

School of Education

Application of student-centred learning principles to mixed-mode delivery:

**An investigation of theory, practice and impact on the quality of learning
and teaching**

Chona Pineda Kennedy

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Declaration

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgement has been made. This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

Signature:_____

Date:.....

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Abstract

The changes in higher education have led to the development of learning and teaching systems that are more responsive to student needs and demands. Not only do tertiary institutions have to cater to the needs of young post-secondary students, they must also respond to the large number of mature, returning students with significant life experience and differing backgrounds. There is a need therefore to rethink and revise current pedagogical approaches, both in theory and practice, to enable learning and teaching systems that are more appropriate to the needs of the returning adult learners. A student-centred approach to learning and teaching is a key element of adult education, where learners' needs are at the centre of the delivery and students have control of their learning.

This study examines how closely aligned the teaching and learning practices, in selected mixed-mode programmes are with a student-centred approach as well as the impact of the practices on the quality of learning and teaching in a New Zealand Māori institution. The study also explored how the quality of the learning and teaching experience can be improved for the student.

Using a sequential, mixed-methods research approach, a survey was conducted in class followed by one-to-one interviews with the tutors and students in the sample to gather their perceptions and views regarding learning and teaching practices. A student-centred learning framework consisting of ten dimensions was developed by the researcher for this study based on the review of literature regarding the principles of a student-centred learning approach. The 'Integrative Framework for Student-Centred Learning' (IFSCL) was used as an epistemological lens to conduct the quantitative and qualitative aspects of the investigation.

The qualitative and quantitative findings showed similar dimensions to the IFSCL which were strongly and weakly aligned with student-centred learning as perceived by both groups of participants. There was also a general concurrence specifically in the suggestions to improve the quality of the teaching and learning experience. The findings suggest that successful implementation of a student-centred learning approach is dependent on context, the role played by the different stakeholders and the holistic interconnection of all systems and processes in supporting quality student-centred educational experiences.

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CHAPTER 1

Introduction

Origin of the study

This study came about as a result of the author's experience teaching in the Philippines and New Zealand, and her continuing involvement with tertiary education in New Zealand. This experience provided her with an appreciation of the contrasting difference in the way tertiary education is delivered in both contexts. When the author first migrated to New Zealand, she taught in a small Māori Private Training Establishment with adult students who had been unemployed for some time and wanted to further their education to advance their employment opportunities. As part of the induction, the Programme Manager sat in the class to observe how she delivered the course. Afterwards, the Programme Manager gave her feedback on how she thought the author had performed. The Programme Manager informed her that she was actually teaching and not facilitating. This statement puzzled the author deeply. She asked herself, "what's the difference?" She is a teacher, therefore she should teach. The Programme Manager explained further that she should do less talking and give more individual work as well as group work to allow the students to learn on their own and at the same time collaborate with the others. The author considered this recommendation to be a challenge to her teaching practice, which is contrary to how she had always taught.

The author has since moved to *Te Wānanga o Aotearoa* (TWOA), a Māori tertiary educational institution providing education to a much larger number of students all over New Zealand. Although she is not teaching, the author is very much involved in reviewing

newly developed programmes submitted for approval to the *Te Puna Waihanga* (Programme Development Committee) and *Te Rautiaki Mātauranga* (Academic Board). This has given her an organisational knowledge about the different learning and teaching methods and activities used in the programmes. Most programmes delivered at TWoA are through mixed-mode, a combination of face-to-face interaction with the tutor, and a significant amount of time spent through self-directed learning where adult students are expected to complete their studies in their own time and place with the support of a wide range of resources. The author has always wondered: Do the students gain significant learning if the tutor is not there to help them with their studies most of the time? How does this impact on the quality of the students' learning experience? From an academic perspective, these questions appeared to be important to address.

As a teacher in the Philippines, the author was very much teacher-centred largely utilising a face-to-face 'chalk and talk' approach in delivering the content to be taught for the day. Students were later assessed on how much they remembered regarding the topic through tests and exams. Assessments were an exercise in rote learning and memorisation. When the author was still teaching, she taught using the only methodology she was exposed to, and to some extent, believed to be the most dominant teaching approach elsewhere. Anything contrary to this was, in her opinion of inferior quality.

How and in what sense can, the 'focusing on the needs of the students' be regarded as more effective than the universally accepted traditional approach? How can tutors focus on the varying needs of the learners in a diverse classroom? Such questions have actually shaped the learning and teaching principles utilised at *Te Wānanga o Aotearoa*. Student-centred learning approach is considered appropriate for the organisation's 'second chance' adult

students rather than the traditional teacher-centred approach. Thus, the conflict between the author's personal views regarding teaching and student-centred learning philosophy espoused in her work environment provided the backdrop to this study. Specifically, she was interested in exploring the degree of student-centeredness occurring within TWoA programmes and their approach in enhancing the quality of the pedagogical experience for the adult students.

A two-pronged approach was required to undertake the research questions: Firstly, to investigate the perceptions of adult students and tutors as to whether the principles of student-centred learning were experienced in the programmes delivered through mixed-mode at *Te Wānanga o Aotearoa*. Secondly, to explore the perceptions and experiences of students and tutors regarding the quality of learning and teaching practices utilised in mixed-mode delivery. This study was therefore undertaken in order to discover the answers to these questions.

Background

This chapter discusses the imperatives for educational change in tertiary education and the resulting paradigm shift from teaching to learning. It also explores the concept of a student-centred learning approach as an example of the paradigm shift in transforming tertiary education and in improving the quality of learning and teaching. Mixed-mode delivery for adult learners, within the context of TWoA, is also examined as part of the shift towards student-centred learning. Other areas dealt with are the significance, purpose, research questions and overview of methodology, scope and limitations of the study, ethical considerations, definition of terms and the structure of the thesis.

Imperatives for educational change in tertiary education

Tertiary education is faced with new challenges and pressures to transform and restructure in the 21st Century, brought about by external and institutional factors. These challenges are driven by a plethora of complex interactions and ever-changing demands between the different stakeholders – the students, institutions, the government, the practitioners, the employment market and the global economy. These pressures include diverse student populations and learning needs, the evolving technological advances, the drive for quality performance and financial accountability, meeting government policy and tertiary reform initiatives such as changes to the funding system, focus on completion and retention, meeting relevant strategic requirements, demand for new knowledge and skills, pursuit of quality, evolution of the knowledge-based economy and globalisation of education among others (Biggs, 2003; T. Brown, 2005; Fenning, 2004; Kallison Jr & Cohen, 2010; Samarawickrema, 2005; Te Wānanga o Aotearoa, 2007). All of these challenges have implications for the way in which tertiary institutions deliver education.

A range of local as well as global economic, political and educational conditions have together impacted on the need to continue transforming education. The diversity of government policy developments which are aimed to align with national economic and social goals have implications for the nature and format of tertiary education and its practice (English, 2006; Knightley & Whitelock, 2006). Institutions are confronted with the challenges of reduced funding but higher accountability and are required to produce high quality educational outcomes (Boggs, 1999; English, 2006; Fenning, 2004; Kallison Jr & Cohen, 2010) as well as balancing quality teaching with producing research output (Arnold, 2010; Biggs, 2001; Houston, Robertson, & Prebble, 2008). There is an apparent

disconnection between teaching approaches and meeting diverse learning needs with what the market place requires and the demand for skills that graduates must possess (Weimer, 2003). There is an expectation for students to be qualified, and for them to possess a depth of knowledge and have critical transferable skills which can be applied in the dynamic employment market (Earle, 2010; Kallison Jr & Cohen, 2010; Michael, 2006; Nicolescu & P[acaron]un, 2009), rather than becoming like a depot of information in a futile attempt to keep up with the changes of the times (Teh & Brandes, 2002). These ‘hard’ (technical) and ‘soft’ skills may include ability to work independently and in a team, critical thinking, construction of new knowledge, multidisciplinary problem solving, effective communication, life-long learning, self-assessment, change management skills, initiative, motivation along with familiarity in technological developments (Burns, 2002; Kallison Jr & Cohen, 2010; Nicolescu & P[acaron]un, 2009; Storen & Aamodt, 2010; Teh & Brandes, 2002). These are just a few of the imperatives that continue to put pressure on the transformation of education.

Globalisation also has an impact on education. Globalisation has liberalised the trading of goods and services, capital, people, ideas, including education (A. Little & Green, 2009; Stella & Gnanam, 2004) across the geographical boundaries, which is pivotal in improving the global economy. Its focus is on productivity, quality, efficiency, sustainability and competitiveness derived from innovation, skills and quality improvement (Burns, 2002). However, globalisation has made higher education a commodity in the global market, driven by economic objectives and profit making rather than genuine cross-cultural exchange and global citizenry (Feast & Bretag, 2005; Wimshurst, Wortley, Bates, & Allard, 2006). As a result, institutions begin to internationalise their curriculum and programmes to attract students, who pay much higher tuition fees, as another source of funding (Wimshurst, et al., 2006). With the commoditisation of education, students are now considered ‘customers’

rather than learners who pay for the delivery of goods and services and tutors are conceptualised as service providers (Cooper, 2007; Douglas & McClelland, 2007; B. Little & Williams, 2010; Wimshurst, et al., 2006). The tertiary institutions are now seen as corporate entities that are there to make money in selling their products (White, 2006). This is contrary to the ultimate aim of education which is providing learning and teaching. Thus, globalisation, both the good and the bad that goes with it, have also underlined the need to transform education.

In addition to the preceding economic and political factors, institutional challenges as well as evidence from educational research regarding the psychology of learning and the promotion of quality learning has also stimulated the need to review and transform education. There is a vast amount of literature that helps increase our understanding of the developments in the theory and practice of learning and teaching. The community of stakeholders is always concerned with improving the quality of the pedagogical experience of the students. Institutions are forced to make significant changes in the delivery of education to integrate the continuous advancements and multiple capabilities of educational technology in supporting the goals for quality education. The use of technology, and its rapid development, has provided flexible access to education: available anywhere, anytime, whenever and wherever the student wants it without leaving the comfort of their homes. Technology has extended the learning environment beyond the four walls of the classroom which has given rise to the opportunity and potential of restructuring the educational system (Burns, 2002; Desai, Hart., & Richards, 2008). This requires both students and tutors to develop skills to enable them to utilise the technology as tools to support them in their learning and teaching.

Likewise, the escalation of focus on the knowledge economy as the road to economic prosperity increased the demand for a much relevant and improved tertiary education (Jones & Richardson, 2002). Institutions also need to meet the challenges of serving the needs of diverse student populations with more mature students returning to study. Other institutional issues relating to the workload of academic staff including increasing research output while teaching, teaching to bigger classes and perceived lack of enthusiasm in embracing new approaches to learning and teaching have also impacted in transforming education (Arnold, 2010; Biggs, 2001; Houston, et al., 2008; Kallison Jr & Cohen, 2010). Together, these drivers for educational change continue to influence the efforts to improve the practice of learning and teaching.

On the contrary, although there have been massive efforts aimed at transforming education to meet the relentless call from various forces, not much has changed. In fact, in New Zealand, “by any assessment, tertiary reforms have so far failed” (English, 2006, p. 74) in its efforts to enable educational policies and quality control measures meet its obligation to taxpayers and students. Despite the continued calls for educational change there is still no evidence in the literature that attests to a radically or significantly transformed educational practice and its outcomes. Reforms and changes are still in progress. Pickering (2006) suggests that pedagogic beliefs and conceptions of teaching are strongly held and resistant to influences for change. Instruction is still about teacher performance and students are still passive recipients of education rather than active agents in control of their learning process (Weimer, 2003). This shows that the reform strategies and measures to improve higher education by focusing on the needs of the individual learners as well as for tutors to continue improving their practice are still evolving.

Paradigm shift from teaching to learning

The imperatives for educational changes in tertiary education impel a need for a paradigm shift from teaching to learning; from being teacher-centred to becoming student-centred. The shift in focus from a teacher-led to student-centred education highlights a need for a holistic change not only in the theory and practice of learning and teaching, but also in all the other organisational systems and processes that support a quality learning environment. In part, this is also driven by the disconnection and incongruence of the primary aims of education with the current way higher education institutions function (Schuyler, 1997; Wingspread Group on Higher Education, 1993). The dominant traditional instruction paradigm has been proven to be inadequate and ineffective in serving the various learning needs of a very diverse student population (Barr & Tagg, 1995; Pulist, 2001; Weimer, 2003). Barr and Tagg (1995) initiated the discussions and debate on the need for institutions to “undergo a paradigm shift from the traditional, dominant “instruction paradigm” to the “learning paradigm”; from being an institution that provided instruction to students to an institution that produced [quality] learning with every student by whatever means that work best” (p. 12). The authors argued further that we are beginning to recognise that the dominant paradigm mistakes a means for an end; making the means called “instruction” or “teaching” as the purpose of education (Barr & Tagg, 1995, p. 12). The focus is on the teaching abilities and strategies of the tutor rather than facilitating and enabling meaningful and quality learning experience in the students. There is now a need to focus on the approaches that best serve the diverse needs of the learners. The shift involves the adoption of a new outlook on the way in which education is delivered.

The shift from the teaching paradigm to learning paradigm has implications for tutors, learners and their learning processes. In the new paradigm, both students and tutors should re-conceptualise the learning and teaching process, the role of teacher and students and the social structure of learning (Huba & Freed, 2000; Yip, Cheung, & Sze, 2004). Huba and Freed (2000) articulated that to focus on learning rather than teaching, we must challenge our basic assumptions on how people learn, what the roles of a teacher should be, and what the role of the students is in the learning process. In the new paradigm, education activities are planned and executed from a learning perspective with emphasis on the learning activity and learning process of the learner (T. Brown, 2006; Kauchak, Eggen, & Burbank, 2005). The paradigm demonstrates the need to make teaching more responsive to the needs of the learners and for them to participate more actively in managing their learning process. The paradigm shift also implies a change in the role of the tutors from being the ‘sage on the stage’ – the expert who has primary control over the content and process of learning, to being the ‘guide on the side’ – a facilitator who shares responsibility for the content, process and evaluation of learning with adult learners (Kiely, 2004). Sharing power and control with the students will assist them to take ownership and be more involved in their learning (McCombs & Miller, 2007). The focus is on the efficiency, effectiveness and quality of learning experience and outcomes gained by the students rather than the amount of content that the tutor must deliver.

The effect of the paradigm shift also has implications for the learning environment and the use of the emerging technological advances. The learning environments and activities in the new paradigm are learner-centred and learner-controlled (Barr & Tagg, 1995; Kauchak, et al., 2005; McCombs & Miller, 2007) where students are allowed to have choices in terms of the knowledge and skills, objectives, teaching materials and the nature of the assessment

(Gibbs, 1992b; Guest, 2005; Harvey & Green, 1993; Kiley, Cannon, Rogers, & Ingleton, 2000; McMahon & O'Neill, 2005). It is an environment in which the attention is on what the students are doing, and it is the students' behaviour that is the significant determinant of what is learnt (Michael, 2006). An adequately resourced learning environment supports the development of critical skills and knowledge of the learners by actively engaging them in a meaningful learning experience. Rovai and Jordan (2004) argued for the "need for a recommitment to creating an ideal learning environment for students and employing new pedagogies and technologies, where appropriate" (p. 2). Thus, the use of information and communication technologies (ICT) in conjunction with a student-centred learning environment together has the potential to bring about greater opportunities and possibilities for a much-improved educational outcome.

However, providing a suitable and adequately resourced and successful learning environment that will support students in gaining a quality learning experience is complex. The tutor has the responsibility in creating not only the physical learning environment, but also an environment where student-centred pedagogical approaches are utilised in the learning and teaching activities. This is a big leap for some tutors and will depend much on their skills for this to successfully happen for which they may not have been professionally prepared for (Frank, 2005). Although ICT is heralded as a catalyst for changes in pursuing educational goals, technological advances are often seen as add-ons rather than fully integrated in the system which has led to an unchanged curriculum (Desai, et al., 2008). Other concerns relate to focusing more on the technology itself rather than on the quality of the learning experience and educational outcomes (Achacoso, 2003; Soccio, 2005). Technology must not be seen as a panacea of flexible learning (Soccio, 2005). Thus, high expectations for the use of ICT in re-structuring higher education may be difficult to realise.

There are questions and challenges as to whether the paradigm shift will be successful. Jacob and Farrell (2001) argued that the evident lack of change from the paradigm shift is a result of the difficulty of translating the theory into practical applications in the day-to-day teaching routines. Barr and Tagg (1995) posited that the “Instruction Paradigm” is [the] theory-in-use, yet the espoused theories of most educators more closely resemble components of the “Learning Paradigm” (p. 14). Huba and Freed (2000) added to this by saying that the paradigm shift will work best when the entire institutional culture supports it, including all the structures and processes that facilitate it. There is a need for all components of the organisation to work together and commit to change. Changing the paradigm is hard but at the same time presents an opportunity for great success if the transformational changes are implemented in a holistic way rather than in a piecemeal fashion (Barr & Tagg, 1995; Huba & Freed, 2000; Jacobs & Farrell, 2001). Huba and Freed (2000) agreed that if we were able to interpret our lives in terms of partnership and teamwork with others, shifting paradigms may be less threatening.

Student-centred learning as a paradigm shift

Student-centred learning (also used interchangeably with the term ‘learner-centred’ approach) has contributed to the ever-growing need to innovate our educational practice (T. Brown, 2005). For several years now, the notion of student-centred learning has been considered an influential guiding principle in education for improving the learning and teaching experience of the students. More and more institutions are now increasingly using student-centred learning approaches as opposed to the traditional, didactic method of teaching, which has been considered inadequate and not working in meeting the needs of the growing diverse student population (K. Brown, 2003; Hsu & Shiue, 2005; Weimer, 2003). In

a student-centred approach, students are more likely to engage and participate actively than in a teacher-centred approach to learning and teaching. Treating students as passive learners and empty receptacles ready to be filled with information provided by the all-knowing tutor are no longer appropriate. Adopting innovative learning and teaching approaches that focus on making the students actively engage in their learning, thus improving their learning experience, is increasingly preferred.

Definitions of a student-centred learning approach

Various researchers have defined student-centred learning in different ways. Different researchers use the term to reference a set of teaching methods, or a paradigm shift, or a distinct perspective towards what knowledge is and how it is constructed, developed and learnt (Barr & Tagg, 1995; O'Dwyer, 2006; O'Sullivan, 2004). The diversity of definitions has given rise to scepticism as to whether student-centred learning will be successful in the classroom, if one is not sure exactly what it is supposed to be or what it looks like.

Some definitions of a student-centred learning approach include:

- Empowering students by giving them greater autonomy and control of their own learning process (C. Rogers, 1969);
- A system of providing learning which has the student at its heart (Brandes & Ginnis, 1986);
- A process by which students are given greater autonomy and control over choice of subject matter, the pace of learning and the learning methods used (Gibbs, 1992a);
- A focus first on what the student needs to do in order to learn, rather than on the content of the course (K. Brown, 2003; McCombs & Whisler, 1997);
- A perspective that couples a focus on individual learners (their heredity, experiences, perspectives, backgrounds, talents, interests, capacities and needs) with a focus on learning (the best available knowledge about learning and how it occurs) and teaching practices that are most effective

in promoting the highest levels of motivation, learning and achievement for all learners. (McCombs & Whisler, 1997, p. 9)

The definitions and practice of student-centred learning is perceived in a variety of ways but can be understood as the combination of the focus on: a) individual learners; and b) learning and teaching practices that support learning (McCombs & Miller, 2007; McCombs & Whisler, 1997). Firstly, focusing on the individual learners and their learning processes recognises that they bring with them a unique combination of factors to any learning situation: heredity, temperament, experiential history; beliefs, values, perspectives, talents, interests and needs to name just a few (McCombs & Miller, 2007). Opportunities to use their prior knowledge and previous experience are provided to them through activities based on real-life situations to make their learning more meaningful and relevant. A student-centred learning approach recognises the fact that students have different learning styles and allows students to have the opportunity to learn in their own way. The most important considerations are the satisfaction of the students' learning needs and requirements supported by the other institutional systems and processes directed towards helping students successfully achieve their educational objectives (Ellington, Percival, & Race, 1993; McCombs & Whisler, 1997). Indeed, recognising the students' uniqueness and diversity places the learner at the centre of the learning process.

Secondly, student-centred learning is about focusing on the learning process supported by teaching approaches that promote high quality educational outcomes. The goal is to help students develop their strengths and maximise their development so that every student attains the highest level of achievement (Yip, et al., 2004) and to change the focus from pedagogical skills to the learning process (Kauchak, et al., 2005; Weimer, 2002). This means that it is no longer about how well and how much the tutor delivered the course.

Student-centred learning places students at the centre of the learning and teaching process by giving them greater autonomy, responsibility and control of their own learning (Brandes & Ginnis, 1986; Cannon & Newble, 2000b; Gibbs, 1992b; McCombs & Whisler, 1997; C. Rogers, 1969). It “describes ways of thinking about learning and teaching that emphasise student responsibility” [for such activities as planning learning, interacting with tutors and other students, teaching and assessing learning] “rather than what the teachers are doing” (Cannon & Newble, 2000b, pp. 16-17). Students are provided with relevant and meaningful activities where they are able to collaborate with others or work independently thus developing some critical skills (Challis, 2006; Cornelius-White & Harbaugh, 2010; Michael, 2006). Flexible student-centred teaching strategies that suit the unique learning needs of each individual student require active involvement and participation (Cannon & Newble, 2000b; Ellington, et al., 1993; Herrington & Herrington, 2006). Students are able to negotiate, influence the content and enter into a learning contract regarding the activities, materials, pace, place and time of their learning (Doyle, 2008; Gibbs, 1992b; Kiley, et al., 2000; McMahon & O'Neill, 2005; Michael, 2006). If properly implemented, student-centred learning can lead to increased motivation to learn, greater retention of knowledge, deeper understanding and more positive attitudes towards the subject being taught (Frank, 2005; Huba & Freed, 2000; Michael, 2006; Teh & Brandes, 2002). It can also develop a range of transferable skills valued by the employers.

However, implementing a student-centred learning approach appears to be easier said than done. Although the literature attests that student-centred learning works when implemented properly, the promised benefits are neither immediate nor automatic (Weimer, 2002). Frank (2005) raised the question of what are the “needs of the learners” and how can tutors move easily into a student-centred approach? Several academic staff have been

reluctant to embrace student-centred learning approach because they teach what most of them experienced as students in traditional teacher-centred classroom (Huba & Freed, 2000). They need to make changes to what they have been accustomed to and their views regarding knowledge construction before they can effectively practice and implement the principles of a student-centred learning approach. For some, this change may not be easy. However, Teh and Brandes (2002) argued that the shift of the role of the teacher to becoming a facilitator and not the expert does not imply the abrogation of responsibility for the students by the teacher nor a deficiency of wisdom, knowledge or experience. The authors argued that it suggests the need to recognise the contribution students bring into the learning environment, as they themselves are resources with much to offer to both their fellow students and the teacher. It is expected, therefore, that implementing student-centred learning will have its challenges that need to be overcome.

Mixed-mode delivery

Opportunities to access education have been made far easier because institutions are now able to deliver programmes complemented by and supplemented with a blending of different modes and several instructional methods. Learning is no longer confined within the four walls of the classroom and limited to a fixed place and time. Hsu and Shiue (2005) discussed that “as the economic, social and cultural diversity of a population increases, traditional modes of learning may have limited value to people [because of] their varying needs, interests and lifestyles” (p.143). Institutions try to cater for these varying needs by offering flexible learning options, convenience, flexibility of time and place at their own pace (Guest, 2005; McMahon & O'Neill, 2005; Soccio, 2005; Willems, 2005). It is believed that quality learning and teaching can also be achieved in mixed-mode deliveries other than the

‘time tested and proven’ face-to-face delivery method. Mixed-mode delivery enables the convergence of acquiring the best features of face-to-face instruction and flexible learning, which may or may not be complemented with the use of technology. Mixed-mode delivery, therefore, is considered to be supporting the facilitation of student-centred learning and the provision of high quality pedagogical experiences to students.

Mixed-mode delivery may include the combination of the traditional lecture or face-to-face instruction, self-directed learning, as well as the use of audio and visual resources including CD/DVDs, a wide range of print resources, on-and-off campus activities and the provision of study materials through the web to enhance the learning and teaching experience of the students. It is often used synonymously (though not completely) with other related concepts which have evolved through the years including flexible learning, blended learning, distance learning, open learning, independent learning, resource based learning, hybrid learning and distributed learning. These terms can mean different things to different people when applied in different contexts, but on the whole share a common theme in that they provide flexible alternatives to the traditional teacher-centred, classroom-based approach. Blended learning is the concept that is parallel with mixed-mode in that mixed-mode not only combines the use of technology and multimedia resources, but also combines different instructional modalities as well as instructional methods (Graham, 2006). The term ‘mixed-mode delivery’ will be used in this research for the purpose of consistency.

Guest (2005) identified two dimensions to flexible learning. One is often associated with student-centeredness, where students are empowered to make decisions regarding all aspects of their learning environment and over how, when, where and what to learn. This “connotes the freedom for learners from potential participatory barriers in education,

generated, for example, by family or work commitments, financial challenges, a disability, or the learners' geographic location" (Willems, 2005, p. 429). The individual needs of the students are taken into account by responding to their demand for convenience, flexibility of time and place at their own pace (Guest, 2005; O. Hall, 2006; McMahon & O'Neill, 2005; Soccio, 2005; Willems, 2005). These include increasing access to education and providing high quality learning experience by focusing on student learning needs, choices and control over learning, the use of several forms of learning tools in different media and the use of ICT without the complete loss of face-to-face contact (Guest, 2005; Knightley & Whitelock, 2006; Soccio, 2005). Thus, flexible learning is considered to be student-centred in its approaches as it focuses on the students giving them flexibility and choice about their learning.

The second dimension of flexible learning concerns institutional arrangements for delivery of student-centred learning which involves the application of advances in information technology (Achacoso, 2003; Guest, 2005; Kirkwood & Price, 2005; Rovai & Jordan, 2004). The use of technology which continues to grow exponentially has had a huge impact on the way we deliver education. Delivery of courses now involves the integration of teaching methods with the use of ICT. Mixed-mode delivery coupled with the use of technology provide flexibility, convenience and autonomy in terms of, 'where', 'when', 'how', 'why' and 'what' the students learn (T. Brown, 2005; Guest, 2005; Hill, 2006; Kirkwood & Price, 2005). Technology enables the potential of embracing a student-centred model of education alongside the use of didactic teaching practices while still remaining clearly focused on learning and the student (Duhaney, 2004; Halcomb & Rogers, 2002; Jones & Richardson, 2002; Knightley & Whitelock, 2006). Likewise, by using various telecommunication and information technologies, flexible learning programmes can serve

geographically diverse audiences and increase efficient access to programmes as well as information that would otherwise have been limited to on-campus students (Achacoso, 2003; Hsu & Shiue, 2005). This proves that technologies facilitate the learning process if appropriately used by those who have been trained to integrate ICT in learning and teaching. Indeed, this blending of the traditional face-to-face instruction with student-centred learning approaches coupled with the use of different technologies has given rise to a paradigm shift in tertiary education.

However, there are several concerns and known disadvantages when delivering programmes through mixed-mode. One of the commonalities when delivering a programme using a mixed-mode approach is that some components are in face-to-face settings while the majority of the learning is self-directed. Its benefits are described as to how learners develop autonomy and take responsibility for making their own learning experience meaningful. “Flexibility brings with it more independence, which in turn calls for learners to be more responsible, more self-directed and more self-motivated” (Collis & Moonen, 2001 cited in Samarawickrema, 2005, p. 52). On the other hand, there are concerns as to whether adult students with varying backgrounds are prepared for flexible learning where more self-motivation and self-direction are required to be successful. As Cafarella (1993) elucidated, allowing autonomy on the part of the learners creates challenges for the teachers in producing high quality outcomes for the students due to the apparent reduction of teacher control in the classroom. The students need to spend more time studying on their own rather than with their tutors and peers, which can be a challenge for some if they are not highly motivated. Willems (2005) also argued that contestation among the various stakeholders in education have led to major discrepancies and polarity between the espoused theory and the practice of student-centred learning in a mixed-mode environment. Willems (2005) concluded that flexible

provisions using a student-centred learning approach “does not necessarily equate with effective learning, as simply providing a range of options does not bring with it deep learning” (p. 434).

