment details all laid out in order when they arrived was awesome.

7.3 Approach to Engagement

The participants in the distance case reported that they saw the course materials providing them with raw data to be analysed in order to draw conclusions. They were concerned with understanding the wider historical and philosophical values behind the various positions presented to them in the course materials. They valued interacting with a range of perspectives because it allowed them to compare and contrast, thereby gaining a deeper understanding and appreciation of the various perspectives which, in turn, allows them to formulate their own position.

> Donna: I find it particularly helpful when readings are given that give details of

different perspectives … if those perspectives are widely held and they help me to understand the topic in more depth. I am becoming more comfortable with unresolved differences in opinion between highly regarded writers, but it was quite a challenge initially.

John: I am always intrigued to know 'why' someone has written what they have written. As interesting as the reading may be, I am keen to get an insight into the background that has formed the view of the author. It would be beneficial to have a little 'bio' of their life incorporated with the readings. When I first started [the course] last semester, one of the first essays was commenting on an address by [_____] - reading through it I began to feel uncomfortable - until of course I did some work into his background. As soon as I understood a little more about him I could understand why he would write in the manner he did. This in turn enabled me to structure my response correctly.

Participants in the Distance focus group expressed confidence in their information literary skills. They each had a clear strategy to create meaning from the course materials. Through the use of literary clues and structural markers within the text, they are able to locate relevant information efficiently and effectively. Individual participants used different recording and note-taking techniques which allowed them to locate and cross reference information gathered.

Aaron: My strategy was to read the intro and conclusion of each chapter, and then flick through the headings ... I read mainly for breadth of understanding, and enjoyed seeing the different arguments presented for different positions.

Donna: I underline important points as I am reading – in the learning guide, the textbook or the readings. Sometimes I will put a smiley face at the beginning of a reading if I think it is particularly helpful – guides me when I go back to revise. Sometimes I will try to do a one page summary of the reading and file that in with the learning guide – good for when I need to begin revising for an exam. I mark any quotes or paragraphs that I think will be helpful in online discussions or assessments, as I am reading

7.4 Integration of the Course Materials

In the Distance case, the course materials were integrated into the distance student's learning environment using the discussion approach. Participants were expected to engage with all the course materials and then discuss aspects of the course materials during set asynchronous on-line discussions. While participants found that the online discussion was beneficial in terms of pacing and forced reflection, it is interesting to note that no participant mentioned the tutor as an integral part of their learning. For Distance participants, the tutor's role was to moderate

the on-line discussion, answer questions as they arose and to mark the assignments. The course materials, especially the learning guide, functioned as a proxy for the teacher, with one fundamental difference. The course materials themselves did not provide non-verbal clues as to how to approach the course materials. Because the course materials were passive, Distance participants had to take a more active role in constructing their understanding because they could not rely on someone else doing it for them. As a result, the majority of Distance participants took a deep approach to engagement.

7.4 Summary

In the Distance case, participants chose to study at a distance because it allowed them a greater degree of flexibility. Participants were very deliberate in planning and utilizing their study time to suit their individual learning styles and their prior commitments in order maximise their learning. Participants expected to be active learners, constructing their own understanding from the course materials. As a result they used a deep approach when engaging with the course materials. Participants valued the course materials because they provided a base on which to build their understanding and to guide them as they constructed their understanding. Participants preferred to have an assigned textbook with supplemental readings which could form a framework in which to examine the subject. They expected the learning guide to provide a meta-narrative of the course. Participants valued the multimedia presentations because they allowed them to connect relationally with their lead academics and provided models of good thinking. The online discussions were valuable because they paced the participants through the materials and forced them to reflect on their learning. Most participants did not find the ensuing discussion beneficial.

Chapter 8: Discussion and conclusion

This study is concerned with investigating how students engage with self-instructional materials on campus and at a distance within the context of the hybrid courses offered at ABC College. Student engagement was defined in chapter 2 as *the extent of an individual's involvement with activities that are instrumental to their learning*. Four aspects of student engagement were identified from the literature: (1) effort, (2) attitude, (3) activity, and (4) purpose. These aspects were investigated by examining key indicators (table 8.1). It is important to note that these aspects and indicators are not atomistic. They are interrelated and cannot be examined in isolation.

Table 8.1
Indicators of student engagement

Aspect	Indicator
Effort	The amount of time spent engaging with the course materials
Attitude	The perceived value of various components of the course materials
Activity	The integration of the course materials into the learning environment
Purpose	The approach used to engage with the course materials

Quantitative and qualitative data on the key indicators was collected from the Gisborne, Hamilton, and Distance cases; and analysed to construct an understanding of student engagement with the self-instructional materials. This chapter presents the synthesis and discussion of these findings. It uses the research key questions as a framework to discuss student engagement with the self-instructional materials.

8.1 Time Engaged with the Course Materials

8.1.1 The effect of a student's understanding of how the course materials support their learning on time engaged with the course materials

Entwistle and Ramsden (1982) postulated that some students used a strategic approach to engagement in which students made deliberate choices as to the most efficient way to

allocate their time in order to satisfy their deep or surface approach. Subsequent research by Richardson (2000) questioned the notion of the strategic approach, due to inconclusive evidence. However, the findings of this study indicate that the majority of students did, in fact, use a strategic approach to engagement with the course materials. This strategic approach was dependent on a student's understanding of the purpose of the self-instructional materials and the perceived value of the materials in achieving that purpose.

Students engage with the course materials to the extent that they believe it is an educationally purposeful activity. Students entering tertiary study often have a conception of learning and teaching that is lecture-centric (Heathfield & Wakeford, 1993). Orton-Johnson's (2009) research suggests that the use of self-instructional materials within a campus context challenges some of the assumptions and expectations that students have about the nature of tertiary study. Students are reluctant to invest time engaging with the self-instructional materials because they did not conform to their conception of learning and teaching. Students often envisioned the self-instructional materials as a supplement to the lectures and not an integral part of the course design. Orton-Johnson concluded that students' use of self-instructional material was dependent on their understanding of how the materials contributed to their learning (Orton-Johnson, 2009)

The findings from the focus groups demonstrate that participants who understood the purpose and design of the course materials invested a significant amount of time engaging with the course materials. These participants were able to articulate how the different components of the course materials supported their learning. For example, they were able to explain that the readings given in the course materials were there to provide different perspectives on a topic. They were able to use the key questions in the learning guide to guide their thinking as they decided on which perspective was more credible to them. In contrast, participants who did not understand the purpose and design of the course materials often ignored or skim read the readings because they perceived them as a replication of the lecturer's presentation in-class.

Within the campus participants, two groups of students were evident. In the first group, participants took an active part in constructing their understanding of the design and function of the course materials through observing their lecturer interacting with the materials or

observing the materials themselves. These participants had an internal locus of control. They actively engaged with the course materials irrespective of whether or not the lecturer explained the purpose of the course materials and modelled engaging with them. This group was a minority amongst the campus participants. In the second group, participants commented that they followed the lecturer's example when engaging with the course materials. If the lecturer ignored or downplayed the course materials, the participants did likewise. If the lecturer engaged with the materials, these participants followed suit. These participants ignored the explanation of the purpose and design of the course materials that was contained in the *Introduction* to the course materials. They also did not observe the features of the course materials themselves. These participants had an external locus of control. This group formed the majority of the campus participants.

The findings from the distance focus group suggest that the majority of distance participants developed an understanding of the purpose and design of the course materials from observing the features of the course materials and reading the explanation in the *Introduction* to the course materials.

The different patterns of engagement evident in the findings from the Campus and Distance cases suggest that there is a relationship between delivery mode (campus, distance) and locus of control (external, internal). The majority of campus participants exhibited an external locus of control. They allowed the lecturer to dictate how they engaged with the course materials. This may have been as a result of the power relationships between student and lecturer within the classroom. In contrast, the majority of the distance students had an internal locus of control. They developed their own understanding of how to use the course materials. This may have been because distance participants do not experience the same power relationships between student and tutor as campus students experience between student and lecturer. In the ABC College model of distance education, distance participants are assigned a tutor that works under the direction of a lead academic. The tutor's role is to moderate the online discussion, answer student questions and to mark assignments. This role is very different from that of a lecturer (Jelfs, Richardson, & Price, 2009; Salmon, 2000).

The findings from this study suggest that Campus and Distance students develop an understanding of the purpose and design of the course materials in different ways. Distance students develop understanding from the materials themselves and Campus students develop understanding by observing their lecturer. This means that separate deliberate strategies need to be developed to enable Campus and Distance students to understand the purpose and design of the course materials. Distance students need clear written instructions outlining the design features of the course materials and explaining how they should engage with them. Campus students need their lecturers to explicitly verbalise the purpose and design of the course materials and to model how to engage with the course materials. Lecturers cannot assume that the majority of Campus students are able to discover the purpose and design of the course materials themselves. In order to verbalise and model engagement with the course materials, lecturers need to have a clear understanding of the purpose and design of the course materials and how they can integrate the course materials into their teaching style. The findings from this study suggest that lecturers may need to adapt their teaching style to explicitly incorporate the course materials. Lecturers may need extra support and professional development to achieve this.

The findings from the focus groups suggest that participants who were unable to discover the purpose and design of the course materials within the first three weeks of the course tended to ignore the course materials. These participants were exclusively campus participants. The majority of them had lecturers who used the presentation approach to integrate the course materials. These participants relied solely on their lecturer's explanation of how to use the course materials. When no explanation was forthcoming or was incomplete, these participants ignored the course materials. A minority of campus participants spent a significant amount of time engaging with the course materials without a clear understanding of their purpose or design. These participants reported that the course materials were important to their learning because the lecturer had given them the course materials as part of the course, but were unsure of how they fitted into the course design. Campus students decide how to engage with the course materials within the first three weeks based on their observations of the lecturer. This means that in the first three weeks lecturers need to be explicate about the purpose of the course materials and how the complement the classroom learning environment. They also need to be very deliberate in modelling how to engage with the course materials. The comments made by participants suggest that some lecturers did not understand the purpose

of the course materials and as a result did not explicitly communicate and model engagement with the course materials. This suggests that lecturer development needs to be an integral part of the strategy to develop new course materials.

8.1.3 The effect of pacing on time spent engaging with the course materials

The focus group participants reported that the time pressures experienced were not unique to or greater in hybrid courses. Participants identified that one of the causes of this time pressure is uneven workflow throughout the semester. Campus participants tended to spend less than the required ten hours per week studying at the start of the semester, with the result that they required more than ten hours per week towards the end of the semester. As a result, crises, such as illness or family commitments, that occurred in the second half of the semester multiplied the time pressures that participants experienced. In contrast, distance participants tended to work ahead of schedule, building up a time buffer for the inevitable crisis. The differences in workflow can be attributed to the different pacing mechanisms in place for campus and distance participants. Campus participants are paced through the use of assignments which, by necessity, were toward the end of the second half of the semester. Distance participants had the additional pacing mechanism of the online discussions, which tended to be weighted towards the first half of the semester. This required them to engage more regularly with the course material.

Students at tertiary level are expected to be able to manage their workflow in order to devote sufficient time to their studies. However, the different experiences between campus and distance students suggest that pacing mechanisms within the design of the course materials can assist participants to regulate their workflow. Distance education has developed a set of pacing mechanisms, such as online postings, which could be adapted to assist campus students manage their workflow.