There is also another range of issues for both tutorial staff and students regarding flexible learning. Research shows that some students have mixed emotions regarding flexible learning ranging from enthusiasm, to fear regarding the thought of managing their own learning (Rovai & Jordan, 2004). Samarawickrema’s (2005) findings from her research on the determinants of student readiness for flexible, independent learning showed that the participants who are in their first year of study regardless of where they come from were found to be extremely reliant on the teacher, have poor capacity for independent learning and need to be guided appropriately. Cloonan’s (2004) research on the notions and practice of flexibility in a UK higher education institution found that the institutions’ approach to flexible learning was more of an *ad hoc* response to government policy changes and as a “pragmatic response to market conditions, rather than an overtly ideological commitment” (p. 189). There are also reservations as to whether mixed-mode delivery complemented with the use of ICT is driven by a pedagogically sound foundation to provide quality learning and teaching strategies, not simply by advances in technology (Achacoso, 2003; Jones & Richardson, 2002; Ministry of Education, 2004). The question also remains whether the purpose of using mixed-mode delivery aided by technology will improve educational outcomes (Willems, 2005) if the major purpose is to cut costs for the institutions by being able to deliver information to a greater mass of students with limited resources (Mason, 2006). Indeed, the debate surrounding the benefits and drawbacks of mixed-mode delivery need to be given due consideration in order to enhance the quality of the learning and teaching experience for the students.

In this research, mixed-mode does not only refer to the integration of technology (online learning, multimedia resources) in the delivery of programmes but also other alternative delivery methods and learning and teaching approaches, such as the delivery of programmes in a *marae* (a Māori meeting house) during *noho* (live-in) as well as utilising *Ako Whakatere* (accelerated learning) in the *Whakaako* (intensive 3 hours once a week) delivery. Relevant research has investigated the different aspects of teaching and managing Adult Learning; however, very little research is available on the impact of offering mixed-mode delivery with a high level of self-directed learning and greater autonomy to adult students. It is not yet clear as to how the learning experience of adults can be maximised in a mixed-mode delivery. There are also limited studies conducted for the purpose of seeking the perceptions of adult learners concerning the quality of the learning and teaching in the programmes delivered through various flexible modes where there is a high self-directed learning component. Thus, this research is important in that it will provide a much deeper and more profound understanding of tutors' and adult students' perceptions regarding their experiences of student-centred learning approaches as applied to mixed-mode programmes.

Learning and teaching within the context of *Te Wānanga o Aotearoa*

As stated in the 2007 *Te Wānanga o Aotearoa* (TWOA) *Te Kaupapa Kounga* (Te Wānanga o Aotearoa, 2007) the Wānanga is:

A Māori-led, public-funded tertiary organisation whose establishment in July 1993 as a movement emanates from Māori as they seek ways and means to promote *Te Reo* (Māori Language) and *Tikanga Māori* (Māori custom), to

provide opportunities for people to access tertiary education and to improve educational achievement, retention and participation rates for Māori and for those marginalised by the education system. (p. 3)

Likewise, the New Zealand Ministry of Education (2005) , describes *Wānanga* in general as:

Wānanga (Māori centres of tertiary learning) were formally recognised as public tertiary education institutions in the last decade. They offer study at all levels, from foundation education to postgraduate study and research where *Ähuatanga Māori* (Māori tradition) and *Tikanga Māori* (Māori custom) are an integral part of the programme. *Wānanga* provide Māori-centred tertiary education that supports *te Ao Māori* (Māori worldview), pathways for Māori learners into other tertiary education institutions and promotes the development of *Kaupapa Māori* (Māori concepts) provision. (p. 19)

Te Wānanga o Aotearoa's intention was “to establish tertiary institutions of education that could positively contribute to Māori success and where Māori worldview was front and centre” (Edwards & Hewitson, 2008, p. 99). TWoA is committed “to providing equal opportunities for all *tauira* (students), particularly those who have previously been prevented from participating in tertiary education as a result of various barriers” (Te Wānanga o Aotearoa, 2008, p.10). It seeks to increase Māori and non-Māori participation and achievement in tertiary education to improve cultural, social and economic well-being of those who:

- Have not previously benefited from mainstream education;

- Want a better chance when accessing formal education;
- Are long-term unemployed; and
- Represent the lower socio-economic groups in New Zealand and the world (Te Wānanga o Aotearoa, 2007, p. 1).

Since its inception, the types of programmes offered and its marketing activities have been targeted at this student population. *Te Wānanga o Aotearoa* students are “typically mature people with children... have a low income background and lack confidence as well as the formally acquired skills to seriously aspire to higher earning positions in the modern New Zealand labour market” (Lattimore et al., 2003, p. 91). The demographic profile shows that TWoA is catering to those who have been failed by mainstream education, and as such, they are best described as adult “second chance” learners. Of the 143,000 students who have enrolled at TWoA since 2001, 53% enrolled with no secondary school qualifications and only 27% had qualifications higher than NCEA Level 1 or equivalent; 38% rated themselves as ‘non-workforce’ prior to enrolling” (Te Wānanga o Aotearoa, 2006). “The average student enrolling at TWoA is 35 years of age, ended their secondary school education nearly 20 years prior and has not previously enrolled at a polytech or university” (Te Wānanga o Aotearoa, 2006, p. 8).

The following table and diagram show age demographics statistics for the 2004 to 2008 period (Te Wānanga o Aotearoa, 2008, p. 8).

Table 1.1
Student's Age Demographics Statistics for the 2004 to 2008 Period

	2004	2005	2006	2007	2008
Under 18 years	1%	1%	1%	1%	1%
18 to 24 years	11%	11%	10%	9%	9%
25 to 39 years	43%	41%	39%	36%	33%
40 years plus	45%	48%	51%	54%	57%

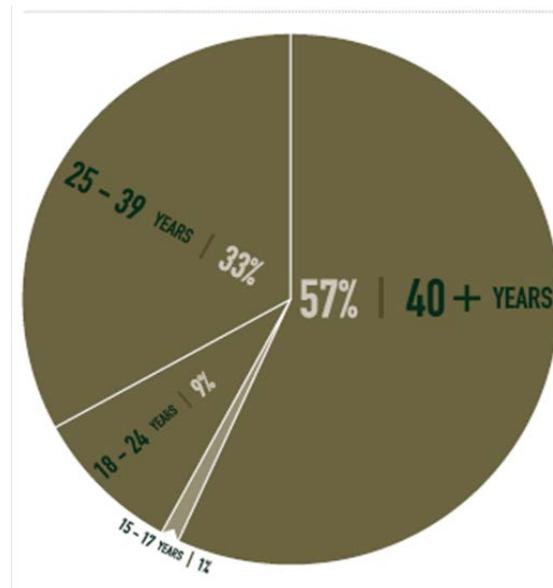


Figure 1.1. Students' age profile statistics for 2008.

Enrolment at TWoA has grown dramatically in recent years and reached its peak in 2003 when enrolment numbers approximated 63,000 students. The organisation is multi-sited and offers a range of programmes throughout New Zealand using various delivery modes. Geographically, *Te Wānanga o Aotearoa* sites are grouped into 6 regions across the country. Under each region, there are campuses, outposts and satellites, in “85 cities and towns throughout New Zealand” (*Te Wānanga o Aotearoa*, 2006, p. 15) . There are more than 60 qualifications ranging from Certificates (Level 1-4), Degrees (Level 7) to Masters (Level 8-9)

offered at 154 delivery sites. The types of programmes include Business, Computing, Education, Foundation Studies, Humanities, *Mātauranga Māori* (Māori Knowledge), *Te Ara Reo* (Māori Language) and Vocational Studies.

As an indigenous, Māori organisation, TWoA offers a holistic learning environment and teaching methods where its philosophy, culture and values of *Māoritanga* (Māori culture and practices) and *Mātauranga Māori* (Māori knowledge) are strongly espoused (Te Wānanga o Aotearoa, 2008). One of the visions of its founders is “to provide an alternative to mainstream education that would benefit students by implementing teaching approaches that are holistic and supportive, and that add practical learning techniques to the classroom environment” (Te Wānanga o Aotearoa, 2005, p.2). In addition, being an indigenous Māori institution, “many of the programmes of study on offer at *Te Wānanga o Aotearoa* use Māori epistemologies as a base for the transmission of both traditional knowledge and social mobility” (Edwards & Hewitson, 2008, p. 99) . The elements of effective teaching are “practical and contextually-based learning approaches that recognise each student’s current capability and connect with the student’s existing cultural and environmental knowledge” (Te Wānanga o Aotearoa, 2005, p.34). This is “the ‘wānanga way’ which is different from that of universities and polytechnics” (Te Wānanga o Aotearoa, 2006, p. 1).

In addition to the face-to-face, classroom based delivery, TWoA provides programmes that include flexible delivery timeframes, well supported, home-based and mixed-mode delivery at no cost to the learner as a way of removing barriers to education (e.g., cost and location) (Te Wānanga o Aotearoa, 2007; *TWoA Te Kaupapa Kounga (Quality Management Systems)*, 2007). Mixed-mode delivery is seen not just as another mode of delivery but also offers another approach to learning and teaching where the student is placed

at the centre of the learning process. TWoA believes that educating mature, ‘second chance’ learners should be approached differently from mainstream education. The traditional, didactic method, including a teacher-centred approach to teaching as practiced in most mainstream institutions is not seen as the most appropriate pedagogic practice at TWoA. Mixed-mode delivery does not solely rely on the use of learning technology or other forms of educational media. It is more about alternative pedagogy, and is designed to improve the quality of learning and teaching.

With exponential student growth, combined with the use of innovative teaching methodologies and modes of delivery, there was public controversy that TWoA had exceeded its core functions as a *Wānanga* providing education in a Māori context and concerns were raised regarding the quality of its education delivery (Berry, 2005). There is an absence of empirical research at TWoA to negate the concern related to the quality of education from the perspectives of both the tutors and their unique students. It is for these reasons that the current research is being conducted in order to determine whether the current learning and teaching practices at TWoA promote and enhance the quality of the students’ pedagogical experience. The study also aims to explore the perceptions of both students and tutors regarding the degree of student-centeredness of the learning and teaching practices in mixed-mode programmes at TWoA.

Significance of the research

The research will be highly significant from an international perspective as current trends in higher education demonstrate that a student-centred approach is fast becoming an alternative pedagogy used by a number of institutions. In sectors of higher education using a

combination of student-centred approach within mixed-mode delivery, recommendations on the possible changes and strategies that are needed in order to increase student-centeredness offer relevant and practical utility. Few studies have been conducted to determine whether the current learning and teaching practices in mixed-mode delivery are aligned with the principles of a student-centred learning approach. The benefits and drawbacks of using a student-centred learning approach in different contexts are well documented in research literature. However, its combination and application in different flexible modes of delivery for adult students where face-to-face contact with the tutor is very limited has not been comprehensively explored. Little is known regarding the impact of student-centred learning with a high self-directed learning component in the quality of delivery of a programme to adult learners.

One of the approaches for assessing the quality of learning and teaching in higher education is to measure the perceptions of the various stakeholders who are directly involved in the learning environments which include the tutors (deliverer) and the students (recipients). How students perceive their learning environment has impact on the outcome of their learning experience and tutors in most cases may have a biased perception of their own activities. It will be interesting to explore the differences in the perceptions between these two groups. Finally, an investigation of the application of student-centred learning in the context of mixed-mode delivery at TWoA has not been undertaken. The research will provide a better understanding of how closely the teaching practices at TWoA resemble student-centred learning approach. Recommendations from the research will assist *Te Wānanga o Aotearoa* in shaping strategies to enhance the quality of learning and teaching practices in mixed-mode programmes. It is anticipated that results from this research will contribute to the improvement of teaching practices by identifying the required changes to be made, the

resources required to establish and improve or maintain the quality of the different modes of delivery and the continuing professional development required for tutors to continue to improve their craft. The findings of the study will also assist TWoA in the area of curriculum design and developments to ensure the structure of future programmes are tailored to meet the needs of their students. Thus, this study is unique and relevant both in the local as well as international educational systems.

Purpose of the study

The research aims to:

- 1) Determine whether the learning and teaching practices in programmes delivered through mixed-mode are consistent with the principles of a student-centred learning approach from the perspectives of the students and tutors;
- 2) Investigate the perceptions of students and tutors regarding the quality of learning and teaching of such programmes; and
- 3) Elicit from students and tutors how the quality of the learning and teaching experience for the student could be improved.

Research questions

The following research questions were used to guide the conduct of the research in meeting the stated purpose of the study.

Major research question 1:

How are the current learning and teaching practices utilised in mixed-mode delivery consistent with the principles of a student-centred learning approach at Te Wānanga o Aotearoa?

Subsidiary questions:

- a) *Which aspects of student-centred learning principles have the greatest impact on the quality of learning and teaching activities?*
- b) *How do tutors' perceptions of the current learning and teaching practices compare with those of students?*

Major research question 2:

In what ways does the mixed-mode of programme delivery impact on the quality of learning and teaching at Te Wānanga o Aotearoa?

Subsidiary questions:

- a) *What are the perceptions of students and tutors regarding the quality of learning and teaching strategies utilised in these programmes?*
- b) *How do the students and tutors perceive improvement in delivery?*

Research methodology

The research methodology utilised in this study is a mixed-methods approach which is a combination of quantitative and qualitative methods consisting of two phases. The first phase of the research method is quantitative and addressed the first two subsidiary research questions. An integrative framework consisting of a set of dimensions and survey items was developed from the theories congruent with a student-centred learning approach. The survey instrument had three sections covering: participants' demographic information, and focussed

closed-ended questions. There were also open-ended questions (4 for students and 5 for tutors) which formed part of the qualitative phase of the research.

The second phase of the research method was qualitative which made use of semi-structured interviews with students and tutors to address the remaining two subsidiary research questions. The semi-structured interviews provided the opportunity to follow-up on key points highlighted in the results of the survey. Additionally, the interviews allowed the researcher to have a more profound understanding about the perceptions of the participants regarding the quality of the pedagogical experiences in a mixed-mode delivery. Interviews were captured on a tape recorder.

Using two different but complementary research methods provided deeper understanding and richer data regarding the perceptions of the key participants in the study. The use of two methods to collect both quantitative and qualitative data was vital in finding answers to the research questions. The two methods approach helped establish the validity and reliability of the quantitative data and the credibility and trustworthiness of the qualitative data. Each method has its own advantages and disadvantages. The researcher was able to build on from the results of the first method to inform the investigation of the second research question through the use of second method.

Scope of the study

This research attempted to gain an understanding of the perceptions of both students and tutors engaged in mixed-mode delivery at TWoA. Firstly, it aimed to determine whether the learning and teaching practices in programmes delivered through mixed-mode were

consistent with the principles of a student-centred learning approach from the perspectives of the participants. Secondly, the study also aimed to gain insight into the perceptions and experiences of students and tutors regarding the quality of learning and teaching in mixed-mode programmes. The TWoA programmes for this research were selected based on their mixed-mode type of delivery within the *Tainui* (Waikato) and *Tāmaki Makaurau* (Auckland) regions. The TWoA campuses in the *Tainui* (Waikato) region were located in Hamilton, Huntly and Te Awamutu. The TWoA campus in the *Tāmaki Makaurau* (Auckland) region was the site in Queen St., Auckland.

The following describes the different modes of delivery and the programmes delivered at the aforementioned campuses that were included in this study:

a) Computer Assisted Instruction:

Computer Assisted Instruction refers to the mode of delivery where a learning and teaching computer software application is used to support the delivery of the subject content of the programme. Combinations of face-to-face instruction, tutorial sessions, self-directed learning and online learning with the use of the Moodle system are part of the delivery. The programme delivered in this mode of delivery and included in this study is the Certificate in Computing Level 2-3.

b) *Noho* or *noho marae* delivery (stay over or live-in):

In the *Noho* (not required to stay over or live-in in a *marae*) or *noho marae* (required to stay over or live-in a *marae*) mode of delivery, the students and tutors come together in a *marae* (traditional Māori meeting house) to establish a working and learning relationship with the other students and tutors. They participate and engage

in the discussions and learning activities designed for the programme. Students and tutors stay together in a *marae*-style, and experience working and studying collaboratively with the others in shared accommodation for the weekend (Friday to Sunday). Students experience the *whanau* (family) atmosphere and Māori culture as part of their learning where they share, eat, study and sleep together in a communal accommodation. Students included in this study are enrolled in the Certificate in Social Work, *Te Pinakitanga ki Te Reo Māori* and *Te Ara Reo Māori* (Māori Language Courses), Diploma in Business Enterprise, *Toi Paemataua Raranga* (Diploma in Māori Arts - Weaving) and Certificate in *Waka Ama* (Navigation course). This mode of delivery is also combined with tutorial lessons and self-directed learning.

c) *Whakaako* delivery (once a week 3 hour class):

This mode of delivery includes concentrated learning that usually consists of one three - hourly face-to-face, directed learning based at *Te Wānanga o Aotearoa* campuses as the main mode of delivery (Te Wānanga O Aotearoa, 2009). It is also combined with tutorial sessions and *Noho* delivery.

d) *Wānanga* delivery (one day a week sessions):

This mode of delivery is a combination of face-to-face instruction, self-directed learning and *noho*. Classes are held once a week with no overnight stay or live-in.

Limitations of the study

The scope of this study was subjected to a number of limitations. It would have been desirable to have had a bigger sample; however this study was limited to the *Tainui*

(Waikato) and *Tāmaki Makaurau* (Auckland) regions of *Te Wānanga o Aotearoa*. Within these regions, the focus was on 4 types of mixed-mode delivery: *Noho* based programmes, *Wānanga* delivery, Computer Assisted Instruction and *Whakaako* modalities. The respondents for the survey and interviews were thus limited to the tutors and students of these modes of delivery. Within the tutor group, the sample could have been bigger if more tutors who were invited to participate had responded positively. Another possible weakness or limitation was the assumption that participants understood and gave their honest opinion to the research questions. The survey did not specify the ethnicity of participants nor was the focus of the study designed to measure or correlates the responses with the achievement of the students. The interviews were conducted on a much smaller scale compared with the survey and could have striven for both spread and depth of the responses, rather than the concentration on depth alone.

The data collected from this research were also not compared with the learning and teaching practices of programmes delivered through traditional face-to-face approaches. It also did not look at gaining an insight into the institution's perspective or rationale as to why such non-traditional modes of delivery are employed. Examining the institution's perspective is a complex objective as this will largely rely on investigating the strategic direction of the organisation as well as looking at the impact of the most recent tertiary reforms and funding requirements to the institution. The research was also limited in its capacity to inform as to whether there is any correlation between participants' perceptions and their level of academic achievement as there are various factors that can contribute to the level of achievement of each student other than the selected mode of programme delivery or the learning and teaching approaches in use.

While TWoA have a number of campuses in different parts of New Zealand with varying student population demographics, they mostly offer similar programmes offered in similar modes of study. The tutors deliver the programmes based on a Marau (Curriculum document) developed centrally. The learning and teaching approaches are also developed from the Marautanga (Academic Department) and are implemented consistently across all campuses. Therefore, the results of this study can be considered generalizable and transferrable to the wider population at TWoA.

Definition of terms

Andragogy – is the art and science of helping adults learn characterised by learner-centredness.

Adult Learning – implies an on-going learning process of learners considered to be adults to continue developing skills, knowledge and abilities through formal or non-formal learning.

Constructivism – is a theory about learning based on active construction of knowledge and meaning from the existing knowledge and prior experiences of the learner through exploration, meaning-making and active learning rather than being transmitted to the learner.

Self-directed Learning – it is a time away from the classroom where students are provided with assignments to work on, supplemented with multimedia learning resources. It is a process where students are empowered to take responsibility of their learning.

Mixed-mode delivery – is concerned with the delivery of a programme utilising a combination of different teaching modes and learning resources in various media, on-campus and off-campus. It includes a combination of face-to-face instruction and self-directed learning supplemented with the use of multimedia resources to enhance the learning and teaching experience of the students.

Student-centred learning – focuses on the students as the centre of the learning process rather than the tutor by giving them greater autonomy, control and responsibility in the learning processes.

Structure of the thesis

Chapter 1 provides a brief introduction and background of the study, significance and purpose of the study, research questions, research methodology, scope and limitations of the study, definition of terms, overall structure of the research and a chapter summary.

Chapter 2 presents a review of the literature with a focus on the conceptions of quality, learning and teaching and the pedagogical and theoretical foundations underpinning a student-centred learning approach. An investigation of the theory and practice of a student-centred learning approach is also presented. These include the concepts of Constructivism and Adult Learning which form the foundations for the research. A number of the Adult Learning theories which include Andragogy and Self-directed Learning which are relevant to student-centred learning in a mixed-mode delivery are explored. Other empirical research already conducted which was associated with student-centred learning approaches in different contexts is also examined.

Chapter 3 includes the conceptual framework that positions the researcher's approach to this study. The chapter also presents a review of the different models, framework and investigations describing the use of student-centred learning in different contexts from previous studies. An overview of how the different constructs in this study were linked together in addressing the research problem is provided.

Chapter 4 provides a detailed description of the methodological framework, procedures and strategies employed in this research which include the data collection, the instruments used, the sample, data sources, statistical procedures and strategies used in data analysis. Chapter 4 also includes discussion regarding the assumptions and rationale for using a mixed-methods approach. It also includes a detailed description of the pilot study which led to revision of instruments and conceptual framework.

Chapter 5 presents the results of the quantitative investigation. This chapter presents the results drawn from survey instrument.

Chapter 6 presents findings for qualitative investigation. This chapter presents the findings drawn from the closed-ended questions of the survey instrument and the responses from the one-on-one semi-structured interviews.

Chapter 7 discusses the findings for the investigation. The findings from the quantitative and qualitative investigations are evaluated and connected to literature. It presents an overview and summary of the study highlighting the contribution to the creation of new knowledge as well as implications for practice.

Chapter 8 includes the conclusion and recommendations for further studies based upon the major themes identified from this research.

Chapter summary

The delivery of programmes utilising a combination of different modalities of delivery is now widely used by several institutions brought about by the convergence of imperatives from the different stakeholders of society. These mixed-modes utilising student-centred learning approaches are found to be favourable to the adult students who are returning to study. The use of student-centred learning approaches has been considered as a paradigm shift where the focus has moved from teaching to learning and from the teacher to the learner. However, this chapter has explained that there are known disadvantages when delivering programmes in mixed-mode using student-centred learning approaches. This study also examined the findings that emerged from the exploration of the perceptions of the quality of learning and teaching. The continued calls for educational reform to improve the quality of learning and teaching driven by a complex interaction of different forces support the relevance of this study to the present context. It is judicious to explore the perceptions of adult students and tutors regarding their experiences of the use of student-centred learning approaches on mixed-mode delivery and the impact of such an approach on the quality of learning and teaching.

This chapter provided an overview of the different sections of the study. It provided a detailed background and rationale of the research, its significance and purpose, the research questions and objectives, the research methodology and the scope of the investigation and the procedures that were followed throughout the study. The research questions, the purpose of

the research and its significance were presented providing the rationale and justification for the research. The introduction gave background information and the context which informed the development of the different topics of the research. The major terms used in the study were also defined to assist in the understanding of the research.

Chapter 2 will present a review of literature regarding theories and practices that underpin the principles of a student-centred learning approach.

CHAPTER 2

Literature Review and Theoretical Framework

Introduction

The literature review is focused upon key areas of investigation which have influenced the development of the theoretical framework of the study. Concepts related to maintaining quality learning and teaching in tertiary education settings are introduced. The literature explores how learning and teaching is conceptualised by the two main groups of stakeholders, the students and the tutors. In relation to this, a discussion of the deep and surface approach to learning is provided with the view towards understanding how the different learning approaches that students adopt impact on methods to improve the quality of their learning experience. This chapter also includes a discussion of the theoretical foundation and pedagogical constructs of Constructivism, Adult Learning, Andragogy and Self-directed Learning. An overview of the theory, proponents, potentials, pitfalls and practice of a student-centred learning approach in different contexts are also discussed. These topics provide the theoretical framework upon which this study is developed.

Conceptions of quality

Improving the quality of learning and teaching continues to drive institutions and governments to transform education. Defining what quality means in higher education is hindered by the complexity of educational theory and practice. In addition, different stakeholders, from practitioners and students to professional bodies and society in general

have broad and competing views as to what they perceive quality to be (Bornman, 2004; Kennedy, 2010). Government in different countries have their own specific views on how to improve the quality of learning and teaching which is evident through their policy initiatives and significant changes in the funding system. Practitioners continue to embark on exploring current thinking regarding effective teaching practices that enhance student learning. For employers, the quality of the learning and teaching of an institution is measured by the knowledge and skills graduates are able to demonstrate in the labour market. For students, when considering their tertiary education, have preferences which may range from the subject of study, geographical location, issues of affordability, the academic reputation of the institution (Cooper, 2007) to gaining skills and knowledge for better employment opportunities. These provide the impetus for the need to have continued quality improvements in the different educational processes.

Harvey and Green (1993) synthesised the differing conceptualisations of quality into five discrete but interrelated ways of thinking. They are:

- a) **Quality as exceptional:** quality equals high standards;
- b) **Quality as perfection:** (or consistency): perfection or zero defects; getting things right through the processes;
- c) **Quality as fitness for purpose:** parallel approach to quality assessment set and defined by the institution;
- d) **Quality as value for money:** measured in terms of key performance indicators mostly by funding agencies such as completion, retention and graduation; and
- e) **Quality as transformative:** enhancement, empowerment, transforming students and adding value as the main goal.

Although these concepts of quality are defined separately, it is highly likely that there is overlap and cross-over with each other (Watty, 2003). Biggs (2001) argued that viewing quality as ‘value for money’ is a retrospective quality assurance measurement by looking back to what has been achieved and making a summative judgment against external standards; while the view of quality as ‘transformative’ is pivotal for prospective quality assurance that encourages continual upgrading and improvement of learning and teaching. Defining quality as ‘transformative’ is considered to be the closest to the true nature and purpose of educational processes referring to “the ‘transformation’ (or improvement) of the learner through the empowerment and value-adding effects of learning” (Carmichael, Palermo, Reeve, & Vallence, 2001, p. 450) making it learning-centred. The transformative view of quality means a fundamental qualitative change (Harvey & Green, 1993) not only of students, but as well as teachers, in advancing their academic capabilities allowing for self-review and reflection. The conception of quality as ‘fitness for purpose’ dominates and is most popular in the private sector and industry where the purpose is determined by the institutions themselves (Lomas, 2004; Watty, 2003). These competing conceptions regarding quality have demonstrated that it is such a complex reality when applied to learning and teaching.

Early and recent research on quality is critical of the way quality has been traditionally defined. With the continued significant changes in the provision of education, former ways of thinking about quality as defined by Harvey and Green, are no longer sufficient to explain what is happening regarding the quality of education (Van Kemenade, Pupius, & Hardjono, 2008). Quality is a relative concept depending on: a) the user of the term and the circumstances in which it is invoked; and b) benchmarking where thresholds and standards are used in judging quality (Harvey & Green, 1993). Nightingale and O’Neill

(1994) criticised the benchmarking concept as unproductive as institutions should be thinking more about continuous improvement rather than meeting standards. Likewise, there are variations concerning approaches and consensus when assessing quality among providers of higher education due to differences in teaching strategies, programmes, subject areas, and so on (Ng, Murphy, & Jenkins, 2002; UNESCO, 2003). Lomas (2004) argued that there is a need to develop a culture where quality is similarly understood and embedded within institutions.

It is in “the context of learning and teaching that the notion of quality has evolved and acquired special significance [as it] refers to both the provision and the outcomes of the learning and teaching process” (UNESCO, 2003, p. 6). This means that teaching should be focused on student learning to facilitate higher quality learning outcomes for students. In practice, however, quality mechanisms focus on anything but the student, and habitually fail to demonstrate direct links to student learning (Carmichael, et al., 2001). Cartwright’s (2007) findings from his study of exploring academic colleagues’ perceptions of the rhetoric and discourse related to the national quality agenda in UK showed a certain degree of cynicism concerning how quality is operationalised. The comments regarding quality made by the respondents include: “quality as being a game which has to be played and that their respective roles were to ensure that their particular institution played the game as effectively as possible”; “the quality language has been high-jacked and [it’s all] about tick box approach”; “the quality agenda as a systematic of a wider political agenda of controlling the workforce”; and “a quality system resulted in the deployment of resources which should be used to enhance teaching, instead of in the administration of the quality processes” (Cartwright, 2007, p. 296). With these, Ottewill (2005) elucidated that “there is clearly a need for a shared understanding, amongst all the stakeholders of the concept of quality on which it

is based” (p. 224). These findings show that there is an apparent conflict and tension with quality concepts between academics and administrators of institutions (Watty, 2003).