8.2 Perceived Value of the Course Materials

8.2.1 Integration and the perceived value of the course materials

The analysis of the questionnaire data indicates that participants in the distance case placed a higher value on the course materials than the campus participants. This was expected because distance participants had to rely on the course materials for a significant portion of their learning, whereas, for campus participants, the course materials complement the lectures.

The questionnaire data also identified a group of campus participants who placed a higher value on the course materials than their peers. This group of campus participants reported the same level of perceived value as the distance participants.

All the participants in the Distance focus group reported that the course materials were integral to their learning experience. They were able to articulate how the course materials integrated with the other aspects of the course. These participants were able to describe the purpose of the course materials and how that related to other aspects of the course. As a result they had a clear method of engaging with the course materials and placed a higher value on the course materials. This same pattern occurred within a small group of campus focus group participants across both campuses. However, the majority (14 out of 20) of campus focus group participants reported uncertainty over how the course materials should be integrated into their learning experience. They were not able to describe the purpose of the course materials and how that related to other aspects of the course. Importantly, a significant number of participants commented that they wanted lecturers to explicitly explain and model how the course materials should be integrated into their learning experience. The implication was that if they understood how the course materials should be integrated they would place a higher value on them because they understood how to use the course materials. This suggests that the perceived value of the course materials may be related to a student's understanding of how the course materials should be integrated into their learning experience not the modality of study as suggested by the questionnaire data.

8.2.2 The perceived value of different components within the course materials

Campus and distance participants valued different components within the course materials. Distance participants placed a high value on the readings and multimedia presentations, and a moderate value on the learning guide. They valued the different perspectives presented in the readings because these enabled them to wrestle with content themselves and to draw their own conclusions. Distance participants valued the presentations on the CD-ROM because they provided an interpersonal connection with the lead academic. Participants commented that they "got to know" the lead academic through these presentations and sensed they were part of a wider learning community as a result. The presentations on the CD-ROM also gave participants an insight into the meta-narrative of the course, linking the various themes and topics covered into a coherent whole. In contrast, campus participants placed the highest

value on the learning guide, which represents the lecturer's perspective, over the readings. Only a minority of campus participants valued the multimedia presentations of the CD-ROM. This is not surprising as campus participants receive dedicated class time with the lecturer. What is significant is that there was a group of campus participants who mirrored the distance participants in terms of what they value. These same participants also exhibited a deep approach to engaging with the course materials which mirrors that of the distance participants. This suggests that these participants understood the function of the course materials in the same way as the distance participants did. These were also the participants who exhibited an internal locus of control.

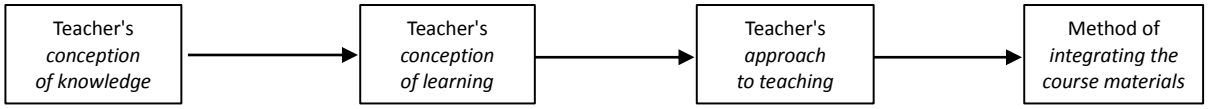
8.2.3 Accessibility and the perceived value of the course materials

The majority of campus participants valued the course materials for the greater accessibility they offered. The course materials provided participants with more flexibility and support in their learning. They furnished participants with convenient access to hard-to-find resources. They allowed participants with learning difficulties to engage with the material multiple times at a pace that suited them. For the majority of campus participants, the flexibility and support the course materials provided was only possible because they were provided in hardcopy. Where hardcopies were not provided, participants requested hardcopies from faculty, printed their own or ignored the electronic course materials. This means that course materials need to be provided in hardcopy as well as in electronic form. Institutions invest significant resources to develop high quality course materials. However, this investment is wasted if students are not able to effectively engage with the course materials. The small additional cost in providing printed materials results in students engaging with the course a material which leads to a higher level of learning. Participants very clearly stated that they would pay extra in order to have printed materials. If the cost of printed materials is the issue then the cost should be passed on the student instead of only providing electronic copies of the course materials.

8.3 Integration of the Course Materials

The model presented in figure 8.1 is the researcher's synthesis of the current literature on the relationship between a lecturer's approach to teaching and how the course materials are integrated into the classroom learning environment (Eley, 2006; Entwistle, Tait, & McCune, 2000; Ho, Watkins, & Kelly, 2001; Kember & And Others, 1991; Kember & Kwan, 2000; Postareff et al., 2008; Samuelowicz & Bain, 1992, 2001; Trigwell & Prosser, 1996). A lecturer's approach to teaching is based on two underlying assumptions: 1. Conception of knowledge, and 2. Conception of learning. Lecturers with an objective and atomistic conception of knowledge tend to have an *information transfer* conception of learning which is teacher focused and leads to a surface approach to engagement. Lecturers with a relativistic conception of knowledge tend to have *cognitive transformation* conception of learning which is learner centred and leads to a deep approach to engagement.

Figure 8.1
Links between teacher's conception of knowledge and method of integrating the course materials



8.3.1 Methods of integration evident in this study

Four methods of integrating the course materials emerged from the cross case analysis of the focus group data.

1. **Presentation**: The teacher presented the course materials in a lecture format with some deviations to discuss relevant points and answer questions.
2. **Supplemental**: The teacher produced an alternative set of course materials which they lectured from. Students had access to the official course materials as a supplement to the teacher-produced course materials.
3. **Springboard**: Students engaged with some of the materials before class. The teacher briefly summarised the course materials and then used them as a starting point to critique, expand and apply. The teacher communicated his/her thought processes out loud and invited the students to join in.
4. **Discussion**: Students are expected to engage with the course materials before class and come prepared to discuss them during class or online (for distance students)

Table 8.2 presents the frequency of each method of integration within individual courses across the cases, as reported by the participants in the focus group discussions. The integration evident in the Distance case was categorised as discussion because participants were required to engage with the course materials before participating in online discussion which focused on aspects of the course materials.

Table 8.2
Methods of integration within individual courses

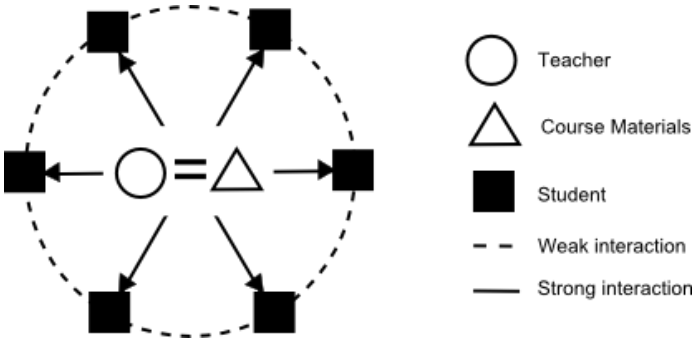
	Gisborne	Hamilton	Distance
Presentation	1.5[a]	2	0
Supplemental	0	1	0
Springboard	2	0	0
Discussion	0.5[a]	0	4

[a] One course was co-taught

8.3.2 Presentation and supplemental methods of integration

Where the presentation and supplemental methods of integration were evident, participants reported that the course materials were being used as a vehicle for information transfer. The lecturer was the focus of the learning environment (see figure 8.2). There was strong interaction from lecturer to student, but weak interaction from student to lecturer and student to student. Participants reported that they were expected to memorize information without significant critical engagement. This expectation may or may not have been intended by the lecturer. However, due to the method of integration this was the expectation that was communicated to the students.

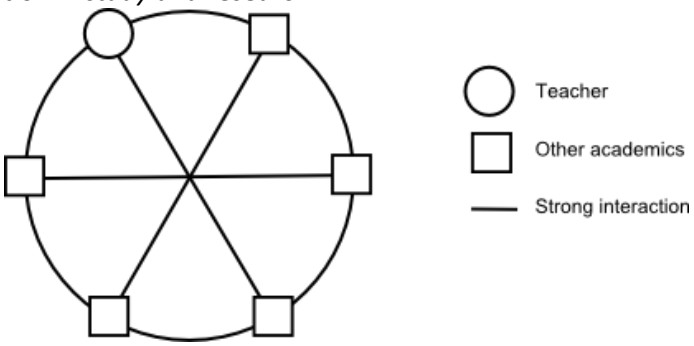
Figure 8.2
Presentation and supplemental methods of integration



Adapted from Palmer (1998)

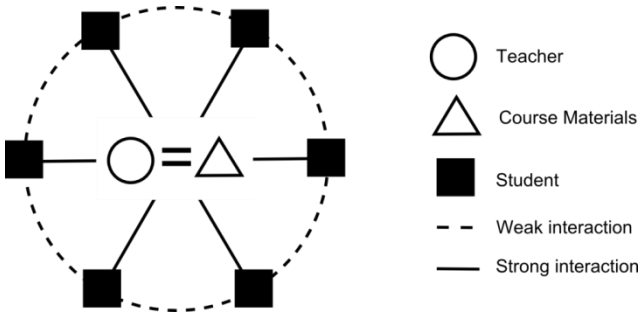
Prosser et al. (2005) suggest that lecturers with a tendency towards an atomistic and less integrated conception of knowledge are more likely to have a transmission conception of learning and as a result use a teacher-focused approach such as the presentation and supplemental methods of integration. While this may be the case, it does not necessarily follow that lecturers who use a presentation or supplemental method of integration have a transmission conception of learning accompanied by an atomistic and less integrated conception of knowledge. The lecturers in this study have all been involved in research and scholarly publication. It is highly likely that the lecturers in this study have a relativistic conception of knowledge which they employed in their own study and research (see fig. 8.3), but for some reason this was not evident to participants.

Figure 8.3
A teacher's interaction in study and research



Comments for the focus group participants suggest that lecturers who used the presentation or supplemental methods equated the course materials with themselves (see fig. 8.4). In a sense, the course materials were the end *product* of the academic *process* (fig. 8.3) in which they were engaged. Participants' comments suggest that if the course materials did not reflect the lecturer's understanding, they were inclined to reject them outright, modify them or supplement them with their own materials.

Figure 8.4
The course materials embody the teacher

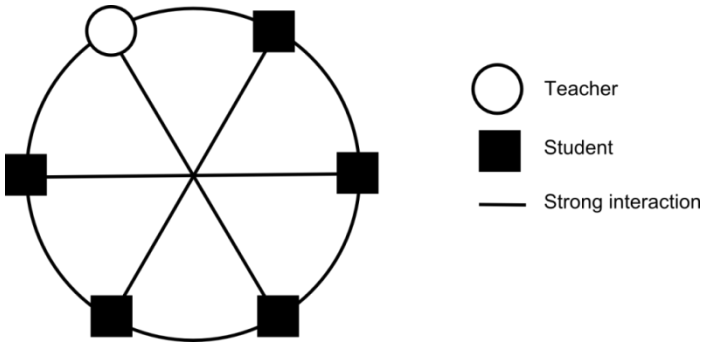


8.3.3 Springboard and discussion methods of integration

Where the springboard and discussion methods of integration were evident, participants reported that the course materials were being used as the foundation to develop their skill in the academic process. They noted that lecturers “thought out loud” which enabled them to observe the academic process and understand why the lecturer reached the conclusions, or end product, they reached. The participants commented that lecturers who used the springboard and discussion methods of integration interacted freely with all aspects of the course materials, sometimes challenging them and other times agreeing with them.