In an effort to regulate and assess educational quality and standards, governments intervene by requiring tertiary institutions to adopt management models to improve the delivery of education (Srikanthan & Dalrymple, 2007). However, no one seems to know what model is appropriate that will measure students’ learning development nor is there “a real conception of what appropriate system of accountability other than government control should look like” (Srikanthan & Dalrymple, 2004, p. 278). After synthesising existing literature related to approaches to maintaining quality in education, the authors proposed a holistic composite model that combines elements of services and education. In other respects, Bramming (2007) discussed that “because ‘student satisfaction’ is a familiar indicator of educational quality, it has also become natural to evaluate learning by measuring whether or not students are satisfied with their transformation, that is, with what they have become” (Bramming, 2007, p. 45). Bramming (2007) went on to suggest that the concept of ‘strong learning’ as a learning philosophy focuses on the transformative development of the students in their learning.

Other research has highlighted several concerns regarding the provision of quality learning and teaching. There is an apparent agreement from a number of studies that the quality imperative in higher education emanates from the market and government (Houston, 2007; Kember, Jenkins, & Ng, 2003). Institutions have been faced with significant changes and reduction in government funding, but at the same time they are expected to deliver high quality educational outcomes. This is evident in many parts of the world, where “universities are being asked to do with less – and, what is more, to prove that they are doing well”

(Kember & Kwan, 2000, p. 3). Furthermore, there is a view that education is commodified and marketised as service provided to paying customers in a competitive marketplace (Cooper, 2007; Feast & Bretag, 2005; Wimshurst, et al., 2006). This refers to students as the customers or consumers who are willing to pay for a product provided by the institution at a price, the amount of which is dependent on their reputation with regards to the quality of their service (Douglas & McClelland, 2007; B. Little & Williams, 2010; McCulloch, 2009). Houston (2007) argued that labelling any group as “the customer” who defines quality is an over simplification of the demands and complexities of higher education, presents an inaccurate and distorted picture of the environment in which it operates and limits the thinking about quality. Cooper (2007) refers to this as “quality uncertainty” brought about by the notion of consumerism that is prevailing in higher education.

Trying to understand the complexities of providing quality learning and teaching has produced contrasting perspectives from different paradigms and contexts. A study regarding some of the quality issues experienced by a department in one of the universities in New Zealand conducted by Houston, Robertson and Prebble (2008) indicated that “while there was broad agreement that quality was a concern, there was little agreement about what exactly the issues are or how they should be resolved” (p. 222). However, at the core of all this is the understanding that is required of the psychology of learning, attitude to learning, what makes teaching effective, and the gradual development into higher levels of thinking. Martens and Prosser (1998) posited that “it is the subject as a whole – how it is designed, taught and assessed – which relates to the quality of student learning” (p. 29). All of these are centred on the “experience of the learner, and the context that they are in” (Kennedy, 2010, p. 114). It is evident that although the concept of quality is complex, multifaceted, difficult to

grasp and operationalise, higher education institutions strive to provide and maintain their view of quality education.

Measuring quality

Concerns regarding the quality of learning and teaching has resulted in the growth of schemes for quality control, quality assurance and enhancement of learning and teaching (Kember & Kwan, 2000). Different quality assurance processes have been put in place not only as a response to the challenge of ensuring quality learning and teaching is provided to the students, but as well as a response to the government requirements to demonstrate accountability. Likewise, the government and the society in general have an expectation for tertiary education to contribute to economic growth and development through the quality of graduates. A key element in determining the quality of education refers to the life and workplace skills students have acquired, as well as the relevance of their qualification to what the economy needs (Earle, 2010).

There are several tools and strategies by which quality assurance is assessed in different tertiary institutions. A widely-used tool is the canvassing of the views and perspectives of both students and tutors to improve learning and teaching. The results of the assessments are also used “to provide evidence of the quality of student learning and teaching experience, to satisfy the requirements of the funding agencies, governments, accreditation bodies and more demanding students” (Douglas & Douglas, 2006, p. 12). Little and Williams’ (2010) study explored student engagement for quality assurance purposes which consist of interviews with key stakeholders and online survey of tertiary institutions and colleges in England, student unions and other representatives. Barr and Tagg (1995, p.16) differentiated the criteria for quality between the traditional “Instruction Paradigm” and

“Learning Paradigm”, where the former define quality in terms of “inputs and process measures”, while the latter is judged “in terms of its impact on learning”. The authors continued that outcomes should be the focus of any measures rather than the inputs. Storen and Aamodt (2010) extended this stipulation recently by examining the perceptions of the graduates from 13 European countries on their employability and the usefulness of their programme in preparing them for the world of work as an indicator of quality. The authors concluded that “the characteristics of the study programme as a quality indicator seem to have minor effects on the chances of *obtaining* a job but significant effects on *doing* the job” (Storen & Aamodt, 2010, p. 312). Indeed, efforts related to ensuring quality assurance on the learning and teaching is typical of any institution in an effort to make sure that they are providing high quality education.

Kennedy (2010) reviewed a number of research describing the different ways institutions endeavour to continually improve or maintain the provision of quality educational experience to the students. For example, Bornman (2004) proposed self-assessment, self-analysis or SWOT (strengths, weaknesses, opportunities and threats) as a critical tool to analyse the strengths and weaknesses in the content, delivery and assessment areas of the programme or activity. Williams and Saunders (2005) discussed adopting the developments in service quality by using the service template as an alternative approach in evaluating the quality of higher education. The service template works by illustrating the ‘fit’ between the service provided, in this case by the tutor and the institution, and the users (students) of the service. The gaps between perceptions and expectations are then critically analysed and an agenda for action to close the gaps is developed. Love and Scoble (2006) developed a novel approach called multi-dimensional crystal view as one of the tools in gathering effective feedback from stakeholders which analyses the interactions between

processes and outcomes in order to continually enhance the learning experience. From their literature review of third-party classroom teaching observation, McMahon, Barrett and O'Neill (2007) concluded that using the results from the classroom observations is one way of improving the standard of teaching and the learning experience of the students. Burquel and van Vught (2010) discussed the benchmarking process undertaken by tertiary institutions in Europe in order to continually improve the quality of education and the organisation's performance. "Benchmarking is defined as a diagnostic instrument, a self-improvement tool, a collaborative learning exercise, on-going evaluation involving a systematic approach of continually measuring work process" (Burquel & van Vught, 2010, p. 248). These are just a few of the several strategies used in trying to assess the provision of quality learning and teaching in different institutions.

It is to be acknowledged that quality is a goal pursued by higher education institutions, given that institutions are required to meet certain quality standards and audit requirements as part of their accountabilities. However, Smith (2008) argued that systems for collecting data to measure perceptions and evaluate the quality of learning and teaching practices will have no quality improvement impact unless: a) the data are used to inform practitioners of what needs to be improved; and b) practitioners use them in this way. The author elucidated further that there needs to be an appropriate interpretation of results and deliberate and well-thought-through practice change. Smith (2008) alluded to the fact that there seems to be a lack of research in evaluating the outcomes from the tools and systems used.

The demands for improvement continue regardless of the mode of delivery. This should be the concern for many. For a number of reasons including maintaining stakeholder

satisfaction and finding out what is effective and ineffective in the delivery of programmes among others, institutions still spend a considerable amount of resources collecting and analysing tutors' and students' perspectives as materials of evidence that will inform decision makers regarding quality of learning and teaching. It is expected that findings will eventually contribute to the drive to improve the educational experience of the students. In addition, assessing the quality of higher education has always been structured around the traditional teacher-centred, face-to-face instruction. As a result, the criteria used for the well-tested and traditional measures of quality may no longer be applicable for flexible learning. Research has identified the need to have a different set of criteria for assessing the quality of the mixed-mode delivery.

Conceptions of learning and teaching

“An important dimension to the concept of quality learning and teaching is how academic staff and students conceive what quality teaching is as well as the approaches they take to promote positive educational outcomes” (Kennedy, 2010, p. 115). Kember and Gow (1994) discussed that students' approach to their studies are influenced by their conceptions of learning. By perusing a number of seminal research, Kennedy (2010) attempted to establish the links between conceptions of learning, conceptions of teaching and the approaches for both learning and teaching as held by tutors and students and their eventual link to the learning outcomes.

Students' conceptions of learning

Knowing what students' conceptions are regarding learning will broaden the understanding of what constitutes quality learning experiences. For the purpose of this

research, the term ‘conception’ (also synonymous with beliefs, orientations, approaches and intentions) refers to the beliefs and personal meanings that tutors and students have regarding the phenomena of learning and teaching in higher education (Devlin, 2006). Marton, Dall’Alba and Beaty (1993) summarised that “a conception of learning encompasses two main component parts: a way of seeing *what* is learned and a way of seeing *how* it is learned” (p. 296). These conceptions are dynamic, not static or permanent, as students may change their conception or approaches over time or depending on the contexts (Kember & Kwan, 2000; Lublin, 2003; Lublin & Prosser, 1994; Prosser & Trigwell, 1999b). These conceptions carry personal meaning and also have different characteristics depending on how they are utilised within the learning and teaching environment (Entwistle & Walker, 2000). Thus, knowledge related to the varying conceptions regarding learning and teaching of both students and tutors is fundamental in providing a quality educational experience.

Marton and Säljö’s (1976) phenomenographic research investigated students’ learning processes as a way of improving the quality of learning and teaching. Marton and Säljö (1976) distinguished the approaches to learning from ‘deep’ to ‘surface’ learning. The ‘deep approach’ refers to the construction of personal meaning from a deeper understanding and interpretation of knowledge (Cannon & Newble, 2000b; Gibbs, 1992b; Kember & Gow, 1994; Marton & Säljö, 1976; Ramsden, 1992). The students try to make sense of what the content means to them. Kember and Kwan (2000) indicated that a deep approach to learning normally results in better academic performance. By contrast, the surface approach is limited to memorisation of facts without understanding and meaning leading to a reproductive orientation (Cannon & Newble, 2000b; Gibbs, 1992b; Kember & Gow, 1994; Marton & Säljö, 1976; Ramsden, 1992). Students try to memorise to remember the content discussed. This distinction of approaches has led to further expansion and developments by Entwistle

and Ramsden (1983) where they described the third approach which is less popular – ‘achieving or strategic approach’ where the objective is just to get good grades, thereby increasing their self-esteem or be able to compete with others. Some students may choose to categorise themselves under this approach depending on the context that they are in, for example, assessments or what is required by the course (Cannon & Newble, 2000b; Cuthbert, 2005; Entwistle & Ramsden, 1983). Thus, students have varying approaches to their learning depending on their intention and whatever they try to achieve (Gibbs, 1992b).

Säljö (1979) conducted a qualitative study with adult learners regarding what learning means to them, and after analysing the findings, five qualitatively different conceptions were produced. These conceptions demonstrate the differences in ‘*what*’ the adult students think learning is, and ‘*how*’ learning can be acquired. The conceptions are:

- a) Learning as a quantitative increase in knowledge. Learning is acquiring information or knowing ‘a lot’;
- b) Learning as memorising. Learning is storing information that can be reproduced;
- c) Learning as acquiring facts, skills and methods that can be retained and used as necessary;
- d) Learning as making sense or abstracting meaning. Learning involves relating parts of the subject matter to each other and to the real world;
- e) Learning as interpreting and understanding reality in a different way. Learning involves comprehending the world by reinterpreting knowledge (as cited in Ramsden, 1992).

Although there are five distinctions, these can actually be categorised into two: “content-centred” which refers to learning as transmission, memorisation and reproduction of facts as delivered by the teacher; and “learning-centred” as making meaning, construction and integration with previous knowledge. The interrelationship between the conception of

learning and students' approaches to their studies was corroborated by Marton, Dall'Alba and Beaty (1993) who revealed findings from their longitudinal study of over six years with a particular group of adult students. They identified six qualitatively different conceptions about the two aspects of learning: *what* is learned and *how* it is learned (Marton, et al., 1993). They include: "a) increasing one's knowledge; b) memorizing and reproducing; c) applying; d) understanding; e) seeing something in a different way; and f) changing as a person" (Marton, et al., 1993, pp. 283-284). These conceptions reflect the deep and surface approaches to learning identified by Marton and Säljö (1976; Säljö, 1979).

The findings from the earlier research of Van Rossum and Schenk (1984) also established the close connection between students' approaches to learning and educational outcomes. Their findings confirmed that the way students conceive their learning will influence the way they approach it, which will in turn influence their educational outcomes. This validates Marton and Säljö's (1976) and Kember and Kwan (2000) conclusion that deep approach to learning leads to better and high quality learning outcomes while surface approach leads to poorer quality of learning outcomes. Biggs and Tang (2007) expanded this further by concluding that when improving teaching, "surface approach is to be discouraged, the deep approach encouraged" (p. 26). In their view, the surface approach is associated with inappropriate low level learning activities (e.g., memorization) which always nearly leads to poorer quality of learning outcomes, while on the other hand, the deep approach (focusing on understanding and making meaning) is characterised by a full range of appropriate learning activities which lead to a deeper understanding and more meaningful learning.

Students' adoption of any of these approaches will depend largely on the learning situation and learning environment they are in. As Biggs and Tang (2007) discussed, "surface

and deep approaches to learning are not personality traits, as is sometimes thought, but are most usefully thought of as reactions to the teaching environment” (p. 29). Students can be influenced to use a deep or surface approach depending on contexts, their learning circumstances and situations (Kember & Kwan, 2000; Lublin, 2003; Lublin & Prosser, 1994). This means that these approaches are not stable as students may change from one to another. Students may espouse diverse approaches to their studies depending upon their personal learning circumstances (which include their prior experiences, students’ attitudes, motivation and prior knowledge) and the external factors which include the particular context in which they find themselves, for example, the learning environment, tutors’ teaching methods and strategies and requirements of the assessments (Prosser & Trigwell, 1999a). This is similar to Marton and Säljö’s (1976) argument that learning approaches are not inherent descriptions or characteristics of students, but rather are intentional. Therefore, tutors should be able to adjust the learning context to change students’ approaches accordingly.

Kember and Kwan (2000) further affirmed that the study methods adopted by students are a function of the students’ predisposition, the method of teaching and the nature of the learning and teaching environments which in turn affects the quality of the learning outcomes. In the same way, tutors’ conceptions of teaching will have influence on their approaches to teaching, which may also be developed into higher level or more sophisticated conceptions regarding learning. Simply put, by knowing the different approaches students use in their learning, there is potential to increase the quality of the learning experience of the students. However, developing from a surface approach to a deep approach is quite complex and challenging (Kember & Kwan, 2000).

Table 2.1

Characteristics of Deep and Surface Approach to Learning

Characteristics of a deep approach	Characteristics of a surface approach
<ul style="list-style-type: none"> Actively seek to understand the material/ the subject Interact vigorously with the content Make use of evidence, inquiry and evaluation Take a broad view and relate ideas to one another Are motivated by interest Relate new ideas to previous knowledge Relate concepts to everyday experience Tend to read and study beyond the course requirements 	<ul style="list-style-type: none"> Try to learn in order to repeat what they have learned Memorise information needed for assessments Make use of rote learning Take a narrow view and concentrate on details Fail to distinguish principles from examples Tend to stick closely to the course requirements Are motivated by fear or failure

(Lublin, 2003, pp. 3-4).

From the breadth of the research, encompassing Western and non-Western contexts, valuable knowledge has been gained regarding students' conceptions of learning. There are, however, limitations in the research as most of it was conducted in university settings and did not take into consideration the cultural background of the learners and how cultural beliefs may influence the students' learning approach and conceptions (Kennedy, 2010). Overall, though, these seminal pieces of research established the relationship between how students conceive and approach their learning and their eventual learning outcomes.

Teachers' conceptions of teaching

Parallel with the conception of learning is the conception of teaching. Conceptions of teaching are defined as "beliefs teachers have about teaching which underlie the purpose and the strategies in teaching" (Postareff & Lindblom-Ylanne, 2008, p.109). This means that teachers' views about teaching are made up of their knowledge of learning and teaching theories and principles and their accumulated experiences. There is an apparent agreement

among the previously mentioned authors as demonstrated in their findings from their research that students' conceptions and approaches to their learning influence their educational outcomes. This, in turn, has implications for the way tutors conceive and approach their teaching. Kember (1997) concluded in his research that teachers' conceptions of teaching influence their approach to teaching.

Kember and Gow (1994) argued that the "relationship between conceptions or orientations to teaching and the way courses are taughtin turn, [also] affects the quality of student learning" (p. 59). This means that the teaching strategies used by the tutors and the learning strategies students have impact on their outcomes. Indeed, high quality teaching leads to high quality student learning (Martens & Prosser, 1998). Kember and Gow (1994) added further that students' predispositions to learning are also closely related to their conceptions of learning and this has a relationship with how teachers conceive their teaching. The authors established the existence of two orientations to teaching: "learning facilitation" and "knowledge transmission" (Kember & Gow, 1994, p. 70). A teacher whose orientation is towards 'transmitting knowledge' will likely use 'content-centred approaches' where students are expected to learn depending on how well the teacher delivered the information. This is similar to the quantitative perspective of knowledge as discussed by Biggs (1994). Conversely, teachers who see teaching as 'facilitating understanding' will tend to use 'learning-centred' methods, which is also similar to the qualitative perspective of knowledge by Biggs (1994). Their research established that there is a direct relationship between these two orientations to teaching and student learning outcomes.

Nightingale and O'Neil (1994) indicated that if teaching is conceived as the efficient orchestration of teaching skills, teachers work to adapt their teaching methods to different

student needs and to different content goals. The orientations affect the curriculum design, the teaching methods employed and the learning tasks which in turn, influence students' approaches to learning. It is, therefore, important to direct initial attention towards the tutors' conceptions of teaching for students to be able to adopt meaningful approaches to learning. Tutors who have the 'knowledge transmission' orientation may not always result in meaningful learning to a certain number of students and may, therefore, need to revisit their conceptions towards 'learning facilitation'. However, Kember and Gow (1994) highlighted that tutors have deep seated conceptions of teaching that have been formed in their lengthy careers in academia and will therefore be difficult to change. Likewise, Kember (1997) discussed that merely directing attention towards teaching approaches without any corresponding change in beliefs will only negate any educational development initiatives.

An authoritative review of thirteen qualitative articles by Kember (1997, 1998) found a high degree of commonality between academics' conceptions of teaching and categorised them into two broad orientations characterised as: 'teacher-centred/content-oriented' and 'student-centred/learning-oriented' with a third bridging category labelled as 'student-teacher interaction' linking the two orientations. The 'teacher-centred' orientation focuses upon the communication or transmission of content or knowledge to the students while the 'student-centred' orientation is disposed towards student learning aimed at developing the construction of their own knowledge (Kember, 1997). Kember's (1997) research findings concur with the earlier research of Kember and Gow (1994) and Biggs (1994).

Drawing on the research of Marton and Säljö (1976), Prosser and Trigwell (1999a) validated the established "link between students' high quality learning outcomes on one hand, and the way teachers approach their teaching on the other" (p. 55). In addition, it was pointed

out that the perspectives of university tutors and students regarding their approaches to learning and teaching were contextual and relational. The authors argued that both tutors and students will have a unique conception and adopt different approaches to learning and teaching depending on the context they are in, their prior experience and the learning situation. The authors advocated that by changing the context of the learning situation, students may be encouraged to use the deep approach thus improving their learning. In a quantitative study conducted by Trigwell and Prosser (1999a), there was also evidence that the way students learn was influenced by the way the teacher taught. The authors concluded that teachers who adopt the information transmission/teacher-focused approach to teaching will influence students to adopt a more surface approach to learning. On the contrary, the teacher who adopted approaches to teaching that were student-focused influences the students to use a deeper approach to learning. Similarly, Samuelowicz & Bain (1992), after examining the conceptions of teaching held by academics, proposed five classifications of teaching as follows:

- a) Teaching as supporting student learning;
- b) Teaching as an activity aimed at changing students' conceptions or understanding of the world;
- c) Teaching as facilitating understanding;
- d) Teaching as transmission of knowledge and attitudes to knowledge within the framework of an academic discipline; and
- e) Teaching as imparting information. (pp. 98-101)

Interestingly, the five classifications were eventually simplified as "student-centred and teacher-centred" approaches to teaching (Samuelowicz & Bain, 1992, p.104). Likewise, Martin, Prosser, Trigwell, Ramsden and Benjamin (2000) identified six variations of university teachers' approaches to teaching and found that there was an empirical and clear

relationship between the teachers' intended objects of study and their intended approaches to teaching. The object of study varied in terms of whether knowledge exists in the external world or in people, also influences whether the teacher will adopt a more teacher or student-centred approach. This is again comparable and parallel with the findings of the previous research (e.g. Biggs, 1994; Kember, 1997; Kember & Kwan, 2000; Samuelowicz & Bain, 1992). The authors concluded that 'the objects of study', more than anything else, will determine the quality of teaching and probably the quality of learning outcome as well. Kember and Kwan (2000) also indicated that conceptions and approaches to teaching held by academics are also influenced by curriculum design, nature of the institution and students.

Although the research findings discussed here can be categorised into two broad conceptions of teaching, teacher or student-centred, "they do not indicate any necessary developmental sequence from the less to the more complex conceptions" (Entwistle & Walker, 2000, p. 7). Nevertheless, academic staff can develop from a lower level conception to a higher and sophisticated conception of teaching through reflection and integration which will result in a deeper understanding of learning and teaching (Entwistle & Walker, 2000). By integrating affective and cognitive elements in the teaching, which in turn produces 'strategic alertness' in providing significant learning, Entwistle and Walker (2000) argued the relationship between learning and teaching could be developed into more sophisticated conceptions. The view of good teaching represents a sophisticated conception of the relationship between learning and teaching, and a commitment to encouraging students to reach higher epistemological levels and a deeper understanding of the discipline (Entwistle & Walker, 2000). According to Biggs and Tang (2007) "an important aspect of effective teaching is reflective practice, using transformative reflection, which enables teachers to create an improved teaching environment suited to their own context" (p. 31). Biggs and

Tang (2007) discussed further that reflecting on what is effective and what needs improvement in one's teaching requires knowing the theories of teaching and the context of experiences as the object of reflection.

Most of the preceding research included both quantitative and qualitative methods, action research, phenomenography, observation methods regarding the teachers' espoused theory and theory in practice in teaching, as well as exploring the '*what*' (refers to the content) and '*how*' (refers to the process) of student learning. More so, the preceding research has confirmed that there is a relationship between how teachers conceive of and approach their teaching in a particular context, how students conceive of and approach their learning and the quality of student learning outcomes (Kember & Gow, 1994; Kember & Kwan, 2000; Lublin, 2003; Marton & Säljö, 1976; Prosser & Trigwell, 1999b). The research can be summarised by formulating two broad conceptions of learning and teaching: 'student-centred/learning-centred' and 'teacher-centred/content-centred', while the learning preferences are categorised into 'deep' and 'surface' approaches to learning and teaching. Within this review it was clear that students' conceptions of learning have implications for their approach to their learning, and eventually to their educational outcomes. This is parallel with the conceptions of the teachers. Exploring the literature about conceptions and approaches to learning and teaching from both tutors and students' perspectives are found to be useful when considering improving the quality of educational outcomes.

Although these studies focus on the different ideas that influence the effectiveness of learning and teaching from both tutors and students, to what extent are these applicable when programmes are delivered to adult students through mixed-mode delivery? What impact do they have on the quality of learning and teaching? Their interconnectedness to the other

elements of educational processes, for example, curriculum design, relationships between tutor and students, assessments, learning environment, teaching strategies and learning outcomes and so on in the broad categories of being teacher-centred and student-centred have not been fully explored in mixed-mode delivery. For this study, the focus is on the relationship of the different dimensions of the educational processes in terms of the enhancement of the quality of learning and teaching experience of the students. Relating this to the current study, one can surmise that conceptions of learning and teaching by both tutors and students have a great deal of influence in trying to enhance the quality of the pedagogical experience of the students. In this research, both tutors' and students' perceptions of their experiences of student-centred learning approaches will be examined. Then, the results will be investigated further to determine their impact on the quality of learning and teaching.

Pedagogical perspectives and theoretical foundations underpinning student-centred learning

This section presents a broad scope of the theoretical framework for this study connecting the different theories that serve as both the philosophical and educational foundation for a student-centred learning approach. The theory and practice of a student-centred learning approach is grounded and drawn from an amalgamation of educational theories and philosophies of how people learn. A multiple theoretical framework, rather than a single theory or learning philosophy supports the pedagogical and epistemological foundations of this approach. The philosophy of a student-centred approach in mixed-mode delivery is congruent and interconnected with Constructivism and a number of Adult Learning theories which include Andragogy and Self-directed Learning. Although each of

these has distinct theoretical perspectives and a well-established body of research, there are elements which significantly overlap with one another and these have an overall impact on the practice of a student-centred approach.

Constructivism and its proponents

Constructivism as an educational approach and a learning theory resonates well with student-centred learning. Different researchers have attached multiple meanings to the concept of Constructivism. As a result, there are strong advocates who believe that Constructivism is the leading and dominant metaphor of human learning (Hua Liu & Matthews, 2005). There are also critics who dispute its proclaimed benefits in improving the quality of the student's learning experience. Likewise, because of its popularity, various concepts of Constructivism have emerged through the years, each with subtle differences. However, they all incorporate a view of learning that involves the learner in active, individual processes of knowledge construction based on their previous experience (Arlidge, 1999; Boghossian, 2006; Knowles, 1984; S. Merriam & Caffarella, 1999; Schweitzer & Stephenson, 2008), thus the name Constructivism. Piaget (1972) and Vygotsky (1978) were the early advocates of Constructivism and laid the foundation for the constructivist theory. Their seminal work had been influential in the theory and practice of education in different contexts.

In Constructivism, learning is seen as individually and socially constructed. Piaget (1972) advocated for the individual construction of knowledge while Vygotsky (1978) argued that knowledge is socially constructed. Piaget's seminal position places the learner as an individual agent actively constructing his learning by using existing knowledge and incorporating it with the new ones thus developing their cognition. The cognitive and

psychological view of Piagetian Constructivism considers learning and active construction of knowledge as individualistic with each individual learner supporting their interests and needs and emphasising cognitive development through interaction with their environment (Abdal-Haqq, 1998). Learning is not transmitted passively, but attained through well-defined stages by active participation of the learner (Harkema & Schout, 2008; Zualkernan, 2006). This means that construction, discovery and understanding of knowledge happen in a logical step by step process through the students' active participation and involvement in their learning. It is the student's subjective learning experience, their perceptions of those experiences and internal development that has educational value (Abdal-Haqq, 1998; Boghossian, 2006). This notion does not take into account the construction of knowledge through social interactions and the role that social context plays.

Constructivism also espouses a social dimension to learning. Vygotsky (1978) posited that the social context of learning is critical to the cognitive development of students. The “crux of Constructivism is in the active construction of meaning through interactions [and meaningful activities] with the social and physical environment” (Bush, 2006, p. 16). They build and use students' previous experience to connect with new learning by engaging students in more meaningful and quality learning experiences through their interpretations, questioning, and interactions with peers. Students actively construct knowledge and develop higher levels of cognitive and thinking skills when they are supported in engaging and interacting with others in a constructivist-learning environment. Constructivism promotes enculturation and immersion of learners in their learning communities, developing multiple perspectives and making meaning based on their prior knowledge and their interaction with peers, and becoming part of a community of learners (S. Merriam & Caffarella, 1999; Straits & Wilke, 2007). This highlights that the social environment plays a crucial role in making the

learning contextualised and situation-specific through the different learning activities (Bush, 2006).

Vygotsky (1978) supported Piaget's ideas but he focused on the importance of socio-cultural activity and social environment as facilitators of development and learning (Schunk, 2004; Zualkernan, 2006). He also advocated for flexible stages of learning development as opposed to the well-defined stages of Piaget. For Vygotsky, recognising social, cultural and historical factors are important to the development of the individual's learning. He postulated that the learner's interaction with the environment, collaboration with others and the experiences they bring to a learning situation greatly influence and contribute to the success of the learning outcomes (S. Merriam & Caffarella, 1999; Schunk, 2004). This notion of Constructivism emphasises that individuals develop their learning through active interaction with others. The creation of meaning is not purely individual, but to a large extent shared in an environment with others, tutor and peers, where they help shape an individual's understanding (S. Merriam & Caffarella, 1999; Straits & Wilke, 2007). The tutor has a very important role to play by creating a learning environment that promotes and encourages the construction of knowledge through their individual experience.

Indeed, these two variants of Constructivism overlap and appear to be similar yet different. Piaget's cognitive Constructivism focused more on the cognitive process and its development within the individual learner while Vygotsky's emphasis was on the influence of the social context of learning.

Constructivist learning and teaching

The emphasis of Constructivism is “on the significance of the role of experience, the development of meaning and the use of problem solving and insights as the sources of learning rather than the effect of training in set routines” (Burns, 2002, p. 124).

Constructivism is about how the students actively construct meaning from their individual experiences (Boghossian, 2006; S. Merriam & Caffarella, 1999; Schweitzer & Stephenson, 2008) and are provided the opportunity to challenge and modify their pre-existing knowledge through tasks and questions that create dilemmas and new meaning in their experience (Abdal-Haqq, 1998; Boghossian, 2006; Terhart, 2003). Pre-existing knowledge refers to reorganisation of previous experience which facilitates the interpretation, synthesising and analysis of information that leads to learning as construction of new knowledge (Burns, 2002; Terhart, 2003). Knowledge is transformed through reflection of the experience, which eventually results in a deeper understanding and meaningful learning. It involves active engagement and collaboration from the students. The students focus on constructing their own understanding based on their own uniqueness and individual perceptions of learning. The students need to internalize and connect new knowledge to what they already know, promoting new meaning-making and understanding thereby creating responsible, autonomous and independent learners (Bush, 2006; Knowles, 1984; S. Merriam & Caffarella, 1999; Straits & Wilke, 2007; Weimer, 2003). It is the students’ uniqueness and subjective perceptions that enables them to develop their cognitive structures and be able to construct new meaning from ideas. Thus, Constructivism is more inclined to be well-connected with the cognitive rather than the behaviourist approach.

Parallel with the constructivist view of learning, Constructivism has also significant implications for teaching. Constructivist teaching promotes the active construction of knowledge by the learners in a conducive learning environment rather than passively receiving it from tutors. A Constructivist teaching approach is where the tutor facilitates learning through teaching activities that provide the opportunity for students to be creative, to discover, to challenge and to assimilate, thus developing their mental processes and skills. Students develop their own understanding aided by their existing knowledge and experience, thus creating new meaning. Constructivist approaches are regarded as producing greater internalisation and deeper understanding of the learning (Abdal-Haqq, 1998). Being able to negotiate about what the students can learn based on their abilities and interest is an important aspect of Constructivism (Alfassi, 2004; K. Brown, 2003; Gibbs, 1992a; Kiley, et al., 2000). Negotiations occur when students are involved in the planning of the curriculum, thus taking ownership and commitment for their learning. The curriculum becomes a collaborative effort between the tutor and student where the students are involved in the decision making process with regards to the content and how it is taught while at the same time developing higher order skills such as problem solving and self-evaluation (D. Nunan, 1988; Schweitzer & Stephenson, 2008). This contrasts with the traditional curriculum where the tutor delivers a specified content in a logical and systematic way.

Constructivism also deems the relationship between the teacher and student is paramount in the learning process. The teacher's role is critical in orchestrating collaborative learning strategies to produce interactions among peers that enable and facilitate their learning (Arlidge, 1999; Lattuca, 2006). Constructivists view the teacher as the facilitator, a guide and a mentor in the learning process rather than the all-knowing dispenser of knowledge (Jones & Richardson, 2002). The tutor's position in the classroom is changed

from being the fountain of knowledge that has the control in the classroom to being a learning resource facilitating the different educational processes with the students. The tutor creates a learning environment that encourages and supports students in developing their critical thinking, rather than passively receiving factual knowledge. Principally, tutors take on the role of trainers and coaches who encourage the learners to construct knowledge themselves, to make meaning, to internalise and challenge their own understanding and formulate their own ideas, opinions and conclusions (Abdal-Haqq, 1998; Hoover, 1996; R Motschnig-Pitrik & Holzinger, 2002; C. Rogers, 1965). The students, therefore, are able to work with less direction from the tutor helping to make them autonomous and responsible learners. Students take an active role in their learning process by participating and engaging in authentic learning tasks relevant to their real-life experiences. The facilitator creates learning situations with carefully planned activities and resources where students are motivated to enhance their learning through active participation and collaboration with fellow students and the tutor. The power of being the sole authority in the classroom is shared among all members of the class. The design of a positive learning environment is therefore critical in enabling and facilitating active participation of students in their learning processes.

Active learning techniques or group learning activities are one of the most common implementations of the constructivist approach where the learning tasks are relevant and rich in context (Cannon & Newble, 2000b; DeWitt, 2010; Leong, 2005). When students actively participate, interact with other students and get involved in the learning process, the teaching is considered effective in providing quality experience which results in the development of skills which include problem solving of authentic and real-life situations through synthesising, simulations, applied and hands-on experiences and group work. This makes the

learning more democratic where mutual respect and trust is built, paving the way for students to be more autonomous and independent.

Criticisms regarding Constructivism

Constructivism is not without its share of critics and critiques. Most of the resistance to Constructivism centres on difficulties in its implementation and issues regarding readiness. For example, a number of authors have described Constructivism as an ‘ill-defined’ concept, ambiguous, inhomogeneous, inconsistent and overused, unsure as to what it actually means because of the different interpretations (Abdal-Haqq, 1998; Arlidge, 1999; Terhart, 2003). A number of authors have criticised the implications of the constructivist approach when implemented in the classroom. Mayer’s (2004) fifty years of research, spanning from the 1960’s, on discovery learning implemented under the guise of social or cognitive Constructivism was proven to be not effective in much of the research literature covering different fields of study. He posited that too much freedom provided to learners as practiced in pure discovery may lead to the failure of developing the cognitive processes of the learners.

Elkind (2004) argued that there is lack of success in implementing constructivist reforms due to so called *failures of readiness* in different areas. According to Elkind (2004), “the current failure to implement Constructivism is not because of its merits but because of a lack of readiness for it (p. 312)”. This means:

Teacher readiness requires teachers who are child development specialists with curricular and instructional expertise. **Curriculum readiness** requires courses of study that have been researched as to what, when and how the

subject matter should be taught. **Societal readiness** requires a nation that is willing – indeed eager – to accept educational change. For a reform movement to succeed, all three forms of readiness must be in alignment. (Elkind, 2004, p. 307)

Elkind's view was, however, criticised by Carson (2005) arguing that Elkind "implied that only a causal relationship exists" [between the] "states of readiness and the implementation of Constructivism" (p. 233). The author indicated that "a teacher must accept first the metaphysical and epistemological assumptions of a pedagogic practice before he or she can implement it" (Carson, 2005, p. 233) . Carson (2005) argued further that "objectivism is more reasonable from a theoretical and practical perspective than Constructivism" (p. 233). In addition, Schweitzer and Stephenson (2008) warned that tutors concerned with the notion of empowering students by letting them decide on their learning preferences may find it difficult to develop higher order analytical capabilities in their students. The authors recommended that tutors continue to assume responsibility and set standards as a challenge for the learners to achieve. In their review of a number of studies, Schweitzer and Stephenson (2008) also identified other criticisms regarding constructivist strategies which include: failure to prepare students adequately for work; less knowledge attainment than students would otherwise obtain and that such an approach is only applicable to students least well positioned to learn. So, in spite of the breadth of research proclaiming the benefits of Constructivism, it is still faced with criticisms in its actual practice in the classroom.

Constructivism and a student-centred learning approach

Constructivism has informed student-centred learning approach; serving as a catalyst for practitioners to incorporate constructivist principles of learning in their teaching (Hess &

Trexter, 2005; Schweitzer & Stephenson, 2008). The philosophy of student-centred learning shares the same principles with Constructivism in terms of promoting learners as the architects of their own learning; allowing them to build upon their prior knowledge in assimilating and advancing new learning. In Constructivism, the learners participate and build new knowledge based upon their previous experiences making connections and advancing understanding through social interaction with others. Constructivism promotes a student-centred view of learners who are the key initiators of their own learning, actively constructing knowledge, and making the learner the focus of the learning environment rather than passively receiving knowledge like ‘vessels’ who receive the transmission of knowledge from ‘expert’ teachers (Barraket, 2005; Torrisi-Steele, 2002). By using the learner-centred philosophy with Constructivism, learner characteristics (cultural aspects, prior knowledge and learning styles) are valued as the critical factor in the construction of new meaning and the development of effective and appropriate learning environments (Torrisi-Steele, 2002).

The following points are what make Constructivism student-centred:

- a) It honours and capitalises on students previous practical experiences;
- b) Solicits students’ thoughts on their observation gained from current and past experiences;
- c) Provides students with opportunities to express ‘how come’ or ‘what if’; and
- d) Focuses on students actually testing their answers to the ‘how come’ or ‘what if’ questions and ideas in a practical experience. (Hess & Trexter, 2005, p. 12)

In summary, the main premise of Constructivism is the construction of meaning based on the individual experiences of the students. The emphasis is placed on utilising learning and teaching activities, which promote the construction of knowledge rather than passively receiving it. The tutor shares the power and control with the students in managing the learning and teaching, thus building relationships and facilitates communication. This

signifies a fundamental shift of the roles of both tutor and students in the learning environment. It is considered as one of the components of the theoretical framework of this study because it supports the main principles of a student-centred learning approach. Constructivism connects well with the other theories which follow in this chapter: Adult Learning, Andragogy and Self-directed Learning.

Adult Learning

Although there is a multitude of constructs and concepts that explain the characteristics of adults and how they learn, the focus of this study is on Andragogy and Self-directed Learning. These two theories have been influential in framing the understanding about a student-centred learning approach utilised in mixed-mode delivery. Each of these theories is a phenomenon on its own; however, the underlying philosophy and ideas are very much linked and interwoven.

The prominence of Adult Learning is the result of the different government and international initiatives including the promotion of lifelong learning, deepening and broadening of educational experiences, greater access and participation of returning adult students to tertiary education, use of technology and calls for reforms (Burns, 2002; Eisen, 2005). These trends will continue to grow and will, therefore, impact on the way we deliver education. The research about adult students who have returned to tertiary studies after a period of non-participation in academia may have different conceptions regarding learning, and consequently their approach to study. It is, therefore, paramount to determine what adult students perceived as working best for them in the different learning and teaching processes.

Characteristics of adult learners

The number of mature students (as defined by their age and role in the society) who are returning to study is growing significantly (Cannon & Newble, 2000b; O. Hall, 2006). Most adult students have a diverse mix of demographics and represent a broad spectrum of society. They come from all walks of life and have entered tertiary education later in life, not directly from secondary school. The returning mature student may already be employed with family responsibilities, or are unemployed beneficiaries, with or without formal educational experience. They are re-engaging and participating in studies for all sort of different reasons. “... knowing who and why adult students return to participating in education and on what conditions will help better understand and serve their learning needs” (S. Merriam, Caffarella, & Baumgartner, 2007, p. 53). Some want to further their education and advance their employment opportunities or make a career shift. Familial and cultural attitudes to education may have also influenced their decision to return to study. Some may have had negative educational experiences in their earlier years, or raised a family at a young age or simply could not afford tertiary education. Others may simply want to learn new skills and gain new knowledge to remain updated with the current trends. Apart from the personal motivations for returning to study, different initiatives including promotion of lifelong learning, greater access and wider participation brought about by the emerging technology have also increased the flow of returning adult students. Regardless of whether it is due to life-changes or simply seeking new opportunities, the uniqueness and characteristics of adults should be taken into consideration to ensure quality learning experience for them.

Fenwick and Tennant (2004) argued that “there is no generic, essentialised ‘adult learner’ who can be described in ways that accurately and responsibly portray the myriad

differences between people and the changes they experience” (p. 55). For Knowles, it is the psychological definition that is considered to be the most fundamental from learning standpoint. However, Knowles (1990) discussed that in his point of view, “gaining self-concept of self-directedness start early in life...” (p. 57). On the contrary, Bland (2003) indicated that “biological and maturational factors are less important than life experiences” (p. 6). Knowles (1990) suggested that the learning needs of adult students must be accommodated given their differences in ways of knowing, experiences, learning styles, need for flexibility in terms of place, pace and time in their learning. Similarly, Fenwick and Tennant (2004) argued that it is “the context of a person’s life – with its unique cultural, political, physical and social dynamics – [that] influences what learning experiences are encountered and how they are engaged” (p. 55).

Russel (2006) discussed that the major differences in adult learners when compared with school age children is in the degree of motivation, the amount of previous experience, the level of engagement in the learning process and how the learning is applied. Adults consider themselves as independent, self-directed learners and must, therefore, exercise control, power, autonomy and full responsibility in their own learning processes. They take pride and value their rich reservoir of life experiences that makes their learning processes distinct from the young (Knowles, 1990). They are driven by their intrinsic motivation to improve and further develop themselves (Knowles, Holton, & Swanson, 2005). They return to study upon their own volition without being compelled to do so. They seek relevance and practical applications of their learning. For adult students, the only learning of significance is that which has been appropriated and assimilated into experience (Burns, 2002). The learning activities, therefore, must be based on real-life situations, relevant and applicable to them in the real world. Adults learn best by doing, active participation and incorporation of their

preferred learning style (visual, auditory and kinaesthetic approaches) in the teaching strategies. There is a lot of potential for adult students in terms of their development in their learning, but they require personal and societal support for their potential to be realised (Burns, 2002).

However, the above characteristics may be true for some but not for all adult learners. Rogers (1996) cautioned that educators face a mix of adult students with a wide range of abilities at different ages and stages of development and with their own individual perspectives and different reactions to the changes that each one experiences in life. Educators, therefore, are faced with a wide variety of people bringing their own advantages and disadvantages to the learning situation. Cercone (2008) posited that although adults are considered to be self-directed, independent and have life experiences, they are all different. Rogers (1996) also identified that “some are more adult than others... some grow in different directions at a different pace... some are more experienced than others... they have a wide range of intentions and needs... they are all at different levels or stages of their learning... they all have competing interests... they all have their own variable ways of learning” (p. 71). Rogers discussed further that the uniqueness of each adult learner seems to make the teaching of adults difficult, but conversely the students themselves are the greatest resource in the learning process. The experience that they bring with them could therefore be a barrier or an advantage in the learning and teaching process. Brookfield (1995) also argued that the focus should be more on the significant issues regarding adult learners which include differences in demographics including culture and ethnicity, learning background and life experiences rather than just age. Adult students therefore need to be provided with support and a learning environment that will help them overcome their weaknesses and focus on their strengths that will help them achieve their educational goals.

Principles of Adult Learning

The principles of Adult Learning are seen to be promoting student-centeredness as they cater to the needs of the students in terms of being flexible in what works best for them to optimise their learning experience. These principles provide guidance for adult educators which are based on what constitutes effective learning and teaching as well as statements of value positions for adult education (Foley, 2000). Teaching adults must be built upon knowing how adults learn. In outlining the elements required for Adult Learning, Knowles (1984) also identified aspects of teaching which focused on placing students at the centre of learning. Adult Learning principles show that adult students tend to have a life-task, or problem-centred orientation to learning as contrasted to a subject matter orientation (Knowles, Holton, & Swanson, 1990). Tutors are advised to focus on actively engaging students through more interactive and discursive type of learning and teaching activities rather than the content being taught (Kember, et al., 2003; Knowles, 1984; O'Donnell & Tobbell, 2007). Active participation, which can take many different forms, is the cornerstone for both the style of learning and the principles of adult education (Russel, 2006). Students need to be actively involved and take a high level of personal responsibility in learning. The tutor is expected to provide the rationale for learners regarding '*what*' and the '*how*' of the learning process. Adult learners see the tutor as a mentor, or a guide, rather than a person who is meant to transmit information to them. Educators of adults need to give to learners as much control as possible in the learning process (S. Merriam, et al., 2007). These are all acknowledged in a student-centred learning approach, which is considered to be a fundamental element of teaching adults. Therefore, the more traditional pedagogical model where it "assigns to the teacher the full responsibility for making all decisions about what

will be learned, how it will be learned, when it will be learned, and if it has been learned” (Knowles, et al., 2005, p. 61) is inappropriate for use with adults.

Rogers’ (1996) findings are in parallel with the results of Merrill (2001), who conducted research on the interaction of adult students and lecturers in a university. Merrill (2001) reported that some lecturers found using life experiences as part of the learning process can be problematical as some attitudes held by adults are entrenched, often narrow and some find it difficult to conceptualise and theorise their life experiences (Merrill, 2001). Successful student-centred learning also requires “learners to be aware of gaps in their skills and knowledge, weaknesses and strengths and how they could be handled” (Pulist, 2001, p. 40). Some adult learners may have insecurities with regards to their academic abilities which may impact on their learning. Allowing adult learners’ autonomy therefore may not necessarily lead to successful learning outcomes. Adult students may also feel vulnerable in their transition to higher education if they are a minority with little recent experience of formal education and have additional life pressures and responsibilities to shoulder (O'Donnell & Tobbell, 2007). Their personal worries may get in their way of learning. When these variables regarding adult learners are taken into consideration, adult educators will be better prepared to teach more effectively.

Andragogy

Malcolm Knowles (1990) argued that there are differences in the teaching approaches between adults and children learning. He popularised the term ‘Andragogy’ which was premised on critical assumptions regarding the characteristics of adult learners and certain conditions for their learning to guide adult educators. Andragogy is defined as “the art and science of helping adults learn; while pedagogy is defined as the art and science of teaching

children” (Knowles, 1990, p. 54). Andragogy has taken on a broader meaning and now refers to learner-focused education for people of all ages (Cercone, 2008; Yoshimoto, Inenaga, & Yamada, 2007) and is considered as an alternative pedagogy. On the contrary, the pedagogical model is teacher-directed where the tutor has full control and responsibility for the learning processes and approaches (Knowles, 1990; Knowles, et al., 2005). This means that the teacher makes all decisions pertaining to student learning, and the student accepts it all without question. They rely and accept whatever the teacher teaches them. The application of pedagogy to adults has been seen as inappropriate because adults learn differently from children. Andragogy is seen as an alternative method in teaching adults which is designed to improve their learning experience.

There are critical assumptions propounded by Knowles (1990), which differentiate between the way adults and children learn, their learning characteristics, interests and abilities. Knowles’ (1984, 1990) theory on Andragogy characterised adult learners as being different from the young in terms of their individual needs and learning processes. These assumptions therefore encourage the belief that adults must be taught differently from the way we teach children.

The assumptions of Andragogy (which are parallel to the principles of Adult Learning) serve to guide the adult practitioners and have implications in “the design, implementation and evaluation of learning activities with adults” (S. Merriam, et al., 2007, p. 85). The assumptions contend that as an individual matures, they prefer to be more independent and autonomous, thereby self-directed in their learning. Adult learners also prefer learning that can be immediately applied straight away in their lives. Andragogy enables the deeper understanding of the characteristics of adults and how different they are in

their learning processes. However, although the critical assumptions of Andragogy are anchored on the characteristics of the adults and their learning process, Imel (1995) posited that the andragagogical model has clear implications for teaching because of the differences in the way adults and children should be taught. What the assumptions mean in practice is that educators have the responsibility to know which assumptions are realistic and appropriate in a given situation (Knowles, 1990). The learning context such us the environment, resources, content to deliver and personal goals of the learners influence the decision as to which teaching approach is used (Imel, 1995). The adult educator who acts as the facilitator still needs to provide the appropriate framework in order for adult learners to grow in their learning (Cercone, 2008). Likewise, the provision of a positive learning environment is necessary to facilitate the differences in the way adults approach their learning.

Criticisms of Andragogy

The theory and application of andradogy has prevailed for many decades, but not without questions regarding its validity by educationalists and psychologists. Differing views from the opponents of Andragogy indicated that andragagogical approach can be applied to all ages, both for adults and the young. Others point out the difficulty in applying the theory to practice. Knowles eventually modified his stance regarding the dichotomy between pedagogical and andragagogical assumptions. He later posited “that pedagogy – Andragogy represents a continuum ranging from teacher-directed to student-directed learning and that both approaches are appropriate with children and adults, depending on the situation” (S. Merriam, et al., 2007, p. 87). The modification, as evidenced in Knowles’ later works, is that Andragogy now appears to be situation-specific and not unique to adults (S. Merriam, et al., 2007).

M. Lee (2003) who examined the perspectives and experiences of adult immigrant learners, identified similar criticisms from other writers in her analysis of Andragogy. According to M. Lee (2003), Knowles' discussion on the role and impact of context in shaping the learning process was limited to the individual Western learners and other socio-cultural factors. Knowles focused on the individual learner as one who is autonomous, free and growth oriented failed to clarify how people's multiple socio-historical and cultural contexts and identities (race, class, gender, nationality, communities and the larger political and socio-cultural milieu) may actually affect their views of learning and the learning process irrespective of the individual learner (M. Lee, 2003; S. Merriam, et al., 2007). On the contrary, Roberson (2002) disputed this claim indicating that Knowles' perspective does not appear to be culture bound and has been successfully implemented in various countries and socio-economic backgrounds as well as in technical sciences and humanities. Regardless of Knowles' modification and the predicted failure of Andragogy by some, Knowles' argument that adults learn differently from children and therefore should be taught differently still remains a very influential assumption.

Self-directed Learning

A programme utilising the mixed-mode approach has some components delivered in face-to-face settings while the majority of the learning is self-directed. Self-directed Learning (SDL) is central to and has been one of the seminal concepts that underpin Adult Learning and mixed-mode delivery. According to Merriam et al. (2007), "being self-directed in one's learning is a natural part of adult life" (p. 110). The notion of adults directing their own learning rather than having it directed by teachers has been linked in facilitating the learning of adults (Foley, 2000; Knowles, et al., 1990; Leach, 2000, 2003; S. Merriam, et al., 2007). In

fact, some of the available literature suggests that a large majority of Adult Learning is self-directed learning.

The concept of Self-directed Learning

Self-directed Learning is a combination of factors related to giving learners responsibility and autonomy of choices over ‘what’, ‘how’ and ‘when’ to learn (Burns, 2002; Leach, 2003; Terry, 2006). SDL has been defined as a goal, a process and a personal attribute (Baumgartner, 2003; Kerka, 2005; S. Merriam, et al., 2007). The authors postulated that Self-directed Learning is a process wherein students take initiative and control in planning, implementing and assessing their learning capabilities and processes. Knowles (1975) also defined Self-directed Learning as “a process in which individuals take the initiative, with or without the help of others, to diagnose their learning needs, formulate learning goals, identify resources for learning, select and implement learning strategies and evaluate learning outcomes” (p. 18). His view is that learners become increasingly more self-directed as they mature. Similarly, Hiemstra (1994), Brocket and Hiemstra (1991) and Brookfield (1993, 1995) see it as a gradual development of the ability in which adult learners take control of their learning, able to work independently or with others and take full responsibility and initiative in managing their own learning processes as well as evaluating their effort and progress. This means that the learners take full responsibility in making decisions about when, what and how to learn.

The three goals of Self-directed Learning have been identified as: a) “to enhance the ability of adult learners to be self-directed in their learning; 2) to foster transformational learning as central to Self-directed Learning; and 3) to promote emancipatory learning and social action as an integral part of Self-directed Learning” (S. Merriam, et al., 2007, p. 107).

Within these goals the development of self-direction for learners is seen as an aim that promotes emancipation, transformation and self-determination. Adult educators, therefore, play an important role in achieving these goals by facilitating a learning environment that will allow adult learners to manage and critically reflect on their own learning. Lastly, Self-directed Learning can be seen as a ‘personal attribute’ and a personal characteristic of the learner associated with other variables such as educational level, creativity, learning style, and so on (Baumgartner, 2003; S. Merriam, et al., 2007). However, although adult learners are able to manage and control their own learning, a great deal of motivation, focus, direction, self-control and readiness is required (Terry, 2006).

Definition of Self-directed Learning

How Self-directed Learning is defined has caused confusion, some of which is not generally accepted by a number of authors. The presence of different and varying definitions of Self-directed Learning was confirmed in Candy’s 1991 investigation, which proposed four distinct but integrated and inter-related dimensions:

- a) Personal autonomy - SDL as a person attribute;
- b) Self-management - SDL as the willingness and capacity to conduct one’s own education;
- c) Learner-control - SDL as a mode of organising instruction in formal settings; and
- d) Autodidaxy - SDL as the individual non-institutional pursuit of learning opportunities in the “natural society setting”. (Candy, 1991, p. 23)

The differences in definition also show that Self-directed Learning can be construed as learning independently with the help of learning resources, as well as learning with the help of others (Leach, 2000). Students are given research, homework and assignments and are provided with different kinds of resources in various media, which include CDs/DVDs and

videos, workbooks, supported with online learning and email to support them with their course with very little face-to-face instruction. Despite the variety of definitions, the learners are still considered to be capable of developing into a self-directed learner although the extent of growth may diverge due to the uniqueness of each individual (Williamson, 2007).

A combination of different personal, institutional and situational variables impacts on the ability of the learner to be autonomous in their learning (S. Merriam, et al., 2007). Adult educators must have a facilitative and enabling style where much control of the learning process is shifted to the adult learner (Kerka, 2005; S. Merriam, et al., 2007). The role of the tutor is to ensure that students are aware of their responsibilities in their learning process. Their role remains vital in providing support and guiding the students' ability to work on their own. The tutor must foster self-directedness and assist students to learn from the learning resources provided (Leach, 2000; Nordgren, 2006). Likewise, educational systems and the social context needs to build the foundation and conditions for learners to foster self-directedness (S. Merriam, et al., 2007).

Self-direction requires a special set of characteristics and attributes on the part of the adult learners for them to be successful (Brookfield, 1995). Adults return to study for all sorts of different reasons (personal, familiar, leisure and professional), which drive and motivate the adult learners inspite of the challenges of unstructured learning in SDL. Candy (1991) also stipulated that "self-directed individuals are those who exhibit the qualities of moral, emotional and intellectual autonomy" (p. 19). Similarly, Cercone (2008) described the characteristics of self-directed learners which include "independence, willingness to take initiative, persistence in learning, self-discipline, self-confidence and the desire to learn more" (p. 148). Brookfield (1985) summed it all up by saying that: "self-directed learners are

those who are able to have undivided control over their learning ... [with] ... minimum assistance from external sources" (p. 7) as well as being goal-oriented. Having an understanding of the complex motivations of adult learners and their individuality will influence how best to approach adult education.

Criticisms of Self-directed Learning

Some research has doubted and questioned the value of Self-directed Learning. One of the weaknesses of SDL is the feeling of isolation experienced by the students. Candy (1991) indicated that maximising the learning opportunities of every individual learner must be achieved within a social context, not in isolation. Likewise, Brookfield (1995) lamented that the ‘self’ in self-directed is a socially formed self and that learning is a collective process. Contrary to this idea, Merriam and Caffarella (1991) argued that it “does not necessarily mean learning in isolation – assistance is often sought from friends, experts and acquaintances in both the planning and execution of the learning activity” (p. 55). Thus, SDL is seen as learning on one’s own or learning with others. In addition to this, Brookfield (1985) also raised the issue of the quality of pursuing learning in a fast and easy way on the part of the learners and the conception of diminished responsibility on the part of the adult educator.

Various authors have also questioned whether all adult learners are indeed capable of being self-directed. The common notion of adult learners as self-directed learners maybe true for some but not all have developed the skills of being self-directed, fully responsible for their learning and may still prefer structure, interaction, guidance and direction in their learning process by another more capable and knowledgeable person, in most cases the teacher (Brookfield, 1993; Cercone, 2008; Terry, 2006; Zepke & Leach, 2002). This maybe more true of adult learners who have been out of the formal academic structure for quite

some time. Some adult students are incapable of engaging in self-directed learning due to lack of independence, confidence, or resources (Brookfield, 1993; Zepke & Leach, 2002). Likewise, Kember, et al. (2003) also argued that exposure to learner-centred teaching that facilitates self-direction does need to be handled carefully and developed gradually as the students will feel as though they are being thrown in the deep end if they are not ready for it. This type of adult student needs to be gradually transitioned into self-directed learning, allowing them to develop the confidence to manage their own learning. Burns (2002) indicated that “it usually takes more careful and detailed planning and structure to support and shape the individual’s learning or developmental efforts than are required in more traditional learning operations” (p. 274). There are also less mature adult learners who may still prefer a tightly controlled curriculum with clear direction as to what to study over self-direction (Burns, 2002). They may be self-directed in some situations but not in all. This means that the adult educators need to be able to facilitate a learning environment where the diversity of learners’ readiness for self-directed learning is accommodated.