The discussion and springboard methods draw from the cognitive and situative perspectives of learning (Greeno, Collins & Resnick, 1996; Mayes & De Freitas, 2004; Palmer, 1998). These methods employ a learning-focused approach to teaching. The underlying assumptions in these methods are that knowledge is a reasoned argument based on the data at hand and learning occurs in the participant's mind as they develop an understanding of and critically evaluate different perspectives. In these methods the teacher takes the role of mentor guiding the participants as they explore the course (Palmer, 1998) (see fig. 8.5). The teacher's role is to provoke thought, challenge students' thinking, direct students to relevant resources and model good thinking. This does not mean that the teacher is an equal member of the learning community. By virtue of a teacher's experience and understanding of the subject matter they retain a leadership role within the classroom.

Figure 8.5
Springboard and discussion methods of integration

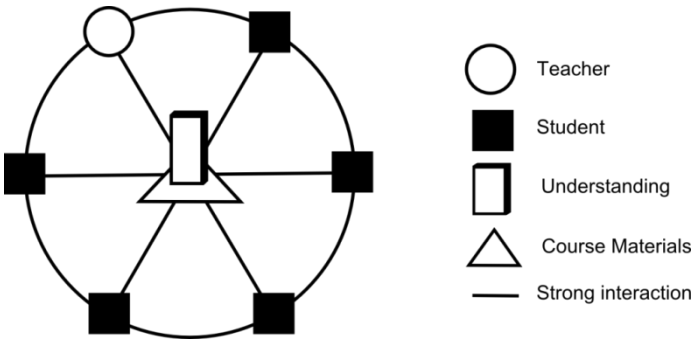


Participants commented that lecturers who used a springboard or discussion method to integration were comfortable using externally developed course materials. Where these

lecturers disagreed with the course materials they demonstrated the logic behind them and then critiqued them. Participants commented that this greatly assisted them to develop in the academic process. Participants reported that use of externally developed course materials did not diminish a lecturer's ownership and voice. This ability to use externally developed course materials was in sharp contrast to lecturers who used a presentation or supplemental method of integration. Participants in these courses commented that the lecturer had little personal voice and ownership. To these participants, it felt like the lecturer was reading from another lecturer's script. One possible explanation for this disparity is that lecturers using a springboard or discussion method viewed the course materials as a foundation to develop the academic *process*, whereas lecturers using the presentation or supplemental methods viewed the course materials as the end *product* to present.

The distinction between process and product is nuanced and goes to the heart of the definition of education. The discussion here is not so much about the course materials themselves, but how the use of the course materials is a manifestation of a lecturer's philosophy of education. While the course materials have been intentionally designed to assist students develop in the academic process, this may not occur because of the manner in which they have been integrated into the learning environment. The context surrounding the use of the course materials has a greater influence in emphasising process or product than the course materials themselves. As a result, at least as much effort and resources needs to dedicated to developing the integration of the course materials as goes into the initial development of the course materials.

Figure 8.6
The course materials are the foundation on which to construct understanding



8.4 Approach to the Course Materials

Prosser et al. (2003) state that there is a greater level of student engagement when there is a consonance in approaches to teaching and engagement. According to Prosser et al. (2003) there is a direct correlation between a lecturer's approach to teaching and a student's approach to engagement with the course materials.

> In those subjects in which students report adopting deep approaches to learning, their teachers report adopting conceptual change/student-focused approaches to teaching, and in those subjects in which students report adopting surface approaches to learning, their teachers report adopting information transmission/teacher-focused approaches to teaching. (Prosser et al., 2003, p. 39)

The findings from this study support Prosser et al., but suggest that there is a mediating correlation between a lecturer's approach to teaching and a student's approach to engagement with the course materials (see table 8.3). Where there is a consonance between a lecturer's approach to teaching and a student's desired approach to engagement, the resulting student approach to engagement is the same as the lecturer's approach to teaching. Where there is a dissonance between a lecturer's approach to teaching and a student's desired approach to engagement the resulting approach to engagement can either be surface or deep.

Table 8.3
The relationship between approach to teaching and approach to engagement

		Lecturer	
		Surface[4]	Deep[5]
Student	Surface	Surface	Surface or deep
	Deep	Surface or deep	Deep

The findings from this study suggest that where there is a dissonance between the approach to teaching and the desired approach to engagement, external factors do not determine the resulting approach to engagement. The majority of participants in all three cases reported a desire to engage with the course materials, using a deep approach. Participants in all three cases received the same course materials and used the same course outline. However, the

[4] Information transmission/teacher-focused

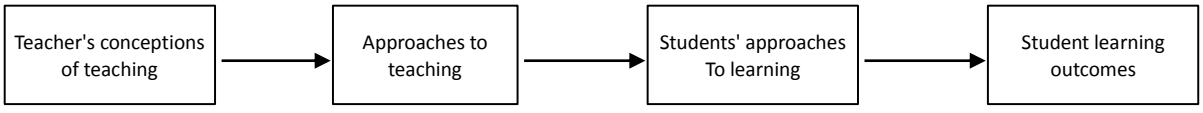
[5] Conceptual change/student-focused

results from approach scale, Distance (7.88) and Campus (3.67), suggest that some intermediating factor caused the lower score for the campus cases. The two external factors suggested by the literature to explain the disparity between the Distance and the Campus groups are lack of time (Entwistle & Ramsden, 2003) and the integration of the course materials into the learning environment (Prosser et al., 2003).

Entwistle and Ramsden (2003) suggest that when participants had insufficient time to engage deeply they reverted to using a surface approach. However, the findings from this study suggest otherwise. On average, participants in the Hamilton case reported spending the same amount of time engaging with the course materials as Distance participants, but scored significantly lower in the approach scale. In comparison, participants in the Gisborne case reported engaging with the course materials for half the amount of time as participants in the Hamilton case, but scored over double in the approach scale. The findings from this study suggest that insufficient time is not a factor in participant's approach to engagement with the course materials.

Prosser et al. (2003) suggest that the students' approach to engagement reflects the lecturer's approach to teaching (fig 8.7). The findings from the focus groups indicate that the majority of participants do mirror their perception of their lecturer's approach to teaching. However, it does not explain why a large group of campus participants chose to engage, using a surface approach, when their desire was to engage using a deep approach. It also does not explain why a small group of campus participants chose to engage using a deep approach despite their lecturer using a surface approach to teaching. This suggests that there is more factors which influences participant's approach to engagement with the course materials.

Figure 8.7
Links between teacher's conception of teaching and student learning outcomes

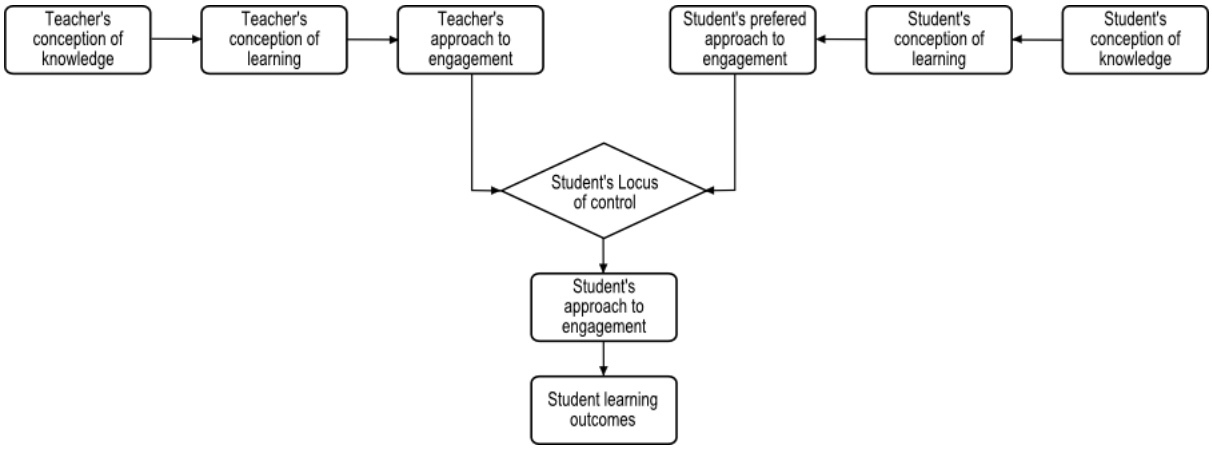


(Kember, Ma, & McNaught, 2006, p. 76)

The literature that examines the relationship between a lecturer's approach to teaching and a student's approach to engagement is concerned with raising the quality of teaching (Kember,

Ma, & McNaught, 2006; Prosser et al., 2003). As a result, it examines the relationship from the lecturer's perspective. These studies assume that undergraduate participants come to the learning experience with an underdeveloped conception of knowledge and learning and readily adopt the conception of knowledge and learning evident in the lecturer's approach to teaching. The findings from the focus groups suggest that this assumption may not be valid. A significant majority of the participants in the focus groups were able to articulate a strong preference for an approach to teaching and engagement. This suggests that these students came to the learning experience with a highly developed conception of knowledge and learning which informed their preference for a particular approach to teaching and engagement. If this is the case, when there is a dissonance between the student's and the student's perception of the lecturer's conception of knowledge and learning the student must choose which to accept and which to reject. The resulting approach to engagement adopted flows from whichever set of assumptions dominates (fig 8.8).

Figure 8.8
Links between approach to teacher, student underlying assumptions, and approach to engagement



The concept of locus of control may explain the data evident in this study. A student's locus of control is defined as the extent to which a student believes that they can control their learning. Students with an internal locus of control have a clear conception of knowledge and learning which guides their engagement irrespective of the environment around them (table 8.4). Students with an external locus of control adopt the conception of knowledge and learning from the authority figures in their environment, namely their lecturer (table 8.5).

A student's locus of control determines the approach to engagement adopted (see table 8.4 and 8.5). Students who experience dissonance are faced with a choice between accepting their underlying assumptions or the lecturer's underlying assumptions. Students with an external locus of control choose to adopt the lecturer's underlying assumption and students with an internal locus of control choose to retain their own underlying assumptions.

Table 8.4
The effect of an internal locus of control on engagement

		Lecturer	
		Surface	Deep
Student	Surface	Surface	Surface
	Deep	Deep	Deep

Table 8.5
The effect of an external locus of control on engagement

		Lecturer	
		Surface	Deep
Student	Surface	Surface	Deep
	Deep	Surface	Deep

The data from the focus groups suggest that the majority of campus participants wanted to use a deep approach to engagement with the course materials. However, when the lecturer used a presentation of supplemental method of integration these participants felt pressured into use a surface approach to engagement. In the end, the majority of these participants adopted a surface approach to engagement with the course materials in these courses. Where lecturers used a springboard or discussion method of integration, the same participants adopted a deep approach to engagement for that course. These students simultaneously used a surface approach to engagement in one course and a deep approach to engagement in another course as a result of the way the lecturer modelled the use of the course materials. This pattern of engagement suggests that the majority of campus participants have an external locus of control. The perceived approached to engagement modelled by the lecturer

takes precedence over their desired approach to engagement. This is consistent with the findings of Meyer (1991) and Lindblom-Ylanne and Lonka (1999).

All the participants in the distance focus group reported a preference for using a deep approach to engagement. Their responses suggest that they did use a deep approach when engaging with the course materials. There was no reported dissonance between the participants' preferred approach to engagement and discussion method of integration. As a result, no conclusions can be drawn as prevalence of an external or internal locus of control for distance participants. An assumption could be made that the prevalence of external and internal locus of control in distance participants mirrors that of campus participants. This assumption is consistent with the data in this study, but cannot be supported by the data. Alternatively, the prevalence of an internal locus of control may be higher in distance participants due to the independent nature of distance education. This is an area which needs further investigation.

8.5 Summary and Implications of the Discussion

This study was concerned with investigating how students engage with self-instructional materials. It discussed four aspects of student engagement. The following is a summary of that discussion along with the implications of that discussion.

8.5.1 The extent of engagement with the course materials

Campus participants reported that they wanted to engage with the course materials, but they needed to be shown by the lecturer how to engage with the course materials. They did not discover how to use the course materials from explanations in the Introduction of the course materials. When participants understood how the course materials support their learning they were more likely to engage with the course materials. The implications of these points are that lectures need to understand themselves how the course materials supports student learning. They cannot assume that participants will automatically figure out how to use the materials. Instead they need to deliberately teach and model how to engage with the course materials. Lecturers without a strong teaching background may need training and support in order to accomplish this.

Participants self regulated the total amount of time they spent on a course. Most participants spend the recommended 150 hours for a 15 credit course. Participants who spent more time engaging with the materials generally engaged with the materials using a deep approach and spent less time on other course activities such as assignments. This may be as a result of spending too much time engaging with the course materials and as a result having insufficient time to spend on assignments. Another explanation is that participants who spent more time engaging with the course materials needed less time on their assignments because they had already made significant progress in their learning while engaging with the course materials. The findings from this study are inconclusive, but do point to a potential area for further research.

The time pressures experienced by campus participants were as a result of an uneven course workload throughout the semester. Distance participants experienced fewer time pressures because they had the additional pacing mechanism of the online discussion. This made it more likely that distance participants spent the recommended 10 hours per week on the course. The implication of this is that campus participants need to have a pacing mechanism built into the design of the course to assist them to regulate their workflow or the uneven workflow needs to be brought to the attention of student so that they can plan for it.

8.5.2 Perceived value of the course materials

Participants placed a higher value on the course materials if they understood how the course materials integrated with their learning experience. Participants with an unclear understanding of how the course materials integrated with their learning experience tended to value components of the course materials which reflected the lecturer's position Participants with a clear understanding of the integration of the course materials placed a higher value on components which examined the subject matter from different perspectives and which provided a meta-narrative to the course. The implications of this are that the integration of the course materials into the student's learning experience needs to be communicated explicitly. Lecturers need to explain the purpose of the course materials and how to use the course materials in class and in their private study. They also need to model critical interaction with the course materials.

Participants valued the accessibility and flexibility offered by the course materials, but only

when the course materials were available in hardcopy. Participants commented that they struggled to engage for extended periods of time with electronic resources. Instead they either opted to print electronic resources or ignored them. The implication of this is that course materials need to be provided in hardcopy so that they can be of maximum use.

8.5.3 The integration of the course materials into the student learning experience

The method used by lecturers to integrate the course materials into the learning environment sends powerful messages to the students about the nature of knowledge and learning. These messages may not be intentional and in fact may be contrary to the messages that lecturers want to communicate. The presentation and supplemental methods of integration focus on the product of the academic process. The message communicated to the students is that there is an objective, discrete body of knowledge to be learned. The springboard and discussion methods of integration focus on the academic process. The message communicated to the students is that they need to wrestle with the evidence in order to draw their own conclusions from the data available, which implies a constructed subjective view of knowledge. The implication of this is that lecturers need to ensure that the method of integration used accurately reflects the messages they want to communicate concerning the nature of knowledge and learning. They are not just teachers of their subject, but they are teachers of the academic process.

A lecturer's voice is as a result of the method of integration they use, not whether they have developed the course materials themselves. The implication of this is that lecturers need to realise that they can retain ownership and their professional voice if they use the course materials as a foundation to demonstrate the academic process.

8.5.4 The approach to engagement with the course materials

This study suggests that student engagement with the self-instructional course materials is the result of a complex interplay between a student's desired approach to engagement, their locus of control and the method of integration. It suggests that the majority of students want to engage with the course materials using a deep approach. However, some of these students end up engaging with the course materials using a surface approach because they have an external locus of control. As a result they adopt the underlying assumptions inherent in the method of integration used by their lecturer. This implies that good course materials in

themselves do not facilitate student engagement using a deep approach unless they are complemented by methods of integration which also facilitate a deep approach to engagement. It also implies that the responsibility for student surface level engagement with the course materials can be largely attributed to the method of integration used by the lecturer. This means that any development of self-instructional materials must be accompanied by rigorous staff development in order to achieve the desired outcomes.

8.6 Review of Limitations

Throughout the course of this study a number of limitations became apparent.

1. *Participants in the focus groups were self selected*. There was no attempt to balance gender, age, educational experience, ethnicity or educational achievement. The distance focus group only reported positive experiences engaging with the course materials. This suggests that it is likely that the participants who choose to be part of the distance focus group did so because they were confident about their learning and engagement with the course materials. The campus focus groups reported both positive and negative experiences engaging with the course materials. This suggests that these participants may be more representative of the student population. However, caution still needs to be used when interpreting data from the campus focus groups because there remains a bias towards participants who are confident of their learning and engagement with the course materials.

2. *This study examined a limited number of courses taught by a small group of lecturers*. The methods of integration identified in the study were based on a small sample. The springboard method was only used on one campus by one lecturer. Because there was no replication with other campuses or other lecturers there may be other factors which influence student engagement which were not evident. The other methods were identified in a greater number of instances, but the sample size was still too small to rule out rule out variations caused by the idiosyncrasies of the lecturer or the subject matter.

8.7 Areas for Further Research

This study was a small scale exploratory case study. As a result of the analysis of data and discussion a number of areas for further research were identified.

1. *The methods of integrating the course materials*. This study focused on student engagement with the course materials. One of its major findings is that student engagement with the course materials is influenced by the method of integration used by the lecturer. This study identified four methods of integration. On reflection, a number of questions arise. Are there more methods of integration? Are the methods of integration really contextualised pedagogy? If so, does that mean the concept of locus of control can be applied to all aspects of student engagement not just student engagement with the course materials?

2. *The relationship between engagement with course materials and other aspects of the course.* This study focused on how students engaged with the course materials. The findings from the campus students suggest that student engagement with the course materials are integrally linked to a lecturer's pedagogy within the classroom. Based on these findings, a hypothesis can be made that a student's approach to engagement with the course materials has a direct correlation to their engagement with other aspects of the course such as lectures, assignments, etc. and their grade for the course. This hypothesis could be a fruitful area for further research.

3. *The validity of locus of control.* This study identified a student's locus of control as a significant factor in student engagement. This is a new concept which has not been discussed in the current literature on student engagement. An additional study needs to be conducted solely focused on locus of control to establish if this construct is transferable to other contexts.

4. *The relationship between modality and locus of control*. The findings from this study suggest that the majority of campus students have an external locus of control. The prevalence of external locus of control amongst distance students was inconclusive. Distance students may mirror campus students or they may have a bias towards an

internal locus of control due to the nature of that form of learning. More research needs to be conducted into the relationship between modality and locus of control. This is a tenuous relationship which needs to be more clearly supported by data.

5. *The relationship between time engaged with the course materials and time spent on assignments.* The findings from this study hint that students who spend more time engaging with the materials engage using a deep approach and as a result understand the subject better so need to spend less time on assignments. The evidence for this chain of causation is tentative and needs further exploration before any findings can be reached.

8.8 Conclusion

Student engagement with self-instructional course materials is the result of complex interactions between a student's preferred approach to engagement, their locus of control and the method of integration used by the lecturer. The majority of students preferred to engage with the course materials using a deep approach. Campus students tend to have an external locus of control, while the data for distance students was inconclusive.

Students with an external locus of control reflect the assumptions and approaches they perceive the lecturer using. The presentation and supplemental approach to integrating the course materials into the classroom learning environment places the lecturer at the centre and equates the lecturer with the course materials. As a result a dualistic conception of knowledge is portrayed to the student which leads to an intake-and-reproduction conception of learning which results in a surface approach when engaging with the course materials. In contrast, lecturers who utilise a discussion or springboard approach to integrating the course materials into the classroom learning environment place the subject as the centre and view the course materials as the foundation upon which understanding can be constructed. As a result, a relativistic conception of knowledge is portrayed to the student which leads to a constructing-and-transforming conception of learning which, in turn, results in a deep approach to engagement with the course materials.

Unless they are convinced that another approach serves their needs better, students with an

internal locus of control engage with the course materials using their preferred approach.

The perceived value of the course materials and the amount of time spent engaging with the course materials are influenced by a lecturer's approach to teaching. The latter is manifest in their integration of the course materials. Whereas lecturers with a content-focused approach to teaching use a presentation or supplemental approach to integrating the course materials, those with a learning-focused approach to teaching use a discussion or springboard approach to integrating the course materials.

Students who experience the presentation approach to integration place a low value on the course materials because it is a replication of what is being presented in class. As a result these students spend little time engaging with the course materials. The exception to this are those students who are visual learners, who tend to tune out the teacher and read the course materials in class, and students with learning/language difficulties who appreciated the ability to review the lecture by studying the course materials.

Students who experience a supplemental approach to integration also place a low value on the course materials. However, unlike the students who experienced a presentation approach, these students do spend a considerable amount of time engaging with the official course materials to ensure that they cover the required material for assessments set by the lead academic who is based at another campus. The additional time spent engaging with the course materials does not translate into a reduction of the amount of time needed for assessments. As a result, these students spend more than the recommended 150 hours on each course.

Students who experience a discussion approach to integration place a high value on the course materials. They engage with all the compulsory course materials.

Students who experience a springboard approach to integration place a high value on the course materials. They engage with significant portions of the course materials, as directed by their teacher, often prior to class. While these students spend more time engaging with the course materials, they spend less time on assessments which results in spending no more than

the recommended 150 hours on each course.

References

Anderson, G., & Arsenault, N. (1998). *Fundamentals of educational research* (2nd ed.). London: Falmer Press.

Anderson, T. (2003). *E-research: methods, strategies, and issues* (1st ed.). Boston: Allyn and Bacon.

Astin, A. (1985). *Achieving educational excellence* (1st ed.). San Francisco: Jossey-Bass.

Babbie, E. (1990). *Survey research methods*. Belmot, California: Wadsworth.

Barbour, R. (2007). *Doing focus groups*. London: SAGE.

Baxter Magolda, M. (1987). The affective dimension of learning: Faculty-student relationships that enhance intellectual development. *College Student Journal*, *21*, 46-58.

Baxter Magolda, M. B. (2006). Intellectual development in the college years. *Change*, 50-54.

Belcheir, M. (2003). *Active learning in and out of the classroom: Results from the National Survey of Student Engagement research report 2003* (No. BSU-RR-2003-02). Boise State University.

Belenky, M. (1986). *Women's ways of knowing: The development of self, voice, and mind*. New York: Basic Books.

Biggs, J. (1987). *Student approaches to learning and studying*. Melbourne: Australian Council for Educational Research.

Bonk, C., Kim, K., & Zeng, T. (2006). Future directions of blended learning in higher education and workplace learning settings. In C. Bonk & C. Graham (Eds.), *Handbook of blended learning: global perspectives, local designs*. San Francisco: Jossey-Bass.

Bryman, A., & Cramer, D. (2004). Constructing variables. In A. Bryman & M. Hardy (Eds.), *Handbook of data analysis* (pp. 17-34). London: Sage.

Chen, P. D., Gonyea, R. M., & Kuh, G. D. (2008). Learning at a distance: Engaged or not? *Innovate*, *4*(3), 1-8.

Chickering, A., & Gamson, Z. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, *March*, 3-7.