Brookfield (1993, 1995, 1985) raised a number of issues regarding the understanding of the concept of self-direction as a defining concept of Adult Learning. The author argued that the cross-cultural dimension, political concept and social construction of self-directed learning have been almost completely ignored. Self-directed learning has also been criticised as focusing on Western values while ignoring cultural diversity and their approaches to independent learning (Baumgartner, 2003; Brookfield, 1993; Kerka, 2005). The complex realities of having various ethnic groups is being oversimplified by simply referring to the binary split between the white and non-white (Brookfield, 1995). Brookfield argued further that there is a need for many more cross-cultural perspectives and understanding of inter-cultural differences, not just Western dominance in Adult Learning research. There is a need,

therefore, “to consider the context of learning and understand that culture and society shape the adult learner and add to his or her individuality” (Cercone, 2008, p. 151). Providing a culturally relevant learning and teaching is an important aspect that must not be ignored as it forms part of the way some students learn and create meaning.

The different aspects of Adult Learning have been presented through the preceding review of Constructivism, Adult Learning, Andragogy and Self-directed Learning. These theories, considered to be the pinnacle of Adult Learning demonstrate strong connections and overlapping fundamental principles with a student-centred learning approach in a mixed-mode delivery. The concepts of the theories, with their strengths and weaknesses, underlie the practice of a student-centred learning approach to adult learners. The emphasis is placed on the learner and their learning process rather than the teacher and the content, which connects well with the principles of a student-centred learning approach.

Student-centred learning approach

The following literature gives an overview of student-centred learning, the distinction between a teacher-centred versus student-centred approach, an overview of the potentials and pitfalls and the research investigating its application and findings in different educational contexts, levels and fields of study.

Student-centred learning approach: Concepts and principles

The key feature of a student-centred approach (also used interchangeably with a learner-centred approach) is the shift from teaching to learning, with an emphasis on the learner and a deeper understanding of the learning process as opposed to delivery of content

(K. Brown, 2003; Cullen & Harris, 2009; C. Hall & Kidman, 2004; McCombs & Whisler, 1997). Firstly, having an understanding of who the learners are, what their aspirations and motivations are, facilitates the building of a good relationship and communication with them. This is essential in helping the learners feel connected, supported and respected by the tutors and peers in their learning (Brandes & Ginnis, 1986; Gibbs, 1992b; McCombs & Whisler, 1997; C. Rogers, 1969). Secondly, focusing on the students' learning process helps in understanding their learning preferences and their motivations for learning. Student-centred teaching approaches are designed to give students a highly flexible system of learning which requires them to have a high degree of responsibility in managing their learning (Brandes & Ginnis, 1986; Ellington, et al., 1993; Gibbs, 1992b; Guest, 2005; McCombs & Miller, 2007). Tutors employ various teaching approaches that are relevant to the students and help promote the achievement of their learning goals. McCombs (1997) emphasised that if all the systems that support the learning of the students are in place, there is a higher potential for the development and achievement of better educational outcomes for the students.

McCombs (1997) summarises the premises of a student-centred learning approach as:

The learner-centred model focuses equally on the learner and learning. The ultimate goal of schooling is to foster the learning of learners; and learners learn best when they are an integral part of the learning equation. This means that the following are recognised and taken into account in student's learning experiences: the relevance and meaningfulness of what students are being asked to learn, students' distinctiveness and uniqueness, the support available to students from the environment, the relationships within which students' learning occurs, and educator's beliefs about the naturalness of students'

learning. It is by focusing on what is known about both learners and the learning process that educators gain a chance at having each student meet high academic standards. (p. 14)

Likewise, Lea, Stephenson and Troy (2003) summarised the tenets of a student-centred learning:

- a) Reliance upon active rather than passive learning;
- b) An emphasis on deep learning and understanding;
- c) Increased responsibility and accountability on the part of the student;
- d) An increased sense of autonomy in the learner;
- e) An interdependence between learner and teacher;
- f) Mutual respect within the learner-teacher relationship; and
- g) A reflexive approach to the learning and teaching process on the part of both teacher and learner.

An earlier learning theory relevant to a student-centred learning approach is Carl Rogers' philosophy which is reflected in the research of McCombs and Whisler (1997). Rogers (1965) developed propositions for client-centred therapy and applied these to education. He conceptualised student-centred learning as parallel to client-centred therapy (Knowles, 1990; Knowles, et al., 1990). His humanistic and phenomenological theory has significant impact on the process of learning. Rogers sees "learning as a completely internal process controlled by the learner and engaging his whole being in interaction with his environment as he perceives it" (Knowles, 1990, p. 42). The personal growth and development of the learners is demonstrated by the quality of their learning experience. Rogers argued that learning is more effective if the students are given problem-solving tasks which are based on their real-life experiences.

Rogers' (C. Rogers, 1965, 1969) hypothesis and principles on significant learning centred around facilitation of learning and creation of a learning environment where the tutor is seen as a resource with an interpersonal relationship with the learner. The facilitator relinquishes power by providing a positive non-threatening learning environment where students gain control over the course of their own learning. This was supported by Ng, Murphy and Jenkins (2002) who agreed that in a student-centred perspective, the learner's experience/ needs and the learning process are valued; and balanced emphasis is placed on the cognitive and affective domains in the learning process.

The facilitation of significant learning also rests upon certain conditions and attitudinal qualities that exist in the personal relationship between the facilitator and the learner (Kirschenbaum & Henderson, 1989; C. Rogers, 1969). This requires special characteristics and attributes from the facilitator: realness or genuineness, acceptance, prizing and trust, empathy and congruence (C. Rogers, 1969). Rogers discussed the effectiveness of the tutor in promoting and facilitating learning as dependent on the attitudinal qualities demonstrated to the students rather than the teaching techniques employed. The relationship with the students developed when the tutor demonstrates genuine concern and establishes connection with the students by making an effort to get to know them, recognise their uniqueness and individuality and understand their shortcomings as well as potential. Cannon and Newble (2000b) also posited that the way the tutor relates to the students and the way in which the tutor helps the students relate to each other is vitally important in enhancing student learning.

However, Rogers (1969, 1983) also realised that the concept of sharing of power in a student-centred approach to learning can be threatening to both students and tutors saying

that being a facilitator of learning is risky. It may mean uncertainties, difficulties, setbacks – at the same time also exciting human adventures as students begin to develop (C. Rogers, 1969). Roger's hypotheses have since been the subject of several studies that have explored student-centred learning approach with a view on looking at facilitation of learning as the purpose of education.

Building on Rogers (1969) principles of student-centred learning, Brandes and Ginnis (1986) contributed a further set of principles:

- a) The learner has full responsibility for their own learning;
- b) The subject matter has relevance and meaning to the learner;
- c) Involvement and participation are necessary for learning;
- d) The relationship between learners is more equal, promoting growth and development;
- e) The teacher becomes a facilitator and resource person;
- f) The learner sees their self differently as a result of the learning experience; and
- g) The leaner experiences confluence in their education.

In addition to the above, Gibbs (1995), highlighted the critical aspects of negotiation in the learning process. Sharing the responsibility in negotiating and deciding what to learn and how to learn to suit the individual needs of the students allows flexibility regarding how best they can achieve their learning goals. Gibbs further explained that by promoting negotiation with the tutor, students should have more input into:

- a) What is learned (goals);
- b) How and when it is to be learned (the methods and schedule);
- c) What conditions under which the student is learning;

- d) With what outcome (the assessment product or evidence);
- e) What criteria and standards are used to assess the outcome;
- f) What judgments are made (the marks or grades); and
- g) By whom these judgments are made.

The notion of the individual student to have ownership, accountability and full responsibility for their learning are recurrent in the work of Rogers (C. Rogers, 1965, 1969), Brandes and Ginnis (1986), Gibbs (1992b) and Mc Combs and Whisler (1997). Undoubtedly, as discussed above, different influential authors have attached different sets of principles to a student-centred learning approach. This has implied different interpretations of a student-centred learning approach. However, despite its varied representations and differences, the crux is that the student is at the centre of the learning process. The research seems to indicate that student-centred learning is a means of promoting and enhancing the quality of the learning experience of the students.

Teacher-centred approach versus student-centred approach

The teacher-centred approach and student-centred approach are always described as two opposite ends of a continuum. They are seen to be mutually exclusive, arising from contrasting paradigms that differ in their underlying philosophies, methodologies, motivational orientations, assessments and student interactions (Ellington, et al., 1993; Giles, Ryan, Belliveau, & Casey, 2006). The traditional teacher-centred mode of instruction is still the dominant teaching strategy used in higher education because it is time tested and the most supported approach in most institutions. To many, didactic methods which are subject-centred are safe, natural, comfortable and appropriate (Brandes & Ginnis, 1986). It is still considered as an effective means of learning, with full opportunities for interaction between

the instructor and students (Kim, 2007). On the contrary, Biggs (2003) argued that “traditional teaching methods such as lectures, tutorials and private study do not in themselves provide much support for higher learning” (p. 5).

Furthermore, in a traditional teacher-centred approach, the course is delivered to a group of students arranged in such a way where the focus of the attention is the tutor, at a predetermined time and place, face-to-face. It is chiefly associated with the transmission of knowledge where the focus is more on delivering content, disseminating necessary information to receptive minds, than on students processing the information or in supporting students in their learning (Blackie, Case, & Jawitz, 2010; Brandes & Ginnis, 1986; K. Brown, 2003; Huba & Freed, 2000). The effectiveness of the delivery of the tutor is perceived to be dependent on their personal attributes – their skills, experience and ability in delivering the content. The ‘how’, ‘what’, ‘why’ and ‘when’ of the different learning and teaching activities are decided and organised by the institution and tutor. There is no input from the student. The evidence of success is when a student passes the prescribed test or assessment set by the tutor or the institution. This is similar to the quantitative orientation towards learning and teaching as presented by Biggs (1994) where teaching is conceived as transmitting knowledge that students need to internalise and be able to reproduce accurately during the assessment.

However, Teh and Brandes (2002) support the view that in order to facilitate the mastery of learning skills, “students need to be involved in the planning, organisation and evaluation of their work so that they feel directly responsible for the learning outcomes they achieve” (para. 2). The authors argue further that a sense of ownership enables more successful learning outcomes and consequently makes the students collaborators and partners in the learning process. Such an approach provides empowerment as well as responsibility to

students. While the traditional teacher-centred approach values human interaction and participation, it has always concentrated on the low-level thinking while the employment market demands critical skills that will enable graduates to perform in a complex workplace environment. Another constraint is the requirement for the students to be in the classroom on designated days and times, making it difficult for certain students (Kim, 2007). Indeed, both teacher-centred and student-centred approaches have great potential but also suffer from limitations. Cornelius-White and Harbaugh (2010, p. xxiv) presented a table contrasting the Learner-centred facets with Traditional facets.

Table 2.2

Distinctions Between Student-centred and Teacher-centred Approaches

Learner-Centred Approaches	Traditional Approaches
• Person-centred	• Curriculum-centred
• Self-directed	• Teacher-directed
• Democratic	• Hierarchical
• Child-centred	• Teacher-centred
• Process (how)	• Content (what)
• Constructing understanding	• Covering subject matter
• Inquiry based	• Knowledge based
• Thinking	• Memorizing
• Relationship	• Instruction
• Experiential methods	• Lecture
• Cooperation	• Competition or individualism
• Active	• Passive
• Learning	• Teaching
• Criterion referencing	• Norm referencing
• Showing	• Telling
• Facilitating	• Professing
• Liberatory pedagogy	• Banking model

Student-centred education is about effective teaching and good teaching practice using teaching methods consisting of activities, techniques, and skills that bring about effective learning (O'Sullivan, 2004). Student-centred instructional methods include discussion, group work, ‘community of learners’ strategy, role-playing, simulation, experiential learning, problem-based learning, cooperative (team based) learning and case-method teaching that require critical or creative thinking (Burns, 2002; Hativa, 2001;

Michael, 2006). Examples of student-centred assessments include: diaries, logs and journals, portfolios, peer/self-assessments, learning contracts and negotiated assessments, group work, self-directed learning kits and action research projects (Burns, 2002; Sparrow, Sparrow, & Swan, 2000). These strategies should be integrated with the traditional lecture method and with one another when used in the classroom. Student-centred learning approach “is not necessarily intended to replace existing methodologies but provide a framework for a variety of teaching methods geared to enhance learning” (Pulist, 2001, p. 40). The learner-centred instructions likewise, focus on the learner and the learning process. The teacher’s role in these methods is that of a facilitator, director, consultant or moderator. When employing these methods, students talk and listen, interact with others, communicate and collaborate with the other students in class, which can enhance their learning. This is similar to the qualitative outlook which refers to the process of learning where students are taught to actively construct knowledge and understanding by incorporating what they already know. This creates more meaningful learning (Biggs, 1994).

In a student-centred classroom, both students and tutors work together in designing the learning activities that are relevant and meaningful to the students. Students can be observed working individually or interacting with others to actively construct their own knowledge – discover meaning and create a personal perspective – by being engaged in tasks and projects that are indicative of real-world activities (K. Brown, 2003; Knowlton, 2000; McCombs & Whisler, 1997; Sparrow, et al., 2000). Students are able to negotiate for the activities and learning outcomes so the curriculum may be planned differently for each student to meet their individual choices and needs and at the same time giving them a sense of responsibility and ownership (Alfassi, 2004; K. Brown, 2003; Gibbs, 1992b; McMahon & O'Neill, 2005; Sparrow, et al., 2000). This means that students need to assume a high level of

responsibility and motivation as they will be actively choosing their goals and managing their learning (Sparrow, et al., 2000). They must be fully engaged in the planning, decision-making and evaluation of their learning processes. Personalised attention to the learner to meet their learning needs and the necessary support is a key feature of the learner-centred approach (Alfassi, 2004). However, the teacher's expertise is still a powerful part of the learning equation (K. Brown, 2003). The tutors will still need to provide the guidance and resources for students to develop their thinking and skills to a higher level.

Student-centred learning approach: Overview of potentials and pitfalls

The application of a student-centred learning approach in different learning environments and educational contexts is well researched and investigated. There are contrasting perspectives that describe the effectiveness and criticisms regarding a student-centred learning approach. There are issues with its application, thus it cannot be assumed that a successful implementation of a student-centred learning approach in the classroom will automatically occur. Weimer (2002) emphasised this by saying that “although the promised benefits [of student-centred learning] are real, they are neither immediate nor automatic” (p. 150). Employing a learning and teaching approach where the learner is at the centre of the learning process does not just happen (Michael, 2006). The evidence shows that academics and students do not readily embrace a student-centred approach as it may involve a fundamental change in perceived learning and teaching practices. There must be commitment from stakeholders to enable the changes to happen (K. Brown, 2003). Thus, in spite of its popularity and the enthusiasm from across disciplines and at various educational levels, the application of learning and teaching approaches underpinned by a student-centred learning philosophy has not been fully successful.

Regardless of the benefits of a student-centred learning approach, several researchers have argued that it also suffers from many limitations and criticisms. Not only are there divergent views about the meaning and nature of a student-centred learning approach, the question of how it would look like in practice is not clear and much more difficult to address. Apparently, how student-centred learning is defined is simplistic and has led to confusion on its implementation (Farrington, 1991; Geelan, 1996; Lea, et al., 2003; McMahon & O'Neill, 2005). In earlier research, Geelan (1996) questioned the use of the metaphor ‘centre’ on ‘student-centred’ or ‘teacher-centred’; what constitutes ‘centre’ and what it means. He argued that the term is ambiguous and could possibly mean authoritarian control, authoritative knowledge and educational relationship to different people. Equally, principles which include ‘students being responsible for their learning’, ‘acknowledging diversity and prior knowledge’, ‘catering to the individual needs of the students’ were challenged as to how much freedom the students are allowed, how does one teach if each student has different strengths and weaknesses and prior learning, how much direction the tutor must have or not have in the learning process, and where the balance is between what is good for the students and what they want to learn (Hansen & Stephens, 2000; Knowlton, 2000; Sparrow, et al., 2000).

Likewise Knowlton (2000) critically asked if the teacher is removed as the centre of the classroom, what sort of processes will keep students in the centre? Sparrow et al. (2000), also argued the need to address some assessment concerns, recognising students’ prior experience and support in analysing the learning needs of the students. The real difficulties with implementation were also supported by Hansen and Stephens (2000) who indicated that that the reality and practice in most classrooms still show that the lecture format remains as the prime teaching method. Changing the way students learn is also difficult unless they are

motivated to focus in maximising their learning. Likewise, Geelan (1996) argued that catering to the individual learning needs and styles of the learners by adopting different approaches was not an easy task when put in practice.

Amidst these criticisms, Cullen and Harris (2009) succinctly point out:

It is essential to keep in mind that the shift to a learner-centred academic environment will necessitate change and change can be uncomfortable.

However, if those in leadership are willing to commit necessary resources to ‘educate, educate, educate’ all parties involved, administration, faculty and students, then the process can become one with a shared goal, a shared vision, and subsequently a greater sense of ownership for all involved and a greater chance of success. People support what they help to build. (p. 121)

Investigations on the implementation of a student-centred learning approach

The use and implementation of a student-centred learning approach in different learning contexts, fields and levels has produced variable results. There is an extensive body of literature investigating the application of a student-centred learning in relation to programme delivery, curriculum design, methodology, assessments, acceptance from tutors and students, pedagogy, institutional support and other contexts. While it has been proven effective in terms of developing the cognitive and affective aspects of learning in some research, student-centred learning is still fraught with contradictory evidence in other studies. The following discusses the early and recent research on the implementation of a student-centred learning approach.

The early research of Felder and Brent (1996) presented mutual positive outcomes from both faculty and students regarding the use of student-centred teaching instructions and methodologies in the field of Financial Accounting. The students found the experience to be beneficial to their learning with improvement of critical thinking skills, and the development of independence, confidence, collaboration, more responsibility and active participation. The outcomes for the teachers included being flexible, open to new interesting and challenging way of presenting the syllabus. Developments of collaboration, discovery and critical thinking while at the same sharing control with the students were the highlights for the teachers. The authors acknowledge that while the benefits of a student-centred learning approach are real, they do not happen easily and may take a while before results are apparent. But nevertheless, they argue that it is an effort well worth making.

Lea, Stephenson and Troy (2003) investigated undergraduate psychology students' perceptions of a student-centred learning approach and reported that students generally held very positive views although they were unfamiliar with the concept. However, a proportion of the students expressed their cynicism and concern around inadequate resources, lack of structure, guidance and support and who appeared to believe that student-centred learning initiatives were driven by political agenda rather than by a genuine commitment to improving learning and teaching (Lea, et al., 2003). These findings are consistent with another study conducted by Girgin and Steven (2005) on the evaluation of their attempt to create a student-centred classroom in a Turkish University. The participants gave remarkable feedback in relation to how much they enjoyed student-centred activities and their improved learning. However, the research also highlighted limitations on the use of student-centred learning methods. From the teachers' perspective, they feared having less control over the students and their learning outcomes and not being able to cover the content. On the part of the

students, they were still “accustomed to the transmission view of learning and teaching [through] lectures, memorisation of knowledge [with] instructors as the single authority in the class” and “feared not learning as much” (Girgin & Stevens, 2005, p. 64).

O’Sullivan’s (2004) research on the attempts to implement student-centred education in Namibia highlighted the impediments and resultant failure. Some of the reasons cited included lack of capability and skills of the teacher who found it difficult to shift their focus from the teacher to the learners; an unsuitable physical learning environment, lack of learning resources, limitation of learner’s background and previous knowledge to the traditional rote learning only, and cultural factors where the relevance of the Western developed learner-centred approach to a developing country was challenged. There were practices which were in stark contrast to student-centred learning approach that were considered to be the norm and culturally appropriate.

Barraket (2005) conducted a case study on the implementation of student-centred learning in a social research methods course at masters level where a combination of different teaching methods were used: “interactive group work, case studies and problem based learning and activities based on real-life” (p. 64). The research found that the use of student-centred learning and teaching methods had a positive effect on student performance, learning experience and subject evaluation. The techniques employed facilitated a strong social context for learning with dialogues and interaction. The assessment results positively showed strong engagement of the subject matter and student feedback was positive. The findings are consistent with O’Neill and McMahon (2005) who reviewed a number of studies on student-centred learning and found a majority favoured it as an effective approach to learning. Barraket (2005) stated that “the analysis also found that students continued to place value on

more formal teaching methods, and that the value of student-centred techniques in this case rested on the way in which they were integrated with more didactic teaching practice” (p. 64).

Other studies have investigated the use of student-centred learning approaches combined with e-learning, multimedia and other computer-aided instruction to achieve more meaningful and effective learning process (e.g. Miller, 2001; R. Motschnig-Pitrik & Derntl, 2002; R Motschnig-Pitrik & Holzinger, 2002; Pedersen & Liu, 2003). The results of these studies showed that both the students and facilitators demonstrated an enriched learning experience in the use of new media and technology combined with a student-centred learning approach. However, there is also empirical evidence indicating no significant difference in students’ performance between teacher-centred and student-centred approaches in a technology enhanced learning environment. Halcomb and Rogers (2002) conducted an investigation on the attitude, behaviour and achievement of students where educational technology was used in classroom practices. They concluded that student performance is not determined by what the instructor does or does not do in the classroom, but by what the students do that determines whether learning occurs.

Adding to the debate is the perspective that student-centred learning principles will only be effective if balanced with the teacher-centred approach. Giles et al. (2006) conducted an experimental study using both teacher and student-centred approaches to assess the influence of teaching style on student learning and found that students who achieved 90 percent or higher in their last mathematics course performed better in the student-centred class. On the other hand, students who achieved less than 60 per cent or higher in their last mathematics course performed better in teacher-centred class. This demonstrates that a particular teaching style, whether teacher-centred or student-centred, works for certain types

of students only. The authors recommended a need to balance teacher-centred and student-centred learning and teaching activities in a class to successfully improve the learning of the entire class.

The research conducted by Bell (2003), Walmsley (2003) and Barraket (2005) also demonstrated that the balance tutors create between tutor-centred and student-centred pedagogies influences students' perceptions of the learning situation, and ultimately how and what they learn in the classroom. The concept of partnership-centred learning promotes autonomy and independence and a more optimal learning and teaching strategy for the required dynamic balance between teacher exposition and student autonomy in technology classrooms (Bell, 2003; Walmsley, 2003). In a similar vein, the survey research conducted on teacher-centred and learning-centred approaches in Belgian universities by Elen, Clarebout, Leonard, and Lowyck (2007), confirmed that these two approaches are not the extremes of a continuum but are closely related dimensions, mutually reinforcing the features of a learning environment. The students in the survey perceived high quality education as the same for both student-centred and teacher-centred approaches with the latter offering safe challenges.

Chapter summary

This chapter has attempted to describe the theoretical framework that has guided the study being undertaken. Both the theoretical and philosophical foundations that underpin student-centred learning as well as research evidence have been presented. The literature review attempted to establish a connection between the different constructs of quality, conceptions of learning and teaching and the theories relevant to student-centred learning

which include Constructivism, Adult Learning, Andragogy and Self-directed Learning.

Underpinning the different theories is a common perspective that places the learner and their learning process in the centre of pedagogical practice, which is then linked to the aim of improving the quality of learning and teaching. Since these theories are intertwined with student-centred learning, their application in a mixed-mode delivery is critical. The constructs and theories though distinct are parallel in their principles which have been used to frame the boundaries of this study.

The review also identified important gaps in the implementation and practice of a student-centred learning approach in different modes of delivery and contexts from the various research. Student-centred learning has been embraced by some academics and institutions on the strength of its benefits and advantages. However, contentious issues, limitations and weaknesses of student-centred learning still prevail. There is a lack of convincing findings from the research conducted concerning a successful implementation of a student-centred learning approach in the classroom.

To the extent of the literature reviewed, the author has found no previous study that seeks to examine the perceptions of the adult students and tutors engaged in mixed-mode delivery regarding the degree of student-centeredness of the learning and teaching practices and the impact these have in enhancing the quality of the educational experience of the students. It is, therefore, critical to investigate the perceptions of the two most important stakeholders in education – the tutors and students, regarding the intentions of this research. The need for further research on the context of how student-centred learning is implemented with adult students in a mixed-mode environment as well as how this impact upon the quality

of learning and teaching becomes even more pressing. There is a gap in the literature which this research seeks to address.

Chapter 3 will examine the different models and framework of a student-centred learning approach from previous studies. It includes the development of the conceptual framework that describes the approach for this research.

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CHAPTER 3

Conceptual Framework

Introduction

Having discussed how the relevant literature has helped establish the theoretical framework of this study, this chapter presents the development of the conceptual framework which integrates concepts, ideas and principles from other established frameworks. It begins with a review of four selected models followed by the proposed integrated framework developed and adapted for the purpose of this research. The preceding chapters and the proposed conceptual framework provide the fundamentals and direction of this research.

Review of existing models and frameworks relevant to this study

In developing the conceptual framework for this study, four relevant models and a framework for understanding and implementing a student-centred learning approach were examined for their usefulness and applicability. The first framework examined was Miller's (2001) person-centred model of instruction which was used to evaluate whether a web-based course met the needs of a person-centred learning experience as described by Rogers (1965, 1969). Although the framework was developed for a web-based course, an analysis of its content showed that it could be applied to other modalities as well. The framework of criteria used by Miller (2001) in his study is presented in Table 3.1.

Table 3.1

Person-centred Instructional Approach Criteria for Web-based Courses

Criteria	Criteria Description
1	The course provides an emphasis on the learners' interests, personal ability and prior knowledge of the instructional topic.
2	The facilitative instructor should connect students' knowledge and interests with content principles of the course.
3	The facilitative instructor should select an environment that supports collaborative learning and control.
4	The facilitative instructor allows students to develop individually achievable objectives based on their interests and abilities within the context of the course. This could be done in the form of a written contract with the facilitative instructor.
5	The facilitative instructor allows students to develop forms of self-evaluation to demonstrate significant learning based on the individual students' learning objectives.
6	Learners work with the facilitative instructor to organise the areas of interest to cover so he or she can meet the needs of the students' learning objectives and maximize their learning potential.
7	The facilitative instructor identifies, selects and presents to the learners resources to enhance their learning experience.
8	The learners conduct self-evaluation based on their individual learning objectives outlined in their learning contracts. The self-evaluation should show the significance of the learning experience and could also provide focus on levels of personal involvement, self-initiated involvement and learners' pervasiveness.
9	Outcomes of the course should show significant learning. This could include an accumulation of knowledge on the topic, satisfaction in the learning, desire to master the experience and a greater understanding of any problem and potential resolutions within the content. The learner should also experience increased levels of self-actualisation.

(Miller, 2001, p. 280)

In Miller's study, the students were asked to evaluate the web-centric course against the above nine criteria. The objective of Miller's research was to determine whether the web-based courses are aligned with the different components of Roger's person-centred learning theory which promotes placing the student at the centre of learning and teaching. Likewise, it also aimed to enhance classes by helping instructors and instructional designers align their

approaches to Roger's theory of learning. The criteria for Miller's framework as presented on Table 3.1 were developed based upon Carl Roger's person-centred learning theory which includes: tutor taking the role of a facilitator, focus on student-tutor relationship, and focusing on the needs of the learners. Miller (2001) concluded that Roger's person-centred theory was applicable and relevant in non-traditional classes and other modes of delivery, which is what web-based courses are. Miller (2001) indicated that "the major focus of Roger's learning theory is that the learning should be student-directed and web-based courses provide fertile ground for student-directed learning" (p. 280). The author discussed further that web-based courses are considered to be student-centred as they help to promote self-development among students and to become active, creative and collaborative learners. Thus, his study aimed to find the potentials of a web-centric course in achieving educational outcomes and learning opportunities.

The course selected for Miller's study was a combination of web-based instruction, where the majority of course materials are available via the web site "through mini lectures, relevant web site links, and threaded discussion features for discussion of course readings and collaborative instruction" (Miller, 2001, p. 281) as well as face-to-face instruction. The web-based course was related to video design and production for distance learning and multimedia which also used classroom projects and activities. As presented on Table 3.1, Miller developed nine criteria based on Roger's person-centred learning theory which are focused on being a facilitative instructor. The results showed that two criteria were not met. Criterion 5, where 'the facilitative tutor is meant to allow students to develop their own learning objectives' was not met. In this case, the tutor had set the learning objectives for the students to achieve. As a consequence of this, criterion 8, where 'students are expected to conduct self-evaluation', was not met. It was unclear from the findings whether this was due to

students not doing self-evaluation at all, or whether the students were not provided with the opportunity to assess their own progress against certain conditions. The findings showed that the focus of the evaluation was more on the tutor conducting an evaluation of student progress as opposed to students doing a self-assessment of their learning development. Overall, the outcomes showed that a person-centred approach based on Roger's principles of significant learning "increased the potential for positive outcomes" (Miller, 2001, p. 282).