Coates, H. (2006a). *Student engagement in campus-based and online education: University connections*. London: Routledge.

Coates, H. (2006b). Student engagement: The specification and measurement of student engagement (pp. 5-12). Presented at the Student Engagement: Measuring and Enhancing Engagement with Learning Conference, Lower Hutt, New Zealand.

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. London: SAGE.

Denzin, N., & Lincoln, Y. (2000). Introduction: The discipline and practice of qualitative research. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 1-29). Thousand Oaks, CA: Sage.

Eley, M. (2006). Teachers' conceptions of teaching, and the making of specific decisions in planning to teach. *Higher Education*, *51*(2), 191-214.

Entwistle, N. (1997). Reconstituting approaches to learning: A response to Webb. *Higher Education*, *33*(2), 213-18.

Entwistle, N. (2003). *Concepts and conceptual frameworks underpinning the ETL project* (Occasional No. 1). Enhancing teaching-learning environments in undergraduate courses project. Retrieved from http://www.etl.tla.ed.ac.uk/docs/ETLreport3.pdf

Entwistle, N., & Ramsden, P. (1982). *Understanding student learning*. London: Nichols Pub. Co.

Entwistle, N., Tait, H., & McCune, V. (2000). Patterns of response to an approaches to studying inventory across contrasting groups and contexts. *European Journal of Psychology of Education*, *15*(1), 33-48.

Entwistle, N. J., & Peterson, E. R. (2004). Conceptions of learning and knowledge in higher education: Relationships with study behaviour and influences of learning environments. *International Journal of Educational Research*, *41*(6), 407-428.

Fredricks, J., Blumenfeld, P., & Paris, A. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, *74*(1), 59-109.

Gardiner, L. (1994). *Redesigning higher education: producing dramatic gains in student learning*. Washington D.C.: Graduate School of Education and Human Development George Washington University.

Grbich, C. (2007). *Qualitative data analysis: An introduction*. London: SAGE.

Greeno, J., Collins, A., & Resnick, L. (1996). Cognition and learning. In *Handbook of educational psychology* (pp. 15-46). New York: Macmillan.

Guba, E., & Lincoln, Y. (1998). Competing paradigms in qualitative research. In N. Denzin & Y. Lincoln (Eds.), *The landscape of qualitative research: Theories and issues* (pp. 195-220). Thousand Oaks, CA: Sage.

Haggis, T. (2003). Constructing images of ourselves? A critical investigation into 'approaches to learning' Research in Higher Education. *British Educational Research Journal*, *29*(1), 89-104.

Hayek, J., & Kuh, G. (2002). Insights into effective educational practices. *Educase Quarterly*, *November*, 60-61.

Healey, J. (2007). *The essentials of statistics: a tool for social research*. Belmont CA: Thomson/Wadsworth.

Ho, A., Watkins, D., & Kelly, M. (2001). The conceptual change approach to improving teaching and learning: An evaluation of a Hong Kong staff development programme. *Higher Education*, *42*(2), 143-169.

Jelfs, A., Richardson, J. T. E., & Price, L. (2009). Student and tutor perceptions of effective tutoring in distance education. *Distance Education*, *30*(3), 419-441.

Keeves, J., & Sowden, S. (1997). Descriptive data, analysis of. In J. Keeves (Ed.), *Educational research, methodology, and measurement: An international handbook* (2nd ed., pp. 296-305). Cambridge: Cambridge University Press.

Kember, D., & and Others. (1991). Towards a causal model of student progress in distance education: Research in Hong Kong. *American Journal of Distance Education*, *5*(2), 3-15.

Kember, D., & Gow, L. (1994). Orientations to teaching and their effect on the quality of student learning. *The Journal of Higher Education*, *65*(1), 58-74.

Kember, D., & Kwan, K. (2000). Lecturers' approaches to teaching and their relationship to conceptions of good teaching. *Instructional Science*, *28*(5-6), 469-490.

Kember, D., Ma, R., & McNaught, C. (2006). *Excellent university teaching*. Hong Kong: Chinese University Press.

King, P. M., & Kitchener, K. S. (1994). *Developing reflective judgment: understanding and promoting intellectual growth and critical thinking in adolescents and adults*. The Jossey-Bass higher and adult education series. San Francisco: Jossey-Bass Publishers.

Krueger, R. (2009). *Focus groups: a practical guide for applied research* (4th ed.). Thousand Oaks, CA.: Sage Publications.

Kuh, G. (2001). The National Survey of Student Engagement: Conceptual Framework and Overview of Psychometric Properties. NSSE. Retrieved July 10, 2010, from http://nsse.iub.edu/pdf/conceptual_framework_2003.pdf

Kuh, G. (2003). What we're learning about student engagement from NSSE: Benchmarks for effective educational practices. *Change*, *35*(2), 24-32.

Kuh, G., & Hu, S. (2001). The effects of student faculty interaction in the 1990s. *Review of Higher Education*, *24*(3), 309-332.

Kuh, G. D., Cruce, T. M., Shoup, R., Kinzie, J., & Gonyea, R. M. (2008). Unmasking the effects of student engagement on first-year college grades and persistence. *Journal of Higher Education*, *79*(5), 540-563.

Laurillard, D. (1993). *Rethinking university teaching: A framework for the effective use of educational technology*. London: Routledge.

Lindblom-Ylanne, S., & Lonka, K. (1999). Individual ways of interacting with the learning

environment: Are they related to study success? *Learning and Instruction*, *9*(1), 1-18.

Lockwood, F. (1992). *Activities in self-instructional texts*. London: Kogan Page.

Lockwood, F. (1994). *Materials production in open and distance learning*. London: Paul Chapman Pub.

Lockwood, F. (1995). *Open and distance learning today*. London: Routledge.

Lockwood, F. (1998). *The design and production of self-instructional materials*. London: Kogan Page.

Lockwood, F. (2000). *Innovation in open & distance learning: successful development of online and Web-based learning*. London: Kogan Page.

Marshall, D., & Case, J. (2005). 'Approaches to learning' research in higher education: A response to Haggis. *British Educational Research Journal*, *31*(2), 257-267.

Marton, F. (1981). Phenomenography - describing conceptions of the world around us. *Instructional Science*, *10*(1981), 177-200.

Marton, F., & Saljio, R. (1997). Approaches to learning. In *The experience of learning* (2nd ed.). Great Britain: Scottish Academic Press.

Mayes, T., & de Freitas, S. (2004). Stage 2: Review of e-learning theories, frameworks and models. *JISC*. Retrieved July 10, 2010, from http://www.jisc.ac.uk/uploaded_documents/Stage%202%20Learning%20Models%20%28Version%201%29.pdf

Meyer, J. (1991). Study orchestration: The manifestation, interpretation and consequences of contextualised approaches to studying. *Higher Education*, *22*(3), 297-316.

Miles, M., & Huberman, M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks: Sage Publications.

Nichols, M. (2008). 03 - Designing for e-learning. Retrieved July 10, 2010, from http://akoaotearoa.ac.nz/download/ng/file/group-661/n882-designing-for-e-learning---3-in-eprimer-series.pdf

NSSE. (2002). *From promise to progress: How colleges and universities are using student engagement results to improve collegiate quality* (Annual report). Bloomington, IN: Indiana University.

NSSE. (2007). *Experiences that matter: Enhancing student learning and success*. Bloomington: NSSE.

Orton-Johnson, K. (2009). 'I've stuck to the path I'm afraid': Exploring student non-use of blended learning. *British Journal of Educational Technology*, *40*(5), 837-847.

Pace, C. (1979). *Measuring quality of effort: A new dimension for understanding student learning and development in college*. Los Angeles: Laboratory for Research on Higher Education Graduate School of Education, University of California.

Pace, C. (1982). Achievement and the quality of student effort. Presented at the Meeting of the National Commission of Excellence in Education, Washington, DC.

Palmer, P. (1998). *The courage to teach: Exploring the inner landscape of a teacher's life* (1st ed.). San Francisco, CA.: Jossey-Bass.

Pascarella, E. (1991). *How college affects students: Findings and insights from twenty years of research* (1st ed.). San Francisco: Jossey-Bass Publishers.

Pascarella, E. (2005). *How college affects students: A third decade of research.* San Francisco, CA: Jossey-Bass.

Perry, W. (1970). *Forms of intellectual and ethical development in the college years: A scheme*. New York: Holt, Rinehart and Winston.

Posavac, E., & Carey, R. (2007). *Programme evaluation methods and case studies*. Upper Saddle River, NJ: Pearson.

Postareff, L., Katajavuori, N., Lindblom-Ylänne, S., & Trigwell, K. (2008). Consonance and dissonance in descriptions of teaching of university teachers. *Studies in Higher Education*, *33*(1), 49-61.

Prosser, M., Ramsden, P., Trigwell, K., & Martin, E. (2003). Dissonance in experience of

teaching and its relation to the quality of student learning. *Studies in Higher Education*, *28*(1), 37.

Punch, K. (2005). *Introduction to social research: quantitative and qualitative approaches* (2nd ed.). London: SAGE.

Rabiee, F. (2004). Focus-group interview and data analysis. *Proc Nutr Soc*, *63*(4), 655-60.

Ramsden, P. (1988). *Improving learning: New perspectives*. London: Kogan Page.

Richardson, J. (2000). *Researching student learning: approaches to studying in campus-based and distance education*. Buckingham, England: Society for Research into Higher Education & Open University Press.

Robinson, C. C., & Hullinger, H. (2008). New benchmarks in higher education: Student engagement in online learning. *Journal of Education for Business*, *84*, 101-109.

Robson, C. (2002). *Real world research: A resource for social scientists and practitioner-researchers* (2nd ed.). Oxford: Blackwell.

Saljio, R. (1979). *Learning in the learner's perception.* In *Some common-sense conceptions* (No. 76). Gothenburg: Department of Education, University of Gothenburg.

Salmon, G. (2000). *E-Moderating*. London: RoutledgeFalmer.

Samuelowicz, K., & Bain, J. D. (1992). Conceptions of Teaching Held by Academic Teachers. *Higher Education*, *24*(1), 93-111.

Samuelowicz, K., & Bain, J. D. (2001). Revisiting academics' beliefs about teaching and learning. *Higher Education*, *41*(3), 299-325.

Schwandt, T. (1998). Constructivist, interpretivist approaches to human inquiry. In N. Denzin & Y. Lincoln (Eds.), *The landscape of qualitative research: Theories and issues* (pp. 221-259). Thousand Oaks, CA: Sage.

Stake, R. (1995). *The art of case study research*. Thousand Oaks: Sage Publications.

Tait, H., Entwistle, N., & McCune, V. (1998). ASSIST: A re-conceptualisation of the approaches to studying inventory. In C. Rust (Ed.), *Improving student learning: Improving students*

as learners (pp. 262-271). Oxford: Oxford Centre for Staff and Learning Development, Oxford Brookes University.

Trigwell, K., & Prosser, M. (1996). Congruence between intention and strategy in university science teachers' approaches to teaching. *Higher Education*, *32*(1), 77-87.

Trigwell, K., Prosser, M., & Waterhouse, F. (1999). Relations between teachers' approaches to teaching and students' approaches to learning. *Higher Education*, *37*(1), 57-70.

Vermunt, J. (1998). The regulation and constructive learning process. *British Journal of Educational Psychology*, *68*, 149-171.

Vermunt, J., & Van Rijswijk, F. (1988). Analysis and development of students' skill in self-regulated learning. *Higher Education*, *17*(6), 647-82.