However, there were some important gaps in the research findings. The method used to evaluate the web-based course involved "reviewing the course syllabus, course documents and a brief interview with the course instructor" only (Miller, 2001, p. 281). The methodology could have been enriched with observations of the learning and teaching practices in the learning environment. In addition, it was written from the point of view of the tutor only and not of the students. Miller's (2001) study was principally about improving teacher effectiveness. Conducting interviews with the students which focused on their learning may have presented more balanced viewpoints. Performing these additional processes would have enhanced the richness of the research.

The second model referred to was the framework developed by Ng, Murphy and Jenkins (2002) to evaluate the extent of student-centred learning within a specific learning context in a university in Hong Kong. The overall aim of the project was "to identify what the part-time students consider to be important issues related to their studies" (Ng, et al., 2002, p. 462). The plan was to identify, describe, measure and evaluate the constructs. To develop their framework, the authors reviewed literature which primarily focused on educators' assumptions regarding what factors facilitate the provision of an optimal learning experience for students. Ng et al. (2002) adopted a qualitative approach through open semi-structured

face-to-face interviews to gather initial data. It emerged that students' learning orientations can be classified as either 'reproductive' or 'facilitative'. Comparison of these two orientations was made to "examine the extent to which learner-centred teaching was favoured by the students" (Ng, et al., 2002, p. 463). There were 13 students from the study of Ng, et al who fell under the category of being 'reproductive' and 11 students were considered to be 'facilitative'.

Building on from the concepts and principles collected from the review of literature, the researchers then examined the students' perceptions of an effective tutor/lecturer practice as described by the following aspects of the framework:

The individual diversity of students: their varying educational backgrounds, work experiences, learning styles and the part-time learner role;

Relationships: the relationships and interactions between teacher-learner and learner-learner;

Responsibility: (conceptions of) student and teacher roles in learning, self-responsibility; and

The relevance of course material: student choices in course content and course process (Ng, et al., 2002, p. 464).

Ng et al. (2002) described the framework as a tool by which the extent of student-centred learning can be measured in different learning contexts. Ng et al. (2002) examined the perceptions of part-time adult postgraduate learners in Hong Kong regarding effective teaching practice in supporting students' learning. The students were asked what they found to be satisfactory as well as disappointing in their relationship with the tutor. The findings were divided and presented in two parts: a) "the interaction and relationship between the respondents and their instructors"; and b) "focus on conceptions of students and teacher roles in learning" (Ng, et al., 2002, p. 467). The findings revealed different and similar perceptions

between students. The differences in perceptions relate to conceptions of the roles and responsibilities of the student and tutor in the learning and teaching process. There were students who appreciated the tutor increasing their student-centeredness and working as a facilitator. Students, however, held similar perceptions regarding the promotion of positive relationships among the students themselves, as well as between the tutor and students, in building a learning environment. These similar and different perceptions demonstrate that some students prefer a learner-centred approach, while others prefer a teacher-centred approach in order to learn effectively.

A number of factors that impact on a good tutor-student relationship emerged. These include: a) availability of the tutors when needed by the students; b) responsiveness of the tutors when approached for advice and support; and c) having mutual respect and an open relationship with their tutors. In addition, perceptions regarding accommodating individual diversity and promoting interactions among students were also sought. The findings showed that there is a need for lecturers to acknowledge the work experience of the students, to allow flexibility in their learning and be more understanding of the needs and constraints of the part-time students and making the syllabus and course content relevant and practical to students.

Conceptions of teaching and the student's role in learning were also explored. The differences of the findings were categorised between 'facilitative' and 'reproductive' conceptions. Findings for the conceptions of teaching from the 'reproductive' group of students showed that "effective tutors are expected to be responsible for ensuring that learning takes place" (Ng, et al., 2002, p. 469). The findings regarding the role as students from the 'reproductive' group who holds "predominantly a didactive or reproductive

orientation towards teaching” showed that they “adopt a narrow and focused study strategy to achieve their learning goals” (Ng, et al., 2002, p. 469). In contrast, the ‘facilitative’ group of students see the tutors as facilitators who did more than just teaching. Tutors encouraged exploration, analysis, sharing of experiences, emphasised learning processes rather than outcomes, empowered students to be responsible for their own learning and showed concern regarding students’ learning (Ng, et al., 2002). As per their role as students, the ‘facilitative’ group perceived their role as being responsible and active learners by taking the initiative to learn, having an open inquiring mind to different perspectives and being participative.

These findings are congruent with the previous research regarding conceptions of learning and teaching where the approaches that tutors have in their teaching, whether teacher-centred or student-centred, have influence on the educational outcomes of students (Gibbs, 1992a; Kember & Gow, 1994; Marton & Säljö, 1976; Prosser & Trigwell, 1999b). Likewise, the findings showed that not all students favour student-centred approaches. “Their desire for a particular form of teaching is related to their beliefs about knowledge” (Ng, et al., 2002, p. 472). Mostly, this is associated with their previous experiences or perceptions regarding learning and teaching. Tutors should be able to build strategies regarding how to develop students’ orientation to learning towards being student-centred. However, both groups of students expect and demand a positive relationship with the tutors. Ng, Murphy & Jenkins’ (2002) framework falls short of being holistic as it seems to have focused only on tutor-student relationships, their roles and conceptions of learning. The study also had only 29 students as participants for the study. The questions were focused primarily on improving teaching quality, rather than the quality of learning experience of the students. The framework was, however, found to be useful for their focus of study by gaining knowledge regarding what factors students perceived to be important in their studies.

The third model which provided useful insight was the teaching resource for academic staff developed by the Centre for Learning and Professional Development (CLPD) of Adelaide University in 2000, to explain what student-centred learning is and how it could be put into practice in any context or field of study for enhanced learning and teaching (Kiley, et al., 2000). The teaching resource described the following important aspects of student-centred learning including:

Table 3.2
Aspects of Student-centred Learning

Know your students.	Who are they? What is their academic, cultural and social background? What are their existing skills and knowledge? Why are there here?
Identify and communicate clear learning outcomes.	Students develop skills of self-managed, independent learning in an environment that provides clear expectations and appropriate resources.
Use learning and teaching activities designed to achieve the desired learning outcome.	Focus on what the student does. Good practice encourages active learning, co-operation and collaboration among students and prompts feedback from staff. Real-world problems, authentic tasks, relevant applications and a degree of choice enable students to be more active learners.
Assess for achievement of desired learning outcomes.	Students have a more active role in: negotiating assessment tasks, self-assessment, and peer assessment.
Evaluate specific aspects of student-centred learning.	Use formal and informal means to evaluate the effectiveness of student-centred teaching initiatives.

(Kiley, et al., 2000, p. 2)

The teaching resource also articulated why there is a need to focus on student-centred learning. Kiley, Cannon, R. Rogers, and Ingleton (2000) posited that there is a need to focus on student learning rather than instruction in order to provide a high quality learning experience and successful educational outcomes. The various aspects of student-centred learning which are considered “to focus on student learning and responsibility” also means

that “teaching staff have an even greater responsibility for providing learning outcomes, assessment and evaluation that support the students as independent learners” (Kiley, et al., 2000, p. 4). The authors also provided practical examples and strategies for each of the aspects of student-centred learning, which any tutor will find useful in promoting deeper learning regardless of the subject matter they are teaching. For example, for learning and teaching strategies, the authors suggested “designing learning activities that allow students to demonstrate what and how they are learning” and to “allow them to construct and climb a ‘scaffold’ of understanding” (Kiley, et al., 2000, p. 11).

Taken together, these aspects represent the different components in ensuring that the learning environment and the various learning and teaching strategies utilised by the tutor support the aim towards providing a quality learning experience for the students. These aspects would have been very useful in developing an evaluative tool to assess the outcomes of the implementation of student-centred learning as well as the extent of the student-centeredness of the learning and teaching activities. However, there were also some dimensions considered to be important in a student-centred learning approach which were not a focus by Kiley et al. These include the role and attitude of the tutor, assessments, learning environment, curriculum and course design and learning resources used.

The fourth model is the research-validated learner-centred principles developed by the American Psychological Association (APA) Taskforce on Psychology in Education (1993). The principles of a student-centred learning approach as discussed by Rogers (1969), Brandes and Ginnis (1986), Gibbs (1992b) and McCombs and Whisler (1997) are complemented by the learner-centred framework created and developed by The APA Taskforce (APA Taskforce on Psychology in Education, 1993). The principles of the APA framework were

based on fundamental pedagogical learning principles for ensuring learning success. These principles serve as a guide when making decisions regarding the content, environment and opportunities for learning (K. Brown, 2003; Cornelius-White & Harbaugh, 2010; McCombs & Whisler, 1997). They are considered to be fundamental in providing a quality learning experience as it takes into consideration the development of the intellectual, physical, mental, social and individual domain of the learners. The learner-centred psychological principles, used as guidelines for school reforms and re-design, have four categories: a) cognitive and meta-cognitive factors; b) motivational and affective factors; c) developmental and social factors; and 4) individual differences factors. The Learner-Centred Psychological principles “provide a knowledge base for understanding learning and motivation as natural processes, that occur when the *conditions and context* of learning support, individual needs, capacities, experiences and interest are attended to holistically and systematically” (Kauchak, et al., 2005, p. 185). This set of principles is expected to guide the tutors in improving the provision of quality learning experiences to the students. Combined together, the principles offer systematic and holistic viewpoints on factors or aspects that influence the quality of learning for all learners.

McCombs (2005) highlighted an imbalance in the current educational system where reforms are focused mainly on raising academic standards with a greater emphasis on curriculum, content, knowledge and assessments, rather than putting the individual needs of students at the centre. As a result, students and tutors feel detached from each other resulting in dissatisfaction in the educational system and teaching profession. McCombs (2005) posited that there is a need for educational models that are student-centred with a balanced focus on learners and learning. This means that there is a need to “focus on the human processes and on personal and interpersonal relationships, beliefs and perceptions that are affected or

supported by the educational system as a whole" (Kauchak, et al., 2005, p. 184). Apart from focusing on how well the individual needs of the learners are met and knowing their learning process, "learner-centred is also related to the beliefs, characteristics, dispositions and practices of teachers – practices primarily created by the teacher" (Kauchak, et al., 2005, p. 186). There is a need therefore for teachers' teaching practices to be always responsive to the needs of the students in order to enhance the quality of their learning experience. Indeed it is the balance between tutors' best practice and focus on the learners that provide the opportunities to optimise student learning.

Table 3.3

The Learner-Centred Psychological Principles

THE LEARNER-CENTRED PSYCHOLOGICAL PRINCIPLES	
COGNITIVE AND METACOGNITIVE FACTORS	
Principle 1:	Nature of the learning process The learning of complex subject matter is most effective when it is an interactive process of constructing meaning from information and experience.
Principle 2:	Goals of the learning process The successful learner, over time and with support and instructional guidance, can create meaningful, coherent representations of knowledge.
Principle 3:	Construction of knowledge The successful learner can link new information with existing knowledge in meaningful ways.
Principle 4:	Strategic thinking The successful learner can create and use a repertoire of thinking and reasoning strategies to achieve complex learning goals.
Principle 5:	Thinking about thinking Higher-order strategies for selecting and monitoring mental operations facilitate creative and critical thinking.
Principle 6:	Context of learning Learning is influenced by environmental factors, including culture, technology and instructional practices.
MOTIVATIONAL AND AFFECTIVE FACTORS	
Principle 7:	Motivational and emotional influences on learning What and how much is learned is influenced by the learner's motivation. Motivation to learn, in turn, is influenced by the individual emotional states, beliefs, interests and goals, and habits of thinking.
Principle 8:	Intrinsic motivation to learn

Table 3.3 continues...

Table 3.4 continued.

Principle 9:	Effects of motivation on effort
	Acquisition of complex knowledge and skills requires extended learner effort and guided practice. Without learner's motivation to learn, the willingness to exert this effort is unlikely without coercion.
	DEVELOPMENTAL AND SOCIAL FACTORS
Principle 10:	Developmental influence on learning
	As individuals develop, they encounter different opportunities and experience different constraints for learning. Learning is most effective when differential development within and across physical, intellectual, emotional, and social domains is taken into account.
Principle 11:	Social influences on learning
	Learning is influenced by social interactions, interpersonal relations, and communication with others.
	INDIVIDUAL DIFFERENCES
Principle 12:	Individual differences in learning
	Learners' different strategies, approaches, and capabilities for learning are a function of prior experience and heredity.
Principle 13:	Learning and diversity
	Learning is most effective when differences in learners' linguistic, cultural, and social backgrounds are taken into account.
Principle 14:	Standards and assessment
	Setting appropriately high and challenging standards and assessing the learner and learning progress—including diagnostic, process and outcome assessment—are integral parts of the learning process.

(Kauchak, et al., 2005, p.187)

The APA learner-centred principles are in accordance with a student-centred learning approach, Constructivism, Adult Learning, Andragogy and Self-directed Learning; all aimed at the holistic development of the learners. As previously discussed, students and tutors' conceptions regarding quality learning and teaching mirror closely the principles of student-centred learning. With the focus on academic development as well as emotional, personal and social development of the learners, this framework provides a holistic paradigm. It highlights the need to recognise the emotional aspects of learning and teaching based on acceptance of feelings and attitude (Cannon & Newble, 2000b). Likewise, learning is not just an intellectual activity; it affects one's emotions and thinking (Zepke, Nugent, & Roberts, 1996).

Importance is placed on building positive relationships between the tutor and among students in working together towards their holistic development. Thus, the framework does not only

primarily focus on the learner and their learning process but also encompasses learning and teaching strategies and practices in order to enhance the quality of the learning experience for students.

The APA learner-centred framework has been proven to be an effective tool that will guide the assessment of the quality of the learning and teaching experience of the students in a number of situations. McCombs and Vakili (2005) applied the APA learner-centred framework in their study on e-learning environments where educational technology is utilised to support the practice of the learner-centred principles. The authors concluded that “the learner-centred framework adds a constant reminder that the human element cannot be left out even in the most advanced technology-supported networked learning communities” (McCombs & Vakili, 2005, p. 1597). Likewise, APA learner-centred principles have also been applied in other educational contexts and levels of study. Meece (2003) applied the APA learner-centred principles to middle school students and the findings showed that students have much “more positive forms of motivation and greater academic engagement when they perceive their teachers were using learner-centred practices ...” (p. 426). McCombs (2003) utilised the APA learner-centred principles in the “development and validation of a survey tool that helps teachers engage in a guided reflection process” (p. 2) and had found the tool to be effective in addressing various issues that teacher experience in their practice, as well as in continually improving and transforming their practice. This research shows the applicability of learner-centred principles in different contexts when utilised as the framework that guides in assessing or evaluating various learning and teaching practices.

The commonalities of the main principles of these theories include: recognising the prior knowledge and experience that students already have and their diversity in learning; providing greater autonomy and responsibility to the students for their learning thereby developing their motivation while at the same time learning critical skills; active involvement of the learners in their construction of knowledge; providing relevant, real-life and authentic learning activities that allow students to collaborate with each other; emphasis on learner's choice and negotiation based on their interests and abilities; creating positive relationships between the tutor and the learners, as well as collaboration among the learners themselves, and ability to provide feedback both ways, from tutor to student and student to tutor as well as with peers, regarding students' development in their learning. All of these were derived from the different learning theories discussed in the review of literature (Constructivism, Adult Learning, Self-directed Learning and Andragogy). These theories are well-connected with each other and with the conceptions of students and tutors regarding improving quality, learning and teaching and with the principles of a student-centred learning approach. All of these principles have been synthesised in the framework that was developed and served as a tool in meeting the objectives of this study.

Dimensions of a student-centred learning approach

Student-centred learning focuses on the needs as well as the various aspects that impact on the individual learner and their learning process. The framework takes into consideration the principles of student-centred learning aimed at providing the most effective learning and teaching approaches and support that adult students need to achieve successful educational outcomes. Thus, the framework not only focuses on the learner, it also includes the need to accommodate the tutors' perspectives and assessment that drive their own

teaching practice. The dimensions of student-centred learning as proposed in this study are fundamental in determining the extent of student-centeredness of the current practices in mixed-mode programmes and their impact upon the quality of learning and teaching. The following paragraphs describe each of the dimensions included in the proposed ‘Integrative Framework for Student-centred Learning’ (IFSCL).

Curriculum Design

A student-centred curriculum design allows the student to negotiate and have a choice regarding what to learn and how it is taught (Gibbs, 1992b; Kiley, et al., 2000; McMahon & O'Neill, 2005; Moore, 1999). Its development is derived from collaboration between students and tutors where students are involved and share in the decision making with regards to the content and delivery of the course (Gibbs, 1992a; McMahon & O'Neill, 2005; Nunan, 1988). This correlates with the principle of a Constructivist student-centred learning approach where it promotes learning that must have relevance and meaning to the learner. A curriculum design relevant to the needs of the students emphasises the development of practical life skills which are required by the labour market and the employability of students after their graduation (Earle, 2010; Houston, Robertson, & Prebble, 2008; Kember, Ho, & Hong, 2010). Likewise, the focus must be on the development of skills as opposed to the delivery of content (Arnold, 2010). Cannon and Newble (2000) discussed that “the key to curriculum planning is to forge educationally sound and logical links between planned intentions (expressed as objectives), course content, learning and teaching methods, and the assessment of student learning while taking into account of student characteristics” (pp. 142-143).

In addition, Cullen and Harris (2009) also highlighted some critical aspects that define student-centred curriculum which include: “an attempt to create community, a sharing of

power and control over what is learned and how it is learned as well as a focus on assessment and evaluation tied directly to learning outcomes” (p. 117). Problem-based learning is one example of a student-centred approach to curriculum design which allows students to set their own learning objectives and outcomes, apply theory to practice and have other choices within the programme of areas that students may study (Jones & Johnston, 2005; McMahon & O'Neill, 2005). This is opposed to the traditional teacher-centred approach where the curriculum does not accommodate the diverse needs of learners nor requires teachers to adapt their instruction (Alfassi, 2004). Thus, curriculum design needs to take into consideration, not only the academic development of the students but also in making the curriculum student-centred by engaging students in its development.

Learning Outcomes

In a student-centred learning approach, the syllabus contains the topics and learning outcomes that must be achieved by the students upon course completion. The completion of learning outcomes are mostly demonstrated in terms of the students’ improved level of learning and acquisition of knowledge and skills. The learning activities, teaching methods and strategies as well as assessments are then aligned to meet the learning outcomes. In this way, students know what is expected of them and are able to engage and get involved in the learning activities in the completion of these outcomes while the tutors are there to facilitate and support their development (Kiley, et al., 2000; Lightner & Benander, 2010). The learning outcomes must describe what the students will be able to do and know and should drive their learning goals and assessments (Kiley, et al., 2000; Lightner & Benander, 2010). The student is given the opportunity to negotiate with the tutor to choose their learning outcomes within the context of the course based on their ability to succeed, their own interest, goals and learning style (Doyle, 2008; Gibbs, 1992a; Harvey & Green, 1993; Kiley, et al., 2000; Leach,

2003; McMahon & O'Neill, 2005; (Moore, 2004) Moore, 1999; Rogers, 1969, 1983). The focus is on student achievement and what the students are able to accomplish and learn, rather than on the content that must be covered by the tutor. This is contrary to the aims and objectives of the course which refer to the intentions of the tutor in what he or she aims to deliver and teach (Adam, 2004). However, these two concepts are always used synonymously.

Evaluation

Improving learning and teaching is always complemented with conducting effective evaluation. Evaluation is used to determine how well the tutor has delivered the course and how successful the course has been in providing and achieving a quality learning experience for students (Cullen & Harris, 2009; Hounsell, 2003; Kiley, et al., 2000; Knowlton, 2000). It not only focuses on evaluating the teaching, but also on helping students achieve efficiency regarding learning outcomes and if specific learning outcomes have been met (Cullen & Harris, 2009; Kiley, et al., 2000; Knowlton, 2000). This is similar to one of the Learning Paradigm's criteria for success where the effectiveness of the teaching approach is judged in terms of "its impact on learning" (Barr & Tagg, 1995, p.16). Evaluation, therefore, is a two-way process of receiving feedback from both students and tutor.

Having identified evaluation as one of the key elements of effective learning and teaching, Cannon and Newble (2000a), in their Statement of Educational Principles have indicated:

Reliable and valid assessment of learning and giving helpful comments on students' work is a distinguishing characteristic of good teaching. So too is

learning from students about the effects of teaching – their misunderstandings, their approaches to studying, and their perceptions of the course and what we do as teachers. (p. 208)

This view concurs with other authors confirming the significance of evaluation in the provision of quality educational experience of the students (Beran & Rokosh, 2009; Gibbs, 1992b; Hounsell, 2003; Jaques, Gibbs, & Rust, 1993; Spiller & Bruce-Ferguson, 2011). The evaluation of the significance of the student's learning experience, which could be carried out either with the tutor or with the peers and self, must be conducted and agreed upon following specified criteria. It can also be an on-going and a summative evaluation for continually improving the pedagogical practices focusing on the strengths and weaknesses of the students' learning. Conducting evaluation must not only focus on the quantifiable aspects similar to students' rating of students' behaviour; but also on the qualitative aspects which include students' development in their learning process and relationship with students (Cannon & Newble, 2000). Results of the evaluation must be analysed, explored and fed back to the students with the plan of action the organisation will take as a response to the feedback. This will show the students that the organisation considers their feedback seriously in improving learning and teaching.

Learning Resources

In a student-centred learning classroom, learning and teaching resources are provided to students with information regarding the course in order to help students achieve the requirements of the learning outcomes. Students are then able to structure, manage and take control of their own learning at their own pace and time while developing and discovering knowledge and skills systematically and gradually. Most of these learning resources are

‘user-friendly’, come in specially designed and interactive packages and are aligned with the learning outcomes of the course. These resources may come in multi-media, audio, visual, workbooks and other attractively designed materials which the students can use at their own time, or sometimes in collaboration with others. In addition, the resources also include equipment (e.g. data show, smart board, printer and computer) available in the classroom used for the delivery of the programmes. Shank (2008) argued that integrating the use of multimedia when teaching must be done effectively and “not merely adding media” (p. 1). The various multimedia accommodated the differing learning preference of the students. These resources supplement the delivery of the requirements of the programmes, thereby enhancing and enriching the learning experience of the students (Isman, 2011; Neo, Neo, & Teoh, 2010; Shank, 2008). They enable the students to learn and relearn until they gain a full understanding of the requirements of the course.

However, questions regarding the contribution of the use of multimedia in improving the quality of learning experience of the students is still considered contentious as it is difficult to measure their effectiveness (Jenkinson, 2009). Other concerns have been raised in regards to the production of the resources as they are time-consuming to produce, expensive, require careful planning and specialists’ skills to develop. In addition to this, they can become extremely boring and may not be suitable for developing higher-cognitive and non-cognitive objectives (Ellington, et al., 1993). Likewise, Shank (2008) stated that if these resources are not properly and effectively integrated in the delivery of the requirements of the course, they can easily become a deterrent to learning. Although there is a considerable amount of planning and a high number of resources used and time spent in developing learning and teaching materials, Knowlton (2000) argued that the focus should still be on pedagogy and managing learning, not in the tools or the learning resources or technology.

Communication

Effective interpersonal communication between the tutor and students and among students must exist in the classroom. In a student-centred classroom, there must be open, effective, two-way communication between the students and the tutor, whether it is verbal, non-verbal, written or electronic. The views of students are actively solicited and integrated in the planning of the delivery of the programme. Any discussion or information communicated to the students need to be checked whether it was understood clearly. Clarity and understanding of communication also include the learning resources and activities ensuring that aims as well as the processes in achieving successful outcomes are understood by the students. Not only is it the tutor's role to communicate information pertaining to the expectations and requirements of the course, the students also need to communicate their feedback and views regarding their learning to their tutor. In the same manner, the tutor should also communicate with the students regarding the progress of their learning.

Frymier (2005) reported on the correlation between tutors' effective communication with student outcomes. Likewise, Lang and Evans (2006) indicated that to be an effective learning facilitator, the tutor must have "well-developed communication, interpersonal and groups skills" (p. 43). There is an expectation that the tutor takes full responsibility in having effective communication in the classroom, however, "not only do teachers influence students and impact the outcome (learning), but students also influence teachers and the outcome" (Frymier, 2005, p. 197). Lang and Evans (2006) also argued for intercultural communication where the tutor takes into consideration the diversity and differences in ways of learning by understanding and being receptive to how students from various cultures communicate and behave. Dwyer et al. (2004) developed the Connected Classroom Climate Inventory (CCCI)

as an instrument to explore the connectedness among students in the classroom, which they believed had an impact upon student success and retention. The findings of the study reported positive perceptions of connectedness among students, the value of respectful relationships with one another and a sense of belonging to a community.

Learning Environment

An authentic, student-centred learning environment plays an important role in enhancing the quality of the educational experience of the students. It not only refers to the atmosphere, ambience, tone or climate that pervades the particular setting (Dorman, Aldridge, & Fraser, 2006; Leach, 2003), but also “encompasses everything from curriculum choices in terms of knowledge and skills objectives, teaching materials including choice of texts and electronic resources, and the nature, timing and weighting of the assessment items” (Guest, 2005, p. 288). This was supported by Herrington and Herrington (2006) who argued for the use of a large number of resources in order to provide students with multiple and diverse perspectives. Gonczi (2004) suggested that a holistic concept of learning demonstrates that the learners are linked to their learning environment and takes into account the affective, moral, physical and cognitive development of individuals. Focusing on learner characteristics, background and preferences are essential elements of an effective, student-centred and quality learning and teaching environment (Hawk & Shah, 2007; McCombs & Miller, 2007; Soylu & Akkoyunlu, 2009). Both the students and the tutor have the responsibility for building a stimulating learning environment: the tutor promotes interaction while the students actively participate (Cannon & Newble, 2000). In her study of a Physics classroom learning environment, Yeo (2002) posited that students’ motivation and learning behaviours may be affected as much by the psychosocial environment as they are by teacher directions, teaching methods or the subject matter. However, Cannon and Newble (2000)

posed that there is minimal collaboration among students and in most cases, they do not get involved in decision-making in the classroom. The findings of the research of Ellen, Clarebout, Leonard and Lowyck (2007) indicated that students see a high quality-learning environment where they can work independently in an environment that provides challenges with proper safeguards and ample support.

Learning Activities

A student-centred approach provides significant flexibility with learning and teaching activities and teaching methods with a focus on the individual characteristics and diverse needs of the learners. Appropriate information is provided to the students with regards to the organisation of teaching methods, strategies and learning activities which the students are expected to complete. They are aligned and designed to encourage and facilitate the completion of the goals and objectives, course content, learning outcomes and assessments set (Cannon & Newble, 2000; Kiley, et al., 2000). Further, learning activities involve and engage students in tasks that will develop their higher order skills for complex tasks such as analysis, synthesis and evaluation and development of work and life skills (DeWitt, 2010; Isman, 2011; Lynch & Polich, 2009). The emphasis is on engaging and giving students the responsibility for managing their learning but allowing flexibility to construct their own learning, develops understanding and build their own interpretation and application of knowledge and theory (K. Brown, 2003). The activities must allow the application of the theories learnt giving the students a taste of the real-world workplace experience so they become more involved, and thus increasing motivation (Challis, 2006; Gibbs, 1992b; Herrington & Herrington, 2006). The tasks must therefore allow students to engage in experience that models the realities of the working environment. Likewise, Herrington and Herrington (2006) also argued that the engagement of students in different learning tasks is

pivotal in any learning environment where they are provided the opportunity to collaborate and be a team player during problem solving group work or being able to work individually. The learning activities must be supported with resources in order for the students to participate meaningfully.

To achieve the above, the learning needs and styles of students need to be taken into consideration. Tomlison (2000, 2004) promotes ‘differentiated instruction’ to students who may be the same age but each one is unique and has their own individual characteristics and differences in their background, which in turn will have implications for their ability to learn and the amount of support they need to achieve successfully. Brown (2003) supported this by agreeing that differentiation in teaching meets the learning needs and characteristics of a diverse student population by placing emphasis on developing their learning through the construction of knowledge, understanding and thinking. Different teaching strategies are employed including group or individual learning activities based on real-life examples supported by technology in order to engage and sustain students’ interest and motivation. Using this range of activities can make an apparently boring subject become an enjoyable exchange of ideas that results in deeper, longer lasting understanding and learning (Singleton & Kenneth, 2009). The teaching methods, strategies and learning activities are flexible, relevant, allow for collaboration with peers and are based around students’ previous experience, knowledge and interest. Their focus is on the learners and the different conditions required for their successful learning to occur.

The Role of the Tutor in the Classroom

Learning and teaching in a student-centred learning environment rests on the dynamic relationship between the students and the tutor and their mutual effort in meeting the desired

learning outcomes and enriching the quality of educational experience. An effective relationship is built with the students by showing genuine interest regarding their previous experiences, their learning goals and motivation (Arnold, 2010; Cannon & Newble, 2000b; McCombs & Miller, 2007; C. Rogers, 1965, 1983). Students appreciate tutors who make an effort in cultivating positive interpersonal relationships and interaction with them by paying attention to their unique differences and diversity, their background and concerns regarding the course. Tutors work as facilitators by helping students through the difficulties they encounter which is markedly different from being a teacher or instructor in a teacher-centred environment (Hansen & Stephens, 2000; Lang & Evans, 2006; S. Merriam & Caffarella, 1999; Pedersen & Liu, 2003; Ramsden, 1992; C. Rogers, 1969). It is a shared responsibility between the tutor and students in meeting outcomes and requirements of the course and the affective and cognitive potential of the student. Tutors facilitate by establishing the learning with clear outcomes and objectives. The students participate and work together with others in the learning and teaching process.

The elements of interpersonal values and virtues including mutual respect, trust, discipline and motivation on the part of the students should complement the tutor's facilitative leadership, open communication and educational care (Hansen & Stephens, 2000; C. Rogers, 1969, 1983; Zepke, et al., 1996). These involve regard and affection to attain the mutual goal of growth and development of the whole person (Watty, 2003). Providing a wide range of fun, learning activities to establish a connection and get to know one another facilitate for this to happen. A tutor with a sense of humour enables the students to feel comfortable in their learning environment (Pewewardy, 2002; Wagner & Goldsmith, 1981). On the contrary, teachers in teacher-centred environments are in control, authoritarian, focus on a narrow range of learning styles and make relationships with students that are anchored in

intellectual explorations of the content rather than on student processing (K. Brown, 2003). Student-tutor relationships based on mutual respect and genuine interest are seen as one of the factors that promote the attainment of positive learning outcomes.

Teaching Methods and Strategies

Student-centred teaching methods and strategies aim to deliver the objectives of the course with careful consideration of the learning needs of the students in order to achieve successful outcomes. However, it is not about focusing on delivering the content of the course only, but more so in being a facilitator of learning. Lang and Evans (2006) indicated that being a facilitator of learning “requires knowledge of self and subject matter and facility with instructional approaches, verbal and non-verbal communication skills, and interpersonal skills” (p. 53). Being a facilitator of learning focuses on the learner as the centre of the learning process, actively engaging and constructing new knowledge (S. Merriam & Caffarella, 1999; O'Dwyer, 2006; Ramsden, 1992; C. Rogers, 1969, 1983). The effectiveness of the teaching approach is mostly measured in improving and developing new skills and knowledge. In order for learning to happen effectively, appropriate information regarding the lesson must be provided to the students including course objectives, content, learning outcomes, learning resources, and assessments.

One of the strategies is the assessment of students' needs and preferences to ensure that they are learning based on their capability and ability to learn. Teaching methods and strategies employed on the learning activities must be varied and must cater to all learning styles. Gardner's (1985, 1993) theory of multiple intelligences where he identified the eight forms of intelligence (linguistic, logical-mathematical, spatial, kinaesthetic, musical, interpersonal, intrapersonal and naturalist) argued that students use these intelligences in

different levels and dominance. The differences in how students learn must be catered for by adapting to the uniqueness of the individual students (Arnold, 2010; Hawk & Shah, 2007; Lang & Evans, 2006; McCombs & Miller, 2007). Lang and Evans (2006) indicated that though it is quite impractical, it is important to have a gamut of teaching strategies that can be adapted and match the learning style of the students. Likewise, students who come from various cultures may have different learning approaches that need to be taken into consideration. Acknowledgement of the diversity of students' background and experiences serve as strong foundation to reinforce their learning (C. Hall & Kidman, 2004; Knowles, 1990; Knowles, et al., 2005; S. Merriam & Caffarella, 1999; Sheets, 2005, 2009; Vygotsky, 1978). Discussions and activities performed in the class must be practical and relevant to the realities of the workplace environment (Dewey, 1938; DeWitt, 2010; Earle, 2010; Isman, 2011; Lynch & Polich, 2009). Resources are employed in order to enrich and enhance student learning while achieving the learning outcomes of the course. The teaching strategies must allow students to collaborate with one another as well as be able to work individually (Brandes & Ginnis, 1986; Challis, 2006; DeWitt, 2010; Lynch & Polich, 2009).

Assessments

Assessments in student-centred learning support the students and develop their abilities, knowledge and other transferable skills required by the dynamic employment market. They are aligned with the learning goals and designed to give constructive feedback to students as well as valid and reliable measures of achievement (Gibbs, 1992a; Kiley, et al., 2000; Zepke, et al., 1996). They also support learning and serve as evidence in determining if learning is taking place (Berry, 2011; Cullen & Harris, 2009). The use of formative, flexible and a variety of assessment methods, including self and peer assessment are designed to return the control and responsibility back to the students, focus on their learning needs and

identify any gaps and areas that they can improve on (Clark, 2011; McMahon & O'Neill, 2005; Pedersen & Liu, 2003; Berry, 2011). Assessments can either be projects, case studies, practicum or work experience, presentations, laboratory work and exams. This flexibility dimension of assessment stems from the principle of student-centred learning as identified by a number of authors (e.g. Allsopp, 2002; Clark, 2011; Doyle, 2008). Gibbs (1992a) for example, argued that students should be able to negotiate with the tutors regarding the expectations and requirements relating to outcomes, evidence, criteria and judgment statements when taking assessments.

However, some authors have criticised the assessments used in a student-centred learning approach. Brown (2003) argued that several assessments are commercially produced without regard for the cultural differences and individual needs of the learners. Students also consider the use of peer assessment as daunting and as having the potential to threaten the development of trust among students (Hansen & Stephens, 2000). The authors posited further that students struggle with and find the idea of peer-assessment off-putting with the students feeling upset about being ‘judged’ and ‘betrayed’ by their fellow students. Thus, assessments in a student-centred learning approach are found to be contentious and challenging in actual practice. The tutor needs to discuss and explain the benefit of completing such assessments to address the concerns that students may have.

Knowing the Students

Diversity of students’ background characterises most classrooms. Knowing their differences in culture, learning abilities, previous experiences, knowledge, expectations, motivations and interests will enable the tutor to adapt his/her approaches to the diversity in the class. In a student-centred approach, establishing connections by getting to know the

students is fundamental in facilitating a positive learning environment. Knowing and understanding individual learners' needs and capabilities helps facilitate an environment that establishes rapport and enables connections to be made, support and respect gained (K. Brown, 2003; DeWitt, 2010; C. Hall & Kidman, 2004). The students will feel supported and respected if efforts are made to get to know them, their previous experiences and background, their goals and motivations for learning. As a result of this, tutors are able to influence the students' views and conceptions regarding learning and the way they approach their learning (Kiley, et al., 2000).

According to Felder and Brent (2005) there are three ways in which students differ from one another: a) learning styles which refers to which types of instruction they respond to best; b) orientation to studying and approaches to learning which refers to the ways in which they approach their studies; and c) levels of intellectual development which refers to their attitudes regarding the nature of knowledge and their role in constructing it. If the tutors have knowledge and understanding of these differences of the learning needs of the students, they will be able to influence the students' learning. This is in contrast to a teacher-centred environment where the control for learning is in the hands of the teachers, using their expertise in content knowledge to help learners make connections (Brown, 2003). However, Felder and Brent (2005) argued that it would be impossible to implement an optimum teaching style simultaneously to a class with quite a number of students even if the tutors knew their varying needs, attitudes and learning styles. In such situations, Cannon and Newble (2000) discussed that tutors teaching a large group need to carefully organise a combination of strategies that will engage students in active learning and build positive relationships with them. Knowing the students will enable the learning and teaching approaches to be made more relevant to the aspirations of the students.

In conclusion, all of the above dimensions and their characteristics commonly promote a central understanding that the learners and their learning processes are the main focus of the educational process. This also includes all the other systems and factors that impact and support effective learning. All the dimensions represent a reasonably comprehensive picture of the different processes of learning and teaching. These dimensions encapsulate the different fundamental principles of the proponents of a student-centred learning approach.

Development of the proposed conceptual framework

In developing the conceptual framework for this study, the approach was to identify which dimensions of learning and teaching were considered to be emerging themes from the review of the literature. The conceptual framework developed for this study was modelled on a number of frameworks from previous research (American Psychological Association, 1990; Kiley, et al., 2000; Miller, 2001; Ng, et al., 2002). The frameworks and models utilised by the previous research were evaluated based on their congruence with the principles of student-centred learning and on their applicability to mixed-mode delivery. When all the aspects utilised in the previous research were synthesised and integrated, they provided a holistic and comprehensive overview of assessing the degree of student-centeredness of the learning and teaching practices in mixed-mode delivery. These were the factors which were considered to be salient to both tutors and students when the principles of student-centred learning are applied in mixed-mode programmes.

The development of the overarching schematic diagram was designed to capture and encapsulate the different factors and dimensions relevant to the principles of a student-centred learning approach. The APA learner-centred principles served as the broad categories of factors framing the various dimensions. The APA principles are meant to be a holistic set of principles focusing on the needs of the learner and their learning process. Underneath the broad categories of factors of learner-centred learning were the dimensions which were developed based on the theories reviewed. A description of the dimensions was developed and informed the development of item banks in the survey which formed the basis of data collection. Taken as a whole, the dimensions and the survey items provided the conceptual lens for understanding the extent of student-centeredness in mixed-mode delivery. The literature shared common dimensions that have been brought together in this study as the integrative framework that attempted to bring together various elements of learning and teaching. It is the intention of this study to explore the links or association of the dimensions to the quality of learning and teaching in mixed-mode programmes. Utilising the dimensions as the foundation to exploring the participants' perceptions of their experiences in the current learning and teaching has a great potential for discovering what was lacking in the current practice to be appropriately called student-centred. The findings were then further explored to examine their impact upon the quality of learning and teaching.

Examining students' and tutors' perceptions regarding their experiences and expectations is important in being able to deliver mixed-mode programmes that meet their needs and promote positive educational outcomes. In the context of this study, *Te Wānanga o Aotearoa* is steadfast in its claim of being student-centred. This study will be helpful in confirming that the commitment to the concept of student-centred learning is actually applied in practice.

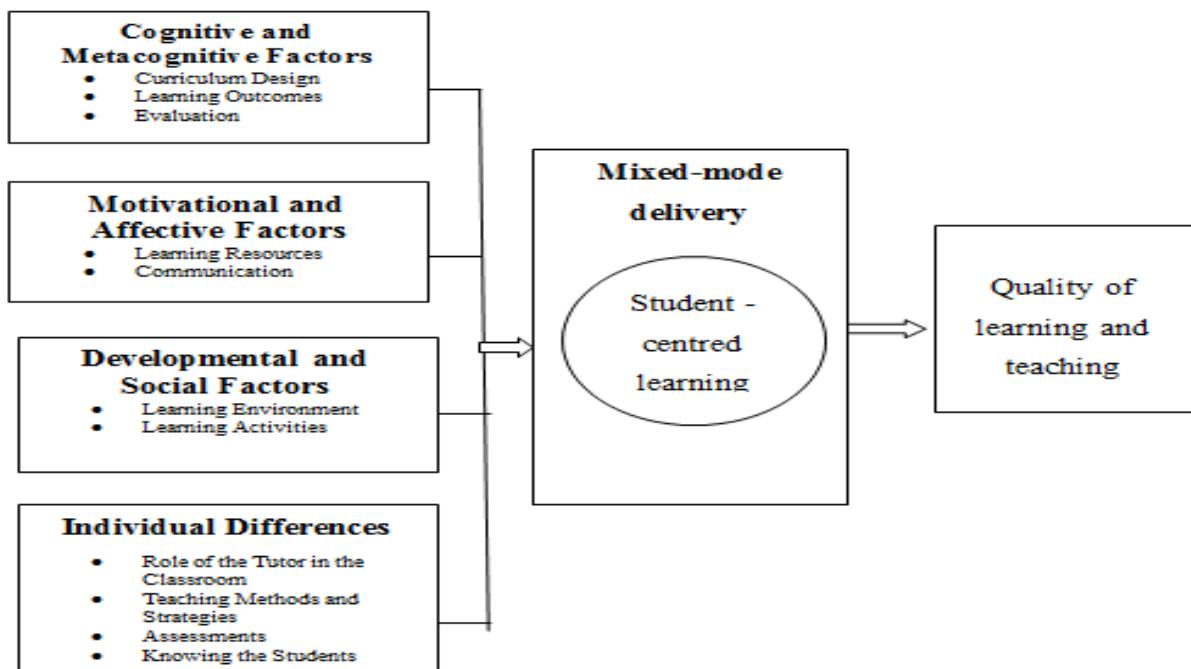


Figure 3.1. Schematic representation of the Integrative Framework for Student-centred Learning

The framework on Figure 3.1 which integrates the different dimensions of a student-centred learning approach based on the frameworks of Miller (2001), Ng, Murphy and Jenkins (2002), the APA learner-centred principles (APA Taskforce on Psychology in Education, 1993), and the different aspects of a student-centred learning approach from the University of Adelaide (Kiley, et al., 2000) was proposed. The content of the integrative framework was drawn from the different principles of the theories and conceptions of quality, learning and teaching and frameworks identified in the review of the implementation of student-centred learning approaches. This framework described as an “Integrative Framework for Student-centred Learning” (IFSCL) encapsulates the principles of a student-centred learning approach and aimed to include the perspectives of both students and tutors and their approaches to both learning and teaching. It represents a comprehensive list of salient factors that enabled a comprehensive analysis of all aspects that impact on the practice and implementation of a student-centred learning approach and on the quality of learning and

teaching. The conceptual framework constructed from the knowledge gained from previous research established the significant dimensions of the principles of student-centred learning. Consequently, the scales or individual survey items under each dimension were developed. The individual items were pooled together and sorted for each dimension. The framework enabled a holistic and inclusive scrutiny and analysis of all the relevant dimensions of student-centred learning. With the appropriate application of the findings, they will help advance the improvement of the quality of learning and teaching.

Table 3.4

Proposed Integrative Framework for Student-centred Learning and APA Principles

Factor	COGNITIVE AND METACOGNITIVE FACTORS
Dimension	Items
Curriculum Design	<ul style="list-style-type: none"> • The course design allows the learning outcomes and objectives to focus on what I will be able to do, rather than on the content. • The programme facilitates student choice – e.g. I can negotiate my learning outcomes. • The programme design provides emphasis on my interest, ability and prior knowledge within the context of the programme. • My views about the programme are actively sought for future planning
Learning Outcomes	<ul style="list-style-type: none"> • The learning outcomes are communicated clearly to me so that I will have knowledge of what I will learn from the process. • I am able to negotiate my learning outcomes to the topics suggested according to the curriculum. • The tutor and I enter into a learning contract based on my own interests, and abilities to succeed. • The achievement of learning outcomes is demonstrated in terms of improvement of learning.
Evaluation	<ul style="list-style-type: none"> • Evaluation of my performance is conducted following specified criteria. • Ongoing evaluations are done either by myself, by peer/s, with the tutor or with a group. • I conduct self-evaluation based on my own individual learning objectives as agreed on the learning contracts • The results of the evaluation are fed back to me.

Table 3.4 continues...

Table 3.4 continued.

Factor	MOTIVATIONAL AND AFFECTIVE FACTORS
Learning Resources	<ul style="list-style-type: none"> The learning resources used are relevant to real life situations. The learning resources used agree with the learning activities in achieving the learning outcomes. There is a variety of learning resources used in the programme to support me in my learning process. The learning resources provided enabled me to have a deeper understanding of the topic.
Communication	<ul style="list-style-type: none"> The objectives of the programme (learning outcomes, assessments, guidelines, etc) are communicated to me in a clear, specific and timely manner. I receive timely and adequate information on which I can base my study plan and decisions My experiences and views about the programme are actively sought and used as an integral part of future planning.
Factor	COGNITIVE AND METACOGNITIVE FACTORS
Dimension	Items
Curriculum Design	<ul style="list-style-type: none"> The course design allows the learning outcomes and objectives to focus on what I will be able to do, rather than on the content. The programme facilitates student choice – e.g. I can negotiate my learning outcomes. The programme design provides emphasis on my interest, ability and prior knowledge within the context of the programme. My views about the programme are actively sought for future planning
Learning Outcomes	<ul style="list-style-type: none"> The learning outcomes are communicated clearly to me so that I will have knowledge of what I will learn from the process.
	<ul style="list-style-type: none"> I am able to negotiate my learning outcomes to the topics suggested according to the curriculum. The tutor and I enter into a learning contract based on my own interests, and abilities to succeed. The achievement of learning outcomes is demonstrated in terms of improvement of learning.
Evaluation	<ul style="list-style-type: none"> Evaluation of my performance is conducted following specified criteria. Ongoing evaluations are done either by myself, by peer/s, with the tutor or with a group. I conduct self-evaluation based on my own individual learning objectives as agreed on the learning contracts The results of the evaluation are fed back to me.

Table continues...

Table 3.4 continued.

Factor	INDIVIDUAL DIFFERENCES
Role of the Tutor in the Classroom	<ul style="list-style-type: none"> • The tutor acts as a guide, facilitator and mentor in the class. • The tutor allows flexibility in facilitating the programme to help me achieve my learning outcomes. • The tutor demonstrates genuine interest towards me. • The tutor respects differences in my characteristics that may impact on my learning.
Teaching Methods and Strategies	<ul style="list-style-type: none"> • Appropriate information is provided to me on course objectives, course content and learning outcomes. • The teaching methods and strategies used are appropriate to my learning needs and styles. • I am given the opportunity to collaborate with others in performing my tasks. • My learning style is assessed to diagnose my learning preferences.
Assessments	<ul style="list-style-type: none"> • I am assessed based on agreed criteria using a range of different forms of assessment like self, peer or group assessments. • The assessments tasks are linked to the objectives of the course. • The assessment includes formative assessments which enable me to act on feedback. • The assessment of the evidence of my learning is non-threatening.
Knowing the Students	<ul style="list-style-type: none"> • My tutor has a good rapport with me by having an understanding of my background, knowledge and experience. • My tutor tried to know how I learn best to determine my learning needs and preferences. • My tutor respects and recognises student differences in personalities, abilities, interest, experience and other factors that may impact in our learning. • My tutor shares his/her personal experience with his/her students to bond with the students.

These dimensions were selected and have been proven to be effective in measuring the outcomes intended for their purpose based on previous research. The potential items listed under each dimension also correspond to the questions that were asked in the survey. The table below shows where each of the dimensions came from based on the review of previous research relevant to the concept of student-centred learning.

Table 3.5
Sources for the Proposed Integrative Framework for Student-centred Learning

SOURCES FOR THE PROPOSED INTEGRATIVE FRAMEWORK FOR STUDENT-CENTRED LEARNING					
Factors	Dimension	APA (1993)	Miller (2001)	Ng, Murphy and Jenkins (2002)	Kiley et al. (2000)
Cognitive and meta-cognitive factors	Curriculum Design	✓	✓		
	Learning Outcomes	✓	✓		✓
	Evaluation	✓	✓	✓	✓
Motivational and affective factors	Learning Resources	✓	✓		
	Communication	✓		✓	
Developmental and social factors	Learning Environment	✓	✓		
	Learning Activities	✓	✓		
Individual differences	Role of the Tutor in the Classroom		✓	✓	
	Teaching Methods and Strategies	✓	✓	✓	✓
	Assessments	✓		✓	✓
	Knowing the Students	✓	✓	✓	✓

Most frameworks are tailored to the focus of the study and therefore have certain limitations when applied to other contexts. The implementation of a student-centred learning approach varies across different contexts, which can potentially impact upon the aim and effectiveness of the assessment. However, the proposed integrative framework in this study has synthesised the fundamental elements, concepts and principles of the frameworks previously discussed. The proposed IFSCL serves two functions: a) assessing the degree of student-centeredness of the learning and teaching practices; and b) as a tool for improving the quality for learning and teaching. The dimensions and set of criteria emphasise the learning and teaching activities in a student-centred learning approach. The framework sets the structure and direction of the type of data collected to answer the research questions. As this is a new framework designed for this study, it was extensively piloted for reliability and validity before it was utilised in the research (See pp. 159-165).

Chapter summary

In this chapter, an integrative framework for assessing the degree of student-centeredness based on the principles of a student-centred learning approach from different authors was proposed. The dimensions of the IFSCL demonstrate that student-centred learning approach is influenced by the other learning philosophies (Constructivism, Adult Learning, Andragogy and Self-directed Learning) as well as by the conceptions of the quality of learning and teaching. From the IFSCL, a survey instrument was developed to examine the set of criteria under each dimension. This helped gauge the extent of student-centeredness and quality of learning and teaching in mixed-mode deliveries, which are the aims of this research.

Chapter 4 will describe the methodological framework, the processes and procedures used in this study which include data collection, the design and development of the instruments used, the sample, data sources, statistical procedures and strategies used for the data analysis.

CHAPTER 4

Methodology

Introduction

This chapter describes the methodological framework, procedures and strategies employed in this study. It includes a discussion of the research paradigms and the rationale for adopting the mixed-methods research approach. The chapter also describes the research setting, overview of the research design, data collection process, instruments used, the participants, data sources and the statistical procedures and strategies that were used in the data analysis. The theoretical background behind each research method is also explained and discussed. This chapter also includes description of the procedures, methodology used for the pilot study and the results. The process to assure the quality, validity and reliability of this research is also explained.

The purposes of the proposed study are to:

1. Determine whether the learning and teaching practices in programmes delivered through mixed-mode are consistent with the principles of a student-centred learning approach from the perspectives of the students and tutors;
2. Investigate the perceptions of students and tutors regarding the quality of learning and teaching of such programmes; and

3. Elicit from students and tutors how the quality of the learning and teaching experience for the student could be improved.

Research paradigms

Different paradigms reflect the different ways of interpreting and viewing the world. “Paradigms are considered to be consensual set of beliefs and practices that guide a field” (Morgan, 2007, p. 15). They are crucially important, as discussed by Krauss (2005) in order, “to understand the overall perspective from which the study is designed and carried out” (p. 759). Paradigms enable the researcher to think about how to ask the research questions and how to find answers to these questions depending on the world view of the researcher. Paradigms guide the researcher to the path the research is meant to follow; what methods to use, what methodology will be followed, and how the results of the study will be communicated. It is a way of viewing the world in a particular way based on one’s own distinct and unique perceptions. The ways in which various multiple realities are constructed and viewed are based on different assumptions and the meaning each individual creates.

Each of the paradigms contains assumptions on the world view. “Ontology is the ‘reality’ that researchers investigate, epistemology is the relationship between that reality and the researcher, and methodology is the technique used by the researcher to investigate that reality” (Healy & Perry, 2000, p. 119). To understand the intimate connection between epistemology, ontology and methodology, Krauss (2005) explained, “ontology involves the philosophy of reality, epistemology addresses how one comes to know that reality while methodology identifies the particular practices used to attain knowledge of it” (pp. 758-759). The unique ontological assumption enables each individual to accept his/her own world view and multiple realities. The ontological question is how can one view the natural world? The

epistemological assumptions enable a researcher to view the world that one lives in as objective and measurable or subjective based on different contexts and perspectives. Realities are constructed, relationships are formed with others and personal meanings are created based on one's beliefs. Ontology, therefore, is what exists out there; while epistemology is what one knows based from his/her experiences, or what is already known because others experienced it.

The paradigms also have their own assumptions about the way research is conducted and in most cases, they are conflicting. They are, however, coherent in trying to provide answers to the different problems in society. The two dominant paradigms are the positivist and interpretive. The difference is not only in the techniques or research methods but also in their assumptions and construction of the multiple realities in viewing the nature of the world in which we live. Between the competing positivist, quantitative and interpretive, qualitative paradigms is the mixed-methods approach “where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study” (Johnson & Onwuegbuzie, 2004, p. 14). There are other research paradigms that have emerged recently that are focussed on restitution and emancipation – Constructivism, critical theory and structuralism (Denzin & Lincoln, 2000). Where one locates oneself among these paradigms will have a profound influence on how the research is carried out. None of these world views are considered to be superior over the other.

Quantitative and qualitative research paradigms

The merits and weaknesses of both quantitative and qualitative research approaches have been compared, debated, and argued as to which is a better strategy when conducting research (Krathwol, 2009; Newman & Benz, 1998). The crux of the debate between these

two dominant paradigms is based upon: a) “the difference in assumptions about what reality is and whether or not it is measurable; and b) “differences of opinion about how we can best understand what we “know”, whether through objective or subjective methods” (Newman & Benz, 1998, p. 2). There are those who advocate strongly for either quantitative (positivist) or qualitative (interpretive) paradigms when investigating a phenomenon.

Quantitative research presents collected data through numbers and statistical trends and analyses. The methods used for quantitative research include survey, survey instrument, statistical analysis and case study. The quantitative data “are normally collected in numerical or categorical form, using instruments or procedures that have been designed and tested to ensure reliability and validity” (Maxwell & Loomis, 2003, p. 254). The positivist researcher acts as an external detached observer, uninvolved with their subjects to eliminate any prejudices. Quantitative research is premised on the ontological assumption that the goal of knowledge is simply to describe the observed phenomenon (Krauss, 2005). For quantitative researchers, the world is objective, value-free, measurable and operated by laws of cause and effect. Its epistemology is that rational science uncovers the truth by developing a theory to understand the world so as to be able to manipulate and make predictions (Krauss, 2005). “Deductive reasoning is used to postulate theories” (Krauss, 2005, p. 760).

In qualitative research, the aim is to know and capture how people view their world, find meaning and construct realities within the different context of their day-to-day life experiences. “Qualitative data collection is typically more open-ended, flexible, and inductive and the data are usually textual descriptions...” (Maxwell & Loomis, 2003, p. 254). When conducting qualitative research, the researcher tries to study, comprehend, interpret and understand the meaning of the phenomena in an ever changing social world. Instead of

controlling and predicting the research outcomes, the researcher explores the phenomena in their natural settings and interprets the meaning people make (Bowen, 2008). The ontological assumption is that there are multiple realities constructed by the different perceptions of individuals (Krauss, 2005). Meaning is constructed based on one's own experiences, background, history, values, beliefs and idiosyncrasies. The reality is not discovered but constructed. "Qualitative research is based on a relativistic, constructivist ontology that posits that there is no objective reality" (Krauss, 2005, p. 759). The epistemological assumption of qualitative researchers is that any phenomenon must be viewed in its context to be understood (Krauss, 2005). The researcher becomes a participant, absorbed and immersed in the phenomenon being studied to experience and understand more fully as it unfolds in its natural setting. Qualitative methods include interviews, participant observation, ethnography, content analysis and grounded theory. The differences in the ontological and epistemological assumption of the quantitative and qualitative paradigm influence and guide the researcher as to how the research process will be designed and conducted.

Qualitative and quantitative research methods differ on the four dimensions explained below (Firestone, 1987 as cited in Newman & Benz, 1998).

Table 4.1
Dimensions that Differentiate Quantitative from Qualitative Research

Dimension	Quantitative	Qualitative
Assumption	<ul style="list-style-type: none"> • Objective reality is sought through facts 	<ul style="list-style-type: none"> • Reality is socially constructed
Purpose	<ul style="list-style-type: none"> • To identify causes 	<ul style="list-style-type: none"> • To understand
Approach	<ul style="list-style-type: none"> • Experimental/correlational 	<ul style="list-style-type: none"> • A form of ethnography
Researcher's role	<ul style="list-style-type: none"> • Detached 	<ul style="list-style-type: none"> • Immersed in the field

Several authors have argued the futility of disputing the superiority of one paradigm over the other. According to Burns (2000), “both are needed in research since there is no one methodology that can answer all questions and provide insights on all issues” (p. 113). Qualitative and quantitative research differs in many ways, but they complement each other and both paradigms have their place in academic research (Kumar, 2005; Neuman, 2003). “Quantitative and qualitative paradigms can coexist in a unified world of inquiry” (Newman & Benz, 1998, p. xii) and must be seen as complementary rather than conflicting. The difference in the main objectives is that qualitative research is about describing a phenomenon; whereas, quantitative research describes a phenomenon through quantification. Thus, these two paradigms remain to be the most dominant approaches in the field of research.

Mixed-methods research: Paradigm adopted in this study

The research approach selected for this study is the mixed-methods research, and although it is “still evolving” (Editorial, 2007, p. 3) it is recognised as the third major research approach or research paradigm. It is considered to be a synthesis which includes the ideas from the extremes of quantitative and qualitative research (Johnson, Onwuegbuzie, & Turner, 2007). Mixed-methods has emerged as an intellectual movement focusing on synthesis and a reaction to the polarization between quantitative and qualitative research (Johnson, et al., 2007). It is believed to provide the best of the two worlds of quantitative and qualitative research as any “antagonism between paradigms is unproductive” (Johnson, et al., 2007, p. 117). In mixed-methods research “the investigator collects and analyzes data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or a program of inquiry” (Editorial, 2007, p. 4). Not

only are the methods or the types of data mixed, but also the amalgamation of the two research approaches in the design, analysis, integration and presentation of the findings of the research. Such an approach will result in multiple perspectives which are more profound and offer more comprehensive understanding of the phenomena under investigation (Plano Clark, Creswell, O'Neil, & Shope, 2008); an exemplification of the realities in life that are multi-faceted and multi-dimensional.

Rationale for the mixed-methods research

Greene, Caracelli and Graham (1989, p. 259) examined a number of research and summarised the purposes of mixed-methods designs.

Table 4.2
Purposes of Mixed-Methods Designs

Triangulation	seeks convergence, corroboration, correspondence of results from different methods.
Complementarity	seeks elaboration, enhancement, illustration, clarification of the results from one method with results from the other method.
Development	seeks to use the results from one method to help develop or inform the other method.
Initiation	seeks the discovery of paradox and contradiction, new perspectives of frameworks, the recasting of questions or results from one method with questions or results from the other method.
Expansion	seeks to extend the breadth and range of inquiry by using different methods for different inquiry components.

For this research in particular, complementarity, development and expansion are the motivations for the mixed-methods research. The primary philosophy of mixed research is that of pragmatism, “the best paradigm for justifying the use of mixed-methods research” (Tashakkori & Teddlie, 2003, p. 20). It supports the view of combining a number of methods that will work best and which are most appropriate for answering the research questions.

While there are various ‘paradigmatic differences’ between qualitative and quantitative research, there are also commonalities. Johnson and Onwuegbuzie (2004) discussed that empirical observations are used in order to address research questions in both quantitative and qualitative research. In mixed-methods research, one of the key features is “its methodological pluralism or eclecticism, which frequently results in a superior research (compared to monomethod research)”, (Johnson & Onwuegbuzie, 2004, p. 14). Researchers are able to combine the different elements in the research design to find answers to their research questions. Contradicting this view, Denzin, Lincoln and Giardina (2006) argue that mixed-methods research fails to recognise legitimate differences in ‘ways of knowing’ possessed by diverse groups and peoples, divides inquiry into dichotomous categories and fails to understand the complex and necessary interplay between the quantitative and qualitative paradigm. With its strengths and weaknesses, mixed-methods research continues to develop to become the third dominant research paradigm.

This study can also be further described as a “sequential mixed-methods research” (Creswell, 2003, p. 100) as it will gain initial quantitative data from the survey instrument, which will then inform the type of qualitative data to be collected through interviews. In sequential mixed-methods research, the results of the first phase (survey) become the foundation in building and developing the second phase (interview) in order to probe the results of the first phase (Tashakkori & Teddlie, 2003). The strands of the study “occur in chronological order, with one strand emerging from or building on the other” (Teddlie, Tashakkori, & Johnson, 2008, p. 389). In this case, the quantitative phase is followed-up by a subsequent collection and analysis of the qualitative data in the second phase (Plano Clark, et al., 2008). This is congruent with the sequential explanatory design which is “characterised

by the collection and analysis of quantitative data followed by the collection and analysis of qualitative data" (Creswell, Plano Clark, Gutmann, & Hanson, 2003, p. 223).

A central feature of this study is to assess the perceptions of the participants with regards to the degree of student-centeredness of the learning and teaching practices experienced in mixed-mode programmes. The quantitative approach is appropriate for the large sample size intended and as such the research tool uses the survey method. Following from this, the results or findings from the survey instrument were utilised as the platform from which the qualitative data were built. The findings were also used to assess the impact of the pedagogical practices on the quality of learning and teaching on programmes offered via mixed-mode delivery. The results of the first phase were explored and probed more in depth which facilitated the incremental building of knowledge required for the second phase (Plano Clark, et al., 2008). This process combines the strength of quantitative data which is that of large sample sizes, numbers, trends and generalizability with the strengths of small sample sizes, contextual details, in-depth description of meaning of the qualitative data (Plano Clark, et al., 2008).

In this study, the findings of the quantitative approach were further investigated by a qualitative process. The quantitative results helped formulate and frame the interview questions of the qualitative phase to determine how the major themes that emerged from the survey impact upon the quality of learning and teaching. The data collected were focused in gaining an insight and understanding regarding the impact of the current practices on the quality of learning and teaching. Understanding the perceptions of the participants was more suitably explored through qualitative research with the use of one-on-one semi-structured interviews. The participants were selected based on those who answered positively to the

question “Are you willing to participate in a follow-up one-on-one interview?” This question was included in the survey instrument. If the participant agreed to participate in the interview, they were asked to write their contact details on the ‘Participants for Interview’ list which was a separate piece of paper. The researcher aimed to interview at least 10 students and at least two tutors from each mode of delivery.

Overview of research setting

The Tertiary Education Commission (TEC) monitors the performance of tertiary institutions through institutional key performance indicators (KPIs) identified in the Investment in a Plan (IiP) requirement. One of the KPIs is the improvement of the quality of delivery of programmes through the retention of students and their successful completion of the qualification(s). The TWoA pedagogic approach caters for the non-mainstream, ‘second chance’ adult students which was evident in TWoA student demographics. *Te Wānanga o Aotearoa* provides an alternative to mainstream education by utilising teaching methodologies that are holistic, innovative and student-focused in the mixed-mode delivery of its programmes to cater to the needs of its diverse range of students (*Te Wānanga o Aotearoa, 2005*). Some of the common modes of delivery are off-campus, *noho/noho marae* (courses with residential or live-in components in a traditional Māori meeting house), *Wānanga* (workshops/seminar), *Whakaako* (intensive one 3-hour classes per week), and Computer Assisted instruction utilising software applications with an online learning component, combined with face-to-face instruction and self-directed learning. A large percentage of the learning time in these modes of delivery is assigned to self-directed learning with learning resource packages to complement students’ learning to meet the course

requirements. This is a move away from the concept of teaching in the traditional mode of delivery.

It became quickly evident that these flexible methodologies were successful for a diverse range of people (Te Wānanga o Aotearoa, 2005). This contributed to the success of TWoA in 2003 when it was claimed to be the largest institution in New Zealand in terms of student numbers by enrolling more than 60,000 students, equivalent to 34,000 EFTS (Equivalent Full Time Study). The students and tutors included in this research were those engaged in a number of mixed-mode programmes. These programmes were delivered in the *Tainui* (Waikato) and *Tāmaki Makaurau* (Auckland) regions. The following table shows the modes of delivery and associated programmes selected for this study:

Table 4.3
Programmes Delivered on Various Modes Selected for this Study

Mode of delivery	Programme
a) Computer Assisted Instruction (with Online learning)	Certificate in Computing (Level 2 –3)
b) <i>Noho/Noho marae</i> delivery (residential or live-in)	Certificate in Waka Ama Certificate in Social Services Toi Paemataua – Diploma in Raranga Bachelor in Iwi Environmental Management Certificate in Māori Ambassadorship and Leadership.
c) <i>Whakaako</i> - One 3-hour meeting a week	Te Reo Māori programmes Diploma in Social Services Certificate in Small Business Management Diploma in Business Enterprise
d) <i>Wānanga</i> – workshops or seminars	There were no programmes delivered in this mode of delivery at the time of the research

Research design

This study employed both quantitative and qualitative methodologies to accomplish the objectives of this research. The development of the research instruments for this study

was based on previous proven instruments used to assess the degree of student-centeredness. In doing so, the American Psychological Association (APA) learner-centred principles with its five general broad categories served as the framework to include the eleven dimensions of a student-centred learning approach as identified by previous researchers (Kiley, et al., 2000; Miller, 2001; Ng, et al., 2002). This resulted in the proposed Integrative Framework for Student-Centred Learning (IFSCL), with its key feature of integrating all relevant dimensions that have been written about or researched to describe student-centred learning principles.

To develop the survey and interview instruments specific to this study, the intuitive-rational approach normally used for designing learning environment instruments was utilised. The validity of intuitive-rational scales involves three steps: a) identification of salient dimensions; b) writing of test items; and c) field testing the survey instrument (Alridge, Dorman, & Fraser, 2004). This is normally complemented with statistical analysis and factor analytic approaches (Alridge, et al., 2004). The salient dimensions that have been identified in the proposed Integrated Framework for Student-centred Learning (IFSCL) were reviewed by three other work colleagues who were educational practitioners and researchers to ensure a general agreement that the dimensions and items were valid and salient for the purpose of this study. The survey instrument capturing the individual items or scales was developed and piloted with a sample of 32 students from various modes of delivery and delivery sites to determine its validity and reliability. Feedback was also sought from the participants of the pilot test to evaluate the suitability of the survey instrument, time taken to complete the survey instrument and ease of use. The tabulation of the results and application of appropriate statistical testing and analysis was conducted to further determine the validity and reliability of the survey instrument.

Stages in the research design

The procedures that were employed in the design of the research involved seven stages.

Table 4.4
Stages in the Research Design

Stage 1	Identification and development of research instruments, population and sample of participants (tutors and students) and delivery sites.
Stage 2	Piloting and refinement of the survey instruments.
Stage 3	Obtain permission from the Regional Managers and participants' approval to conduct the research. Administer the survey instrument to both tutors and students.
Stage 5	Conduct an initial analysis of the responses from the survey instrument.
Stage 6	Administer the interviews with tutors and students.
Stage 7	Analyse the data from both quantitative and qualitative instruments and discuss the findings.

Data collection

Data were collected from both students and tutors using the same scale items in the survey, but presented differently to reflect the different perspectives of groups. The use of the quantitative and qualitative methods is very important in establishing the validity and reliability of the data, which enhanced the credibility of this research. Kumar (2005) defined descriptive research as that which “attempts to describe systematically a situation, problem, phenomenon, service or program ...”(p. 10). This study is considered to be descriptive because it aims to describe and analyse the application of student-centred learning phenomenon in the different modes of study from the perspectives of the students and the tutors.

Quantitative data

The first phase of the data collection was the direct administration of the survey instrument in the classroom to 194 students and 18 tutors for the programmes identified in Table 4.3. The quantitative aspect of this research relies upon a set of statistical summaries in order to answer the first major research question and its two subsidiary questions:

Major research question 1:

How are the current learning and teaching practices utilised in mixed-mode delivery consistent with the principles of a student-centred learning approach at Te Wānanga o Aotearoa?

Subsidiary questions:

- a) *Which aspects of student-centred learning principles have the greatest impact on the quality of learning and teaching activities?*
- b) *How do tutors' perceptions of the current learning and teaching practices compare with those of students?*

The use of the survey method is appropriate as it provides “a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population” (Creswell, 2003, p. 153). Surveys can be used for descriptive research which is “set out to describe and to interpret what is” (Cohen, Manion, & Morrison, 2007, p. 9), and for the exploration of relationships and patterns (Cohen, et al., 2007).

The responses from the quantitative data were classified, categorised and analysed. Consent was obtained from the Regional Manager, Lead Tutor and tutor to administer and

collect the survey instrument during class time to ensure a high response rate. This provided the researcher with the advantage of establishing rapport with the tutors and students, as well as explaining what the research is about and discussing the ethical considerations with the participants.

Qualitative data

In this study the quantitative measures alone cannot adequately answer the objectives of this research. The qualitative data described the phenomenon more fully and more in-depth from the perspectives of tutors and students. Phase two of the research included semi-structured one-on-one interviews with the students and tutors to gather comprehensive responses and to gain a more in-depth understanding of the emerging themes from the responses in the survey. The interview questions aimed to explore the perceptions of students and tutors regarding the impact of the current practices on the quality of learning and teaching (See Appendices N and O). The findings from the interviews are intended to answer the second major research question, comprised of two subsidiary questions as follows:

Major research question 2:

In what ways does the mixed-mode of delivery impact upon the quality of the learning and teaching at Te Wānanga o Aotearoa?

Subsidiary questions:

- a) *What are the perceptions of students and tutors regarding the quality of learning and teaching strategies utilised on these programmes?*
- b) *How do the students and tutors perceive improvement in the delivery?*

The findings from the interviews were joined with the quantitative aspect of the study for a comprehensive description and analysis.

Design of the survey instrument

The survey instrument was based on the proposed Integrative Framework for Student-centred Learning which has been synthesised and expanded from previous models in a number of studies (APA Taskforce on Psychology in Education, 1993; Kiley, et al., 2000; Miller, 2001; Ng, et al., 2002). The IFSCL contains individual items or scales that were used in the survey instrument to investigate the extent to which the current practices are aligned with student-centred learning.

The survey instrument was divided into two sections with open-and closed-ended questions to allow the collection of both quantitative and qualitative data. In the closed-ended questions section, participants were asked to indicate their responses on a 5 point Likert-scale. The open-ended questions provided participants the opportunity to describe their experiences with the programme, the strengths and weaknesses of the current teaching practice and suggestions for improvements. The rich qualitative data from the open-ended questions supported and further clarified the quantitative data from the closed-ended questions.

Design of the semi-structured interview

The one-on-one semi-structured interviews, which took the sample who agreed to participate in the survey approximately fifteen to twenty minutes to complete (See

Appendices N and O). From the initial analysis of the survey responses, the emerging themes were made the subject of the questions in the semi-structured interviews. The interview questions aimed to explore the impact of the pedagogical practices on the quality of learning and teaching on programmes delivered via mixed-mode. An interview guide, containing the list of questions, was used to elicit comprehensive responses from the students and tutors. The interviews were recorded with a dictaphone after obtaining permission from the participants. Probing or follow-up questions were asked when an answer needed further clarification. The researcher also took notes during the interview, which were reviewed, organised and analysed. The audio tapes of each interview were transcribed by the researcher. To ensure the accuracy of the transcribed interviews, a copy was provided to the participants for their confirmation and approval after they were transcribed by the researcher. A number of the participants indicated that they did not need to have a copy of the transcription of the interviews. No participants made any comments regarding the transcriptions that they received.

Data sample

A ‘two-staged’ cluster sampling method was utilised for the survey. “Cluster sampling is based on the ability of the researcher to divide the sampling population into groups, called clusters, and then to select elements within each cluster” (Kumar, 2005, p. 175). Cluster sampling is of benefit to the researcher if the population is spread widely across a large geographic area (Burns, 2000) which is the case in this research. In the first stage, the cluster sample was restricted geographically to the *Tainui* and *Tāmaki Makaurau* region. This sample selection is based on the delivery sites where the programmes are currently being delivered as well as the geographical proximity of these groups to each other and

convenience to the researcher. The second-stage cluster sampling involved selecting classes from the selected campuses.

Data sources

Data were collected from two different sources solicited from tutors and students of selected programmes offered in various modes of flexible delivery in the *Tainui* and *Tāmaki Makaurau* regions. Permission was initially sought from the Regional Manager as a matter of courtesy (See Appendix C). Once approval was obtained, the researcher contacted the different tutors via an email with a copy to the Lead Tutor to determine if the tutors and their class of students were willing to participate in the research (See Appendices D and E). If the tutors agreed on both counts, the researcher then sent another follow-up email to schedule the administration of the survey instrument. Information regarding the tutors and schedule of classes was requested from the Student Registry Unit of *Te Wānanga o Aotearoa*.

Timeframe

Data were collected from students and tutors separately using two different survey instruments and research methods. In order to obtain valid and highly significant data, the timing of the research was carefully planned so that both students and tutors had attended and participated in the class for at least half of the duration of the programme before they were invited to participate. The appropriate timing of the research therefore was from midterm and towards the end of the programme.

Data analysis in mixed-methods research

The quantitative and qualitative data collected from tutors and students were analysed separately. The following paragraphs describe the process for analysing the two sets of data.

Quantitative data analysis

Descriptive statistics were used to describe, analyse and present the quantitative data. Descriptive statistics “take numeric values and represent them in ways that are memorable, and they promote the recognition of usual or unusual patterns” (Krathwohl, 2009, p. 377). The quantitative data were analysed using frequency distribution and central tendencies in order to illustrate the results.

The wider analysis of the data also considered Creswell’s (2003) recommendation:

1. Report information about the number of members of the sample who did and did not return the survey;
2. Discuss the method by which response bias will be determined;
3. Discuss a plan to provide descriptive analysis of data for all independent and dependent variables in the study;
4. If the proposal contains an instrument with scales or a plan to develop scales (combining items into scales), identify the statistical procedure (i.e factor analysis) for accomplishing this. Also mention reliability checks for the internal consistency of the scales (i.e., the Cronbach’s alpha statistic);
5. Identify the statistics and the statistical computer program for testing the major questions or hypotheses in the proposed study. (Creswell, 2003, pp. 160-161)

The quantitative data collected from the closed-ended questions were recorded in an excel spreadsheet, then coded and analysed using the Statistical Package for Social Science (SPSS). The frequency counts of each of the dimensions from both groups (students and

tutors) of participants was collated and summarised in a table format with corresponding graphs. The dimensions which were based on the IFSCL and included in the survey are the following:

- a) Teaching Methods and Strategies;
- b) Learning Outcomes;
- c) Evaluation;
- d) Learning Resources;
- e) Role of the Tutor;
- f) Learning Activities;
- g) Learning Environment;
- h) Curriculum Design;
- i) Assessments; and
- j) Cultural Awareness.

Qualitative data analysis

In qualitative research, “the process of data analysis involves making sense out of text and image data. It involves preparing the data for analysis, conducting different analyses, moving deeper and deeper into understanding the data, representing the data, and making interpretation of the larger meaning of data” (Creswell, 2003, p. 190). Data analysis in qualitative studies is an on-going process (Mertens, 1998) and can be concurrent while collecting the data. There were six generic steps outlined by Creswell (2003) that were utilised in analysing the qualitative data collected.

- a) Organise and prepare the data for analysis.
- b) Read through all the data.
- c) Begin detailed analysis with a coding process.

- d) Use the coding process to generate a description of the setting or people as well as categories of themes for analysis.
- e) Describe how the description and themes will be represented in the qualitative narrative.
- f) A final step in data analysis involves making an interpretation or meaning of the data (pp. 191-196).

The responses to the open-ended questions and interviews were transcribed and converted into an Excel spreadsheet. The researcher analysed the responses for the emergent themes and patterns and categorised the data accordingly. NVIVO software was also utilised in order to analyse the qualitative data. The researcher's notes were reviewed and organised. The newly coded data were systematically and continually compared with previously collected data (Bowen, 2008). Developing a list of codes helped to ascertain any emergent themes or patterns from the responses from the interview. This was part of the inductive analysis to interpret the meaning of the qualitative data. Data were gathered until saturation or the point of diminishing returns when no more new information emerged (Bowen, 2008). Direct quotes from participants were used to accurately reflect the themes of the research where appropriate. The responses that were collected from the open-ended questions and interviews were interpreted and analysed in a way that answered the other three questions that the investigation was designed to clarify.

The data analysis stage went through the major phases as described by Miles and Huberman (1994); that is, data reduction, data display and conclusion drawing and verification. The authors defined data reduction as "a form of analysis that sharpens, sorts, focuses, discards and organizes data in such a way that "final" conclusions can be drawn and verified" (p. 11). In this case, the emerging patterns were coded, summarised, organised, paraphrased and categorised to find meaning on the textual data. The second step of the

analysis was the data display “to assemble organized information into an immediately accessible, compact form so that the analyst can see what is happening and either draw justified conclusions or move on to the next step of analysis the display suggests may be useful” (Miles & Huberman, 1994, p. 11). The last step is the conclusion and verification during and after the analysis (Miles & Huberman, 1994).

Comparing students and tutors’ responses

The responses to the items on the students’ survey instrument were compared with the responses of the tutors. The questions for both tutors and students were similar but written from the point of view of each participant to reflect their perspective. The data collected from both tutors and students revealed their perceptions with regards to the alignment of the current teaching practices with a student-centred learning approach in mixed-mode delivery. A comparison of the responses from students and tutors was made to determine whether there were commonalities or variances between the students and tutors’ opinions.

Validity and reliability

Validity and reliability were addressed differently in the quantitative and qualitative research approaches (Cohen, et al., 2007). “Validity is the ability of an instrument to measure what it is designed to measure” (Kumar, 2005, p. 153). Validity in quantitative research can be improved “through careful sampling, appropriate instrumentation and appropriate statistical treatments of the data” (Cohen, et al., 2007, p. 133). In quantitative research, “reliability is essentially a synonym for dependability, consistency and replicability over time, over instruments and over groups of respondents. It is concerned with precision and accuracy...” (Cohen, et al., 2007, p. 146). In other words, if the procedure used for the study

is repeated, it should result in similar findings, thus establishing confidence in the outcomes of the study. In qualitative research, “reliability can be regarded as a fit between what a researcher records as data and what actually occurs in the natural setting that is being examined; that is, a degree of accuracy and comprehensiveness of coverage” (Cohen, et al., 2007, p. 149).

To ensure the validity and reliability of this research, the following multiple strategies were employed:

- a) Development of the survey instrument based on review of the literature;
- b) Piloting of the survey instrument. The survey was piloted to remove ambiguity or misleading questions, improve clarity of the survey instrument and confirm if it was aligned to the research questions;
- c) Revision of the survey based on feedback from the pilot;
- d) Audio recording of the interviews;
- e) Use of verbatim and direct quotes;
- f) Use of appropriate data analysis techniques and tools such as SPSS and NVIVO;
- g) Analysis of emerging themes and patterns;
- h) Seeking assistance from critical friends to ‘peer review’ the data analysis; and
- i) Maintaining an audit and log of the whole research process that lead to the findings.

The researcher used thick, rich descriptions to communicate the findings of the interview. In addition, ‘critical friends’ were invited to peer review, assess and confirm the reliability of the data and this assisted in reducing any potential bias and anomalies.

Triangulation

Triangulation is “the process of using more than one source to confirm information: confirming data from different sources, confirming observations from different observers, and confirming information with different data-collection methods” (Krathwohl, 2009, p. 286). Triangulation validates the findings, enhances the confidence and eliminates any bias in the study. In triangulation, both the quantitative and qualitative methods are given equal emphasis regarding their contribution in addressing the research questions (Plano Clark, et al., 2008). Utilising a combination of data collection methods has the advantage of integrating and applying the findings from the first method (survey) with the second method (interview) (Axinn & Pearce, 2006). This study employs the three key methods of triangulation as explored and distinguished by Denzin (1970). They are:

- a) Methodological triangulation – refers to the use of more than one method for gathering data;
- b) Theoretical triangulation – refers to the use of more than one theoretical position in interpreting data; and
- c) Data triangulation – refers to using multiple sources of data.

In this study, the methodological triangulation involved data collection from two primary sources – survey and interviews with students and tutors. Findings from the survey influenced the type of questions that were asked during the interviews. Both the qualitative and quantitative data were analysed for a more complete set of findings and results to address the research questions. Using more than one method validates and confirms the integrity, reliability and credibility of the research. The theoretical triangulation of the data was related to the four other theories associated with a student-centred learning approach, namely

Constructivism, Adult Learning, Andragogy and Self-directed Learning. The literature review revealed some similarities and crossover of these principles. An integrated framework detailing the dimensions of student-centred learning as well as incorporating the important elements from the related theories was developed. The survey items and questions were constructed in line with the integrated framework to establish the factual accuracy and to compare consistency of the data collected (Krathwohl, 2009).

Pilot Study

To increase the reliability of the survey, the instrument was piloted with a number of students and tutors using an integration of both quantitative and qualitative measures. The pilot study functions primarily to ensure the validity, reliability and acceptability of the instruments and identifies the most appropriate approach to the testing of the statistical and data analysis procedures. It also helps improve the rigour of the collection of data and possibly gives additional insights and strategies which may not have been anticipated prior to the pilot study. As a result of this pilot study, additional knowledge and insights became apparent and alerted the researcher to enhancements and modifications to the instrument which added further rigour to the subsequent data collection.

Procedures used for the pilot study

Participants were selected from programmes delivered through mixed-mode in the *Tainui* region. Permission was sought from the Regional Manager and Lead Tutors to administer the survey instrument in the class. Tutors who agreed to participate were contacted for a day and time when the researcher could administer the survey instrument in the class.

Direct administration to the class gave the researcher the opportunity to establish rapport with the tutors and students. The participants were informed of the Ethics approval gained from the Curtin University and *Te Kahui Rangahau at Te Wānanga o Aotearoa* Ethics committees and associated with the research. The participants were also assured of confidentiality and anonymity; and that their participation would not impact negatively on their studies. Students were then given the consent form to complete, followed by the survey, which was also given to the tutor to complete at the same time.

Summary of the results of the pilot study

As the survey instrument was developed for the purpose of this research, it was vital to test its reliability and validity. These two aspects were determined from the pilot. “Reliability is a measure of consistency over time and over similar samples” (Cohen, et al., 2007, p. 146). This means that the test aims to determine if the results can be repeated using a similar approach and methodology. The aspect of validity refers to the focus on the content of the survey instrument, what items must be included and how the questions are designed and structured. To assess the validity of the instrument, this study followed the criteria for “construct validity” where researchers are “required to demonstrate that instruments measured the constructs they were designed to measure” (Dellinger & Leech, 2007, p. 311). Construct validity is used as the most appropriate over-arching validity concept because “it includes not only measurement-related validity but also all other validity evidence, such as design-related validity evidence and statistical inference validity evidence” (Dellinger & Leech, 2007, p. 311). It also followed the two other subjective, non-statistical measures of face and content validity in terms of ensuring that the content of the instruments measures what it intended to measure (Creswell & Plano Clark, 2007). This was accomplished through

verbal and informal discussion with colleagues and a number of tutors who gave their feedback regarding the dimensions of the instrument. These two processes which involved the combination of quantitative and qualitative measures ensure that the final outcomes meet the robustness and rigour required for a study.

The 43-item instrument was administered to 32 students, 10 tutors and 6 colleagues engaged in programmes delivered through a mixed-mode approach. Examples of mixed-mode programmes which were included in the pilot include: Certificate in Computing, *Te Ara Reo* (Māori Language), Diploma in Social Work, Bachelor in *Iwi* Environmental Management and Certificate in Māori Ambassadorship and Leadership. Participants were Māori and non-Māori aged 18 years old and above, and included both males and females. The respondents characterised the sample of the overall population which the survey aimed to target. All completed survey instruments were collected from students and tutors by the researcher.

Feedback from students and tutors who participated in the pilot study was collected, as well as feedback from colleagues with learning and teaching experience in higher education. The participants of the pilot test were asked to evaluate the suitability of the survey instrument, time taken to complete the survey, any issues or problems experienced when completing the survey instrument, and its ease of use. The survey instrument was also reviewed by four colleagues from *Te Wānanga o Aotearoa* and two from another institution, who, as educational practitioners and researchers helped establish the appropriateness of the dimensions, items and scales for the purpose of this study.

Piloting the instrument also included the use of statistical procedures and analysis using SPSS software. The tabulation of the results and application of appropriate statistical testing and analyses was conducted to determine the reliability of the survey instrument. The raw data obtained from the survey instrument were recorded in a spreadsheet then uploaded on to SPSS for analysis. The data from the pilot study were analysed and checked for the internal consistency and reliability of the items in the instrument using Cronbach's alpha statistics. Cronbach's alpha helps to determine the replicability of the study where questions are found to be consistent in eliciting reliable and consistent responses. The computation of the Cronbach's alpha coefficient of reliability enabled the researcher to determine the degree to which each item in the dimensions measured the constructs. It generated a summary per scale which provided a view of how reliable each scale was. The acceptable reliability level by convention is between 0.8 and 0.67 (Cohen, et al., 2007). The Cronbach's alpha results certainly