Vygotsky, L. (1978). *Mind in society*. Cambridge, Ma: Harvard University Press.

Webb, G. (1997). Deconstructing deep and surface: Towards a critique of phenomenography. *Higher Education*, *33*(2), 195-212.

Yin, R. (2004). *The case study anthology*. London: SAGE.

Yin, R. (2009). *Case study research: Design and methods* (4th ed.). Los Angeles ;;London: Sage Publications.

Yin, R. K. (1994). *Case study research: Design and methods*. Applied social research methods series, v. 5. Thousand Oaks: Sage Publications.

Appendices

Appendix A: Email Invitation to Participate in the Questionnaire

Did you complete one of the new hybrid courses listed below in semester 1, 2009?

1. [Course A]
2. [Course B]
3. [Course C]
4. [Course D]

If so, I would like to hear from you. I want to understand your experience of engagement with the hybrid course materials (learning guide, readings and CD-ROM). This questionnaire is part of research conducted by Peter Cowie as part of his Masters of Education from Massey University. It will also assist ABC College to improve its hybrid course materials.

You are invited to participate in an online questionnaire about your experience. A full information sheet about this questionnaire is attached to this email. To participate in the questionnaire please click here [Insert URL link].

If you have any questions about the questionnaire please contact Peter Cowie via email at pcowie@ABC College.ac.nz or by phone on (09) 837-9733.

[Attach questionnaire information sheet]

Appendix B: Questionnaire Information Sheet

Massey University
COLLEGE OF EDUCATION
Te Kupenga o Te Mātauranga

SCHOOL OF CURRICULUM
AND PEDAGOGY
Private Bag 11 222
Palmerston North
New Zealand
T 64 6 356 9099
F 64 6 351 3472
www.massey.ac.nz

QUESTIONNAIRE INFORMATION SHEET

Researcher(s) Introduction
Hi, my name is Peter Cowie. I am the Instructional Designer at ABC College. I am responsible for developing the hybrid course materials alongside the lead academic. This research project aims to understand how students engage with the hybrid course materials so that we can create course materials that better meet your needs. This research is part of my studies at Massey University towards a Masters of Education (Distance and Online Learning). If you have any questions about this study, you can contact me by phone on (09) 837-9733 or by email at pcowie@ABC College.ac.nz.

Project Description and Invitation
This research aims to understand how students engage with the hybrid course materials. This study will examine factors such as time engaged, perceived value of materials, student approaches to engagement and the integration of the course materials to the classroom learning experience. It will result in recommendations and implications for the future design and development of hybrid course materials.

You are invited to complete an online questionnaire as part of this research. It will take up to 20 minutes to complete, but will provide invaluable information about how you engaged with the course materials.

Participant Identification and Recruitment
The purpose of the online questionnaire is to describe and summarise how students engaged with the hybrid course materials. As a result, all students who enrolled in a hybrid course for semester 1, 2009 have been invited to participate in this research. You have been contacted through the Moodle system and no personal information has been disclosed to the researcher.

Project Procedures
You are invited to take part in an online questionnaire describing how you engaged with the hybrid course materials. The questionnaire will take up to 20 minutes to complete. The questionnaire is anonymous and your privacy is assured. The questionnaire will be open from [insert final dates here]. It can be accessed by clicking here or using this URL ([insert URL here]).

Data Management
The purpose of the online questionnaire is to describe and summarise how students engaged with the hybrid course materials. The questionnaire is anonymous and your privacy is assured. The data from the questionnaire will be kept secure in a password protected database. A summary of the results of the questionnaire will be made available on Moodle for all participants. You will be contacted by email through the Moodle system when those results are made available.

Participant's Rights

- *You are under no obligation to accept this invitation*
- *You have the right to view a summary of the data collected*
- *Completion and return of the questionnaire implies consent*
- *You have the right to decline to answer any particular question*

Project Contacts

Researcher Peter Cowie
ABC College
[_____]
[_____]
[_____]

Supervisor Dr Ben Kehrwald
School of Curriculum and Pedagogy
College of Education
Massey University
Private Bag 11222
Palmerston North
(06)356 9099 ext: 8714

If you have any questions about the research please contact either myself or my supervisor. We would be happy to answer any questions.

Compulsory Statements

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 09/36. If you have any concerns about the conduct of this research, please contact Dr Karl Pajo, Chair, Massey University Human Ethics Committee: Southern B, telephone 04 801 5799 x 6929, email humanethicsouthb@massey.ac.nz.

Appendix C: Online Questionnaire

Welcome

This questionnaire is designed to collect baseline data on your experience of engagement with the hybrid course materials in the following areas:

1. The amount of time spent engaging with the course materials
2. The perceived value of course materials
3. The approach taken when engaging with the course materials
4. The integration of the course materials into campus students' learning experience

This questionnaire only relates to the following courses on offer in semester 1, 2009.

- [Course A]
- [Course B]
- [Course C]
- [Course D]

This questionnaire will take up to 20 minutes of your time. Your response will be anonymous and stored in a secure database. Submission of this questionnaire will be considered as informed consent. A summary of the results from this questionnaire will be published in the All ABC student area on Moodle.

This questionnaire is part of research conducted by Peter Cowie as part of his Masters of Education from Massey University. If you have any questions about the questionnaire please contact Peter Cowie via email at pcowie@ABC College.ac.nz or by phone on (09) 837-9733.

General information

1. Where did you complete the hybrid course(s)?
   - At the Gisborne campus
   - At the Hamilton campus
   - Via the Distance (DIS)

2. When did you start studying at ABC College?
   - 2009
   - 2008
   - 2007
   - Before 2007

3. Prior to 2009, how many degree level ABC College courses had you completed?
   - None
   - 1-2 courses
   - 3-4 courses
   - More than 4 courses

4. Prior to 2009, what was the highest educational level you studied?

- Bachelor's degree or higher
- Diploma or trade certificate
- High school (NCEA level 1-3 or equivalent)
- None

Time engaged with course materials

The hybrid course materials include the learning guide, the readings, the textbook and the presentations on the CD-ROM. Engaging with the hybrid course materials involves reading and reflecting on the learning guide and course readings, completing the activities listed in the course materials and watching the presentations on the CD-ROM.

5. On average, what is the total amount of time per week you spent engaging with the course materials?

- Up to 3 hours per week
- between 3-5 hours per week
- More than 5 hours per week

6. On average, what is your preferred length of time engaging with the course materials in one session?

- Less than 1 hour
- Between 1 – 2 hours
- Between 2 – 3 hours
- More than 3 hours

7. Hybrid courses are designed to take students a total of 150 hours or 10 hours per week to complete. This time includes lectures/online discussions, engaging with the course materials and assignments. From your experience, do you think 150 hours or 10 hours per week is a realistic estimate for the amount of time it takes to complete a hybrid course?

- Yes, it took me *about* 150 hours or 10 hours per week to complete the course
- No, it took me *less than* 150 hours or 10 hours per week to complete the course
- No, it took me *a little bit more* than 150 hours or 10 hours per week to complete the course
- No, it took me *a lot more* than 150 hours or 10 hours per week to complete the course

8. Assuming that a student did spend 10 hours per week completing a hybrid course, how much time do you think **should** be allocated to engaging with the course materials?

- Less than 1 hour per week
- Between 1-3 hours per week
- Between 3-5 hours per week
- More than 5 hours per week

Perceived value of the course materials

This section of the questionnaire examines your impression of the course materials in so far as it helps you achieve the learning outcome for the course. The hybrid course materials consist of a learning guide, readings booklet, textbook (purchased by students) and a CD-ROM containing multimedia presentations.

9. For each statement below, please indicate the extent of your agreement or disagreement.

	N/A	Strongly disagree	Disagree	Agree	Strongly agree
I had a clear understanding of how to use the course materials.	0	1	2	3	4
The course materials were easy to use.	0	1	2	3	4
The course materials stimulated my thinking.	0	1	2	3	4
The course materials prepared me for my assignments.	0	1	2	3	4
I would make use of the course materials in future studies	0	1	2	3	4

10. How much of the following course materials did you engage with throughout the semester?

	None	A little (about ¼)	Some (about ½)	Most (about ¾)	All
Learning guide	0	1	2	3	4
Required readings in the textbook and the reading guide	0	1	2	3	4
Optional readings in the textbook and the reading guide	0	1	2	3	4
Presentations on the CD-ROM	0	1	2	3	4

11. How valuable were the following course materials in helping you achieve the learning outcomes for the course?

	Not valuable	Of limited value	Somewhat valuable	Valuable	Very valuable
Learning guide	0	1	2	3	4
Required readings in the textbook and the reading guide	0	1	2	3	4
Optional readings in the textbook and the reading guide	0	1	2	3	4
Presentations on the CD-ROM	0	1	2	3	4

Approach to the course materials

The questions in this section of the questionnaire related to how you, as a learner, approach the course materials, including the strategies you use to make best use of the materials.

Please indicate your relative agreement or disagreement with comments about how you approached the course materials. As you work through the comments, give your **immediate** response. If you did not engage with any part of the course materials at all, please select N/A.

12. For each statement below, please indicate the extent of your agreement or disagreement.

	N/A	Strongly disagree	Disagree	Agree	Strongly Agree
I tried to relate ideas presented in the course materials to other subject areas.	N/A	1	2	3	4
Often I feel I'm drowning in the sheer amount of material presented in the course materials.	N/A	1	2	3	4
When I read the course materials, I examine the details carefully to see how they fit in with what's being said.	N/A	1	2	3	4
I find I have to concentrate on memorising a good deal of the information covered in the course materials.	N/A	1	2	3	4
Much of the information presented in the course materials makes little sense: it's like unrelated bits and pieces.	N/A	1	2	3	4
When I read the course materials I stop from time to time to reflect on	N/A	1	2	3	4

what I am learning.					
I'm not really sure what is important in the course materials, so I try to remember everything.	N/A	1	2	3	4
I often find myself questioning things that I read in the course materials.	N/A	1	2	3	4
I only read the course material that is required for assignments or exams.	N/A	1	2	3	4
It is important for me to be able to follow the argument, or see the reason behind things.	N/A	1	2	3	4
When I'm reading the course materials, I try to find out for myself exactly what the author means.	N/A	1	2	3	4
I accept the concepts and ideas presented in the course materials without questioning them.	N/A	1	2	3	4

Integration of course materials with campus lectures

DIS students please skip these questions and submit your completed questionnaire by clicking the submit button at the bottom of the page.

Gisborne and Hamilton campus students please complete this section This section examines how the course materials were integrated into your classroom learning experience.

13. How often did the lecturer use the course materials in their teaching?
- Never
- Rarely (1-3 times in the semester)
- Occasionally (4-5 times in the semester)
- Often (at least every second week)
- Always (every week)

14. How often did the lecturer specifically assign parts of the course materials to be engaged with outside of class?
- Never
- Rarely (1-3 times in the semester)
- Occasionally (4-5 times in the semester)
- Often (at least every second week)
- Always (every week)

15. How much of the course materials did the lecturer require you to engage with?
- None
- A little (about ¼)
- Some (about ½)
- Most (about ¾)
- All

16. When did you engage with the course materials?
(Select all the options that are relevant)

- N/A
- Before class
- During class
- After class

Thank-you

Thank-you for participating in this questionnaire. Your responses will help ABC College understand how students engage with hybrid course materials.

The next phase of this research involves focus group interviews of students from the Gisborne and Hamilton campuses and student studying through DIS. The focus groups will be an opportunity to tell us what you really think of the course materials provided in the new hybrid courses? How did you use them? Where they useful? What did you like/dislike about them? How could they be improved? ABC College wants to know the answers to these and other questions so that future hybrid courses can be designed to meet your learning needs.

If you are interested in participating in a focus group or want more information please click here [insert mailto link]. An automatic email form will be generated. Fill in the form and click send. Please note that email is not linked in any way to this questionnaire.

Appendix D: Email Invitation to Participate in the Focus Groups

What did you really think of the course materials provided in the new hybrid courses? How did you use them? Where they useful? What did you like/dislike about them? How could they be improved? I want to know the answers to these and other questions so that future hybrid courses can be designed to meet your learning needs.

You are invited to be part of a focus group of 6-8 students. The focus group will be held at [insert full details of the focus group]. An information sheet about the focus group is attached to this email. If you want to be part of this focus group please reply to this email.

These focus groups are part of research conducted by Peter Cowie as part of his Masters of Education from Massey University. This research will also assist ABC College develop high quality hybrid course materials. If you have any questions about the questionnaire please contact Peter Cowie via email at pcowie@ABC College.ac.nz or by phone on (09) 837-9733.

[Attach appropriate focus group information sheet]

Appendix E: Campus Focus Group Information Sheet

SCHOOL OF CURRICULUM
AND PEDAGOGY
Private Bag 11 222
Palmerston North
New Zealand
T 64 6 356 9099
F 64 6 351 3472
www.massey.ac.nz

CAMPUS FOCUS GROUP INFORMATION SHEET

Researcher(s) Introduction
Hi, my name is Peter Cowie. I am the Instructional Designer at ABC College. I am responsible for developing the hybrid course materials alongside the lead academic. This research project aims to understand how students engage with the hybrid course materials so that we can create course materials that better meet your needs. This research is part of my studies at Massey University towards a Masters of Education (Distance and Online Learning). If you have any questions about this study, you can contact me by phone on (09) 837-9733 or by email at pcowie@ABC College.ac.nz.

Project Description and Invitation
This research aims to understand how students engage with the hybrid course materials. This research will examine factors such as time engaged, perceived value of materials, student approach to engagement and the integration of course materials to the classroom experience. It will result in recommendations and implications for the future design and development of hybrid course materials.

You are invited to participate in a focus group discussing how you engaged with the hybrid course materials. The focus group will provide invaluable information about how students engage with the hybrid course materials.

Participant Identification and Recruitment
All students who enrolled in a hybrid course for semester 1, 2009 have been invited to participate in the focus groups. You have been contact through the Moodle system and no personal information has been disclosed to the researcher.

Project Procedures
You are invited to take part in a focus group discussing how you engaged with the hybrid course materials. The focus group will take place on [insert time and date] at [insert location]. The focus group discussion will run for 90 minutes.

Data Management
The focus group discussion will be recorded (audio) electronically. A verbatim transcript of the discussion will be made by the researcher. Each participant will be assigned a pseudonym to protect their identity. Participants will be emailed a copy of the transcript. Participants have the right to check/edit their individual contribution so that it accurately reflects their words. All recordings and transcripts will be kept in a password protected file or in a locked cupboard at ABC College. Only the researcher will have access to the data.

Participant's Rights

- *You are under no obligation to accept this invitation*
- *If you decide to participate, you have the right to:*
- *decline to answer any particular question;*
- *withdraw from the study at any stage;*
- *ask any questions about the study at any time during participation;*
- *provide information on the understanding that your name will not be used unless you give permission to the researcher;*
- *review the transcript of the interview to ensure that your individual contribution is accurately recorded;*
- *be given access to a summary of the project findings when it is concluded.*

Project Contacts

Researcher Peter Cowie
ABC College
[_____]
[_____]
[_____]

Supervisor Dr Ben Kehrwald
School of Curriculum and Pedagogy
College of Education
Massey University
Private Bag 11 222
Palmerston North
(06) 356 9099 ext: 8714

If you have any questions about the research please contact either myself or my supervisor. We would be happy to answer any questions.

Compulsory Statements

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 09/36. If you have any concerns about the conduct of this research, please contact Dr Karl Pajo, Chair, Massey University Human Ethics Committee: Southern B, telephone 04 801 5799 x 6929, email humanethicsouthb@massey.ac.nz.

Appendix F: Distance Focus Group Information Sheet

Massey University
COLLEGE OF EDUCATION
Te Kupenga o Te Mātauranga

SCHOOL OF CURRICULUM
AND PEDAGOGY
Private Bag 11 222
Palmerston North
New Zealand
T 64 6 356 9099
F 64 6 351 3472
www.massey.ac.nz

DISTANCE FOCUS GROUP INFORMATION SHEET

Researcher(s) Introduction
Hi, my name is Peter Cowie. I am the Instructional Designer at ABC College. I am responsible for developing the hybrid course materials alongside the lead academic. This research project aims to understand how students engage with the hybrid course materials so that we can create course materials that better meet your needs. This research is part of my studies at Massey University towards a Masters of Education (Distance and Online Learning). If you have any questions about this study, you can contact me by phone on (09) 837-9733 or by email at pcowie@ABC College.ac.nz.

Project Description and Invitation
This study aims to understand how students engage with the hybrid course materials. This study will examine factors such as time engaged, perceived value of materials and student approach to engagement. It will result in recommendations and implications for the future design and development of hybrid course materials.

You are invited to participate in a focus group discussing how you engaged with the hybrid course materials. The focus group will provide invaluable information about how students engage with the hybrid course materials.

Participant Identification and Recruitment
All students who enrolled in a hybrid course for semester 1, 2009 have been invited to participate in the focus groups. You have been contact through the Moodle system and no personal information has been disclosed to the researcher.

Project Procedures
You are invited to take part in a focus group discussing how you engaged with the hybrid course materials. The distance focus group will be conducted over a two week period during the mid-semester break to allow you ample opportunity to contribute to the discussion while not encroaching upon your studies. A new question for discussion will be introduced every two days (see the chart below). You will need to spend at least 20 minutes every two days throughout this two week period engaging with the online discussion. Peter Cowie will monitor the discussion twice a day to ensure quick response times to questions or clarifications. You can contact Peter Cowie by email (pcowie@ABC College.ac.nz) to discuss any issues or questions in private.

	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
Week 1	Q		Q		Q		
Week 2	Q		Q		Q		

Q = New question for discussion

Data Management
The distance focus group will be conducted using the ABC College Moodle site. A modified copy of the Moodle discussion area with identifying information removed will be used for data analysis. To protect your anonymity, each participant will be assigned a pseudonym. You will be emailed a copy of the transcript to check to ensure that all identifying information has been removed. All transcripts will be kept in a password protected file or in a locked cupboard at ABC College. Only the researcher will have access to the data.

Participant's Rights

- *You are under no obligation to accept this invitation*
- *If you decide to participate, you have the right to:*
- *decline to answer any particular question;*
- *withdraw from the study at any stage;*
- *ask any questions about the study at any time during participation;*
- *provide information on the understanding that your name will not be used unless you give permission to the researcher;*
- *review the transcript of the interview to ensure that your words are accurately recorded;*
- *be given access to a summary of the project findings when it is concluded.*

Project Contacts

Researcher Peter Cowie
ABC College
[_____]
[_____]
[_____]

Supervisor Dr Ben Kehrwald
School of Curriculum and Pedagogy
College of Education
Massey University
Private Bag 11 222
Palmerston North
(06) 356 9099 ext: 8714

If you have any questions about the research please contact either myself or my supervisor. We would be happy to answer any questions.

Compulsory Statements
This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 09/36. If you have any concerns about the conduct of this research, please contact Dr Karl Pajo, Chair, Massey University Human Ethics Committee: Southern B, telephone 04 801 5799 x 6929, email humanethicsouthb@massey.ac.nz.

Appendix G: Focus Group Participant Consent Form

SCHOOL OF CURRICULUM
AND PEDAGOGY
Private Bag 11 222
Palmerston North
New Zealand
T 64 6 356 9099
F 64 6 351 3472
www.massey.ac.nz

FOCUS GROUP PARTICIPANT CONSENT FORM

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree not to disclose anything discussed in the Focus Group.

I agree to the recording of the Focus Group

I agree to participate in this study under the conditions set out in the Information Sheet.

Signature: _____ **Date:** _____

Full Name - printed _____

Appendix H: Authority for the Release of Transcript

Massey University
COLLEGE OF EDUCATION
Te Kupenga o Te Mātauranga

SCHOOL OF CURRICULUM
AND PEDAGOGY
Private Bag 11 222
Palmerston North
New Zealand
T 64 6 356 9099
F 64 6 351 3472
www.massey.ac.nz

AUTHORITY FOR THE RELEASE OF TRANSCRIPTS

I confirm that I have had the opportunity to read and amend the transcript of my interactions in the focus group.

I agree that the edited transcript and extracts from this may be used in reports and publications arising from the research.

Signature: _____ **Date:** _____

Full Name - printed _____

Appendix I: Questionnaire Data

General information

1. Where did you complete the hybrid course(s)?

Response		f	%
GIS		33	41
HAM		15	19
DIS		32	40
	N=	80	

2. When did you start studying at ABC College?

		GIS		HAM		DIS	
Response		f	%	f	%	f	%
2009		18	55	10	67	9	28
2008		8	24	3	20	8	25
2007		4	12	1	7	4	13
Before 2007		3	9	1	7	11	34
	N=	33		15		32	

3. Prior to 2009, how many degree level ABC College courses had you completed?

		GIS		HAM		DIS	
Response		f	%	f	%	f	%
None		21	64	9	60	20	63
1-2 courses		3	9	2	13	1	3
3-4 courses		1	3	1	7	3	9
More than 4 courses		8	24	3	20	8	25
	N=	33		15		32	

4. Prior to 2009, what was the highest educational level you studied?

		GIS		HAM		DIS	
Response		f	%	f	%	f	%
Bachelor or higher		17	52	8	53	17	53
Diploma or Trade Cert		10	30	4	27	7	22
High School		5	15	3	20	7	22
None		1	3	0	0	1	3
	N=	33		15		32	

Time engaged with course materials

5. On average, what is the total amount of time per week you spent engaging with the course materials?

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
Up to 3 hours	13	39	2	13	2	6
3-5 hours	13	39	5	33	6	19
More than 5 hours	7	21	8	53	24	75
N=	33		15		32	

6. On average, what is your preferred length of time engaging with the course materials in one session?

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
Less than 1 hour	6	18	0	0	2	6
Between 1-2 hours	16	48	8	53	18	56
Between 2-3 hours	6	18	4	27	6	19
More than 3 hours	5	15	3	20	6	19
N=	33		15		32	

7. Hybrid courses are designed to take students a total of 150 hours or 10 hours per week to complete. This time includes lectures/online discussions, engaging with the course materials and assignments. From your experience, do you think 150 hours or 10 hours per week is a realistic estimate for the amount of time it takes to complete a hybrid course?

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
Yes, about 150 hours	9	27	9	60	17	53
No, less than 150 hours	11	33	1	7	4	13
No, a little more than 150	9	27	2	13	7	22
No, a lot more than 150 hours	4	12	3	20	4	13
N=	33		15		32	

8. Assuming that a student did spend 10 hours per week completing a hybrid course, how much time do you think **should** be allocated to engaging with the course materials?

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
Less than 1 hour	1	3	0	0	0	0
1-3 hours	16	48	6	40	7	22
3-5 hours	14	42	7	47	18	56
More than 5 hours	2	6	2	13	7	22
N=	33		15		32	

Perceived value of the course materials

9. I had a clear understanding of how to use the course materials

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
N/A	0	0	0	0	0	0
Strongly disagree	0	0	2	13	0	0
Disagree	4	12	3	20	5	16
Agree	19	58	10	67	20	63
Strongly agree	10	30	0	0	7	22
N=	33		15		32	

10. The course materials were easy to use.

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
N/A	0	0	0	0	0	0
Strongly disagree	0	0	2	13	0	0
Disagree	7	21	6	40	7	22
Agree	17	52	7	47	21	66
Strongly agree	9	27	0	0	4	13
N=	33		15		32	

11. The course materials stimulated my thinking.

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
N/A	1	3	0	0	0	0
Strongly disagree	0	0	1	7	2	6
Disagree	4	12	1	7	3	9
Agree	23	70	10	67	14	44
Strongly agree	5	15	3	20	13	41
N=	33		15		32	

12. The course materials prepared me for my assignments.

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
N/A	0	0	0	0	0	0
Strongly disagree	0	0	0	0	2	6
Disagree	6	18	3	20	5	16
Agree	23	70	12	80	18	56
Strongly agree	4	12	0	0	7	22
N=	33		15		32	

13. I would make use of the course materials in future studies.

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
N/A	1	3	0	0	0	0
Strongly disagree	1	3	1	7	2	6
Disagree	3	9	4	27	5	16
Agree	19	58	10	67	18	56
Strongly agree	9	27	0	0	7	22
N=	33		15		32	

14. How much of the following course materials did you engage with throughout the semester? Learning guide

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
None	2	6	1	7	1	3
A little (about ¼)	4	12	5	33	9	28
Some (about ½)	8	24	1	7	3	9
Most (about ¾)	11	33	4	27	8	25
All	8	24	4	27	11	34
N=	33		15		32	

15. How much of the following course materials did you engage with throughout the semester? Required readings

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
None	0	0	0	0	0	0
A little (about ¼)	3	9	1	7	2	6
Some (about ½)	12	36	5	33	2	6
Most (about ¾)	11	33	6	40	13	41
All	7	21	3	20	15	47
N=	33		15		32	

16. How much of the following course materials did you engage with throughout the semester? Optional readings

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
None	2	6	3	20	5	16
A little (about ¼)	15	45	5	33	7	22
Some (about ½)	9	27	4	27	10	31
Most (about ¾)	4	12	2	13	7	22
All	3	9	1	7	3	9
N=	33		15		32	

17. How much of the following course materials did you engage with throughout the semester? Presentations on CD

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
None	5	15	8	53	1	3
A little (about ¼)	11	33	5	33	4	13
Some (about ½)	10	30	0	0	3	9
Most (about ¾)	4	12	1	7	4	13
All	3	9	1	7	20	63
N=	33		15		32	

18. How valuable were the following course materials in helping you achieve the learning outcomes for the course? Learning guide

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
Not valuable	1	3	0	0	1	3
Limited value	5	15	1	7	2	6
Somewhat valuable	6	18	4	27	7	22
Valuable	10	30	7	47	16	50
Very valuable	11	33	3	20	6	19
N=	33		15		32	

19. How valuable were the following course materials in helping you achieve the learning outcomes for the course? Required readings

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
Not valuable	0	0	0	0	1	3
Limited value	1	3	1	7	2	6
Somewhat valuable	8	24	4	27	3	9
Valuable	15	45	8	53	10	31
Very valuable	9	27	2	13	16	50
N=	33		15		32	

20. How valuable were the following course materials in helping you achieve the learning outcomes for the course? Optional readings

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
Not valuable	0	0	1	7	3	9
Limited value	7	21	3	20	6	19
Somewhat valuable	12	36	7	47	6	19
Valuable	11	33	4	27	14	44
Very valuable	3	9	0	0	3	9
N=	33		15		32	

21. How valuable were the following course materials in helping you achieve the learning outcomes for the course? Presentations on CD

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
Not valuable	3	9	7	47	3	9
Limited value	9	27	5	33	3	9
Somewhat valuable	9	27	1	7	5	16
Valuable	6	18	2	13	9	28
Very valuable	6	18	0	0	12	38
N=	33		15		32	

Approach to the course materials

22. I tried to relate ideas presented in the course materials to other subject areas.

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
N/A	1	3	2	13	2	6
Disagree	3	9	1	7	3	9
Agree	21	64	9	60	17	53
Strongly agree	8	24	3	20	10	31
N=	33		15		32	

23. Often I feel I'm drowning in the sheer amount of material presented in the course materials.

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
N/A	0	0	2	13	0	0
Disagree	16	48	2	13	14	44
Agree	9	27	7	47	12	38
Strongly agree	8	24	4	27	6	19
N=	33		15		32	

24. When I read the course materials, I examine the details carefully to see how they fit in with what's being said.

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
N/A	1	3	1	7	0	0
Disagree	5	15	0	0	7	22
Agree	25	76	13	87	21	66
Strongly agree	2	6	1	7	4	13
N=	33		15		32	

25. I find I have to concentrate on memorising a good deal of the information covered in the course materials.

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
N/A	0	0	2	13	0	0
Disagree	14	42	4	27	23	72
Agree	16	48	9	60	7	22
Strongly agree	3	9	0	0	2	6
N=	33		15		32	

26. Much of the information presented in the course materials makes little sense: it's like unrelated bits and pieces.

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
N/A	1	3	1	7	0	0
Disagree	27	82	8	53	29	91
Agree	5	15	5	33	2	6
Strongly Agree	0	0	1	7	1	3
N=	33		15		32	

27. When I read the course materials I stop from time to time to reflect on what I am learning.

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
N/A	2	6	1	7	0	0
Disagree	7	21	5	33	2	6
Agree	22	67	9	60	25	78
Strongly agree	2	6	0	0	5	16
N=	33		15		32	

28. I'm not really sure what is important in the course materials, so I try to remember everything.

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
N/A	2	6	2	13	0	0
Disagree	22	67	6	40	27	84
Agree	8	24	6	40	4	13
Strongly agree	1	3	1	7	1	3
N=	33		15		32	

29. I often find myself questioning things that I read in the course materials.

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
N/A	2	6	1	7	0	0
Disagree	14	42	8	53	8	25
Agree	13	39	5	33	22	69
Strongly agree	4	12	1	7	2	6
N=	33		15		32	

30. I only read the course material that is required for assignments or exams.

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
N/A	0	0	1	7	0	0
Disagree	19	58	9	60	24	75
Agree	13	39	2	13	7	22
Strongly agree	1	3	3	20	1	3
N=	33		15		32	

31. It is important for me to be able to follow the argument, or see the reason behind things.

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
N/A	0	0	1	7	0	0
Disagree	1	3	0	0	0	0
Agree	19	58	3	20	17	53
Strongly agree	13	39	11	73	15	47
N=	33		15		32	

32. When I'm reading the course materials, I try to find out for myself exactly what the author means.

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
N/A	1	3	1	7	0	0
Disagree	8	24	0	0	5	16
Agree	20	61	9	60	23	72
Strongly agree	4	12	5	33	4	13
N=	33		15		32	

33. I accept the concepts and ideas presented in the course materials without questioning them.

	GIS		HAM		DIS	
Response	f	%	f	%	f	%
N/A	2	6	1	7	0	0
Disagree	25	76	10	67	31	97
Agree	5	15	3	20	1	3
Strongly agree	1	3	1	7	0	0
N=	33		15		32	

Surface approach scale (questions 23, 25, 26, 28, 30 and 33)

	GIS		HAM		DIS	
	f	%	f	%	f	%
0	0	0	0	0	0	0
1	4	12	0	0	3	9
2	8	24	0	0	11	34
3	0	0	0	0	0	0
4	15	45	8	53	13	41
5	3	9	3	20	2	6
6	0	0	1	7	2	6
7	1	3	2	13	1	3
8	2	6	0	0	0	0
9	0	0	0	0	0	0
10	0	0	0	0	0	0
11	0	0	0	0	0	0
12	0	0	0	0	0	0

Deep approach scale (questions 22, 24, 27, 29, 31 and 32)

	GIS		HAM		DIS	
	f	%	f	%	f	%
0	1	3	0	0	0	0
1	0	0	0	0	0	0
2	1	3	1	7	3	9
3	0	0	0	0	0	0
4	15	45	5	33	7	22
5	4	12	3	20	7	22
6	6	18	1	7	10	31
7	2	6	3	20	2	6
8	1	3	1	7	2	6
9	1	3	0	0	1	3
10	1	3	0	0	0	0
11	0	0	0	0	0	0
12	0	0	0	0	0	0

Integration of course materials with campus lectures

34. How often did the lecturer use the course materials in their teaching?

	GIS		HAM	
Response	f	%	f	%
Never	0	0	0	0
Rarely	5	15	1	7
Occasionally	6	18	1	7
Often	10	30	4	27
Always	12	36	9	60
N=	33		15	

35. How often did the lecturer specifically assign parts of the course materials to be engaged with outside of class?

	GIS		HAM	
Response	f	%	f	%
Never	1	3	0	0
Rarely	9	27	2	13
Occasionally	8	24	1	7
Often	10	30	7	47
Always	5	15	5	33
N=	33		15	

36. How much of the course materials did the lecturer require you to engage with?

	GIS		HAM	
Response	f	%	f	%
None	2	6	0	0
A little	4	12	1	7
Some	5	15	4	27
Most	20	61	7	47
All	2	6	3	20
N=	33		15	

37. When did you engage with the course materials?
(Select all the options that are relevant)

	GIS		HAM	
Response	f	%	f	%
N/A	1	3	0	0
Before class	25	76	13	87
During class	19	58	11	73
After class	23	70	7	47

Appendix J: Focus Group Discussion Guide

The following list contains starter questions ranked in order of priority. These questions were developed after examining the data from the questionnaire. This list served as a general guide. The discussion was allowed to develop its own direction following key themes raised by the students.

General questions

- Which parts of the course materials did you find most and least valuable? Why?
- If you could change one aspect of the course materials to suit you, what would you change and how would that help you?
- How does a hybrid course compare with non-hybrid ABC College courses? Which would you prefer? Why?
- If a new student asked your advice on how to get the most out of the course materials what would you say?
- Several people in the questionnaire commented that they felt they were drowning in the sheer amount of information being presented in the course materials. If that was your experience what would have helped to alleviate that pressure? If the amount of material didn't overwhelm you, what did you do to ensure that you kept on top of all the material that was being presented?
- How do you decide what was important in the course materials?
- What questions were running though your mind as you read the course materials?
- Do you try and memorise a good deal of the information covered in the course materials? Why or why not?
- Did you sense that the course was one cohesive whole or fragmented? What made it that way for you? Can you summarise what the whole course was about in one statement or question? If so, what is that statement or question?
- Do you agree with everything you read in the course materials? If not, what caused you to disagree? If yes, do you think the lead academic expected you to agree with everything? Why do you think that the lead academic choose to put that set of materials together?
- What is the purpose of the course materials?

Campus specific questions

- If you didn't have the course materials how would your studies have been affected?
- If you were the lecturer how would you have got students to use the course materials?
- Did the course materials feel like a tack on or an integral part of the course? Why?
- How could the course materials have been used better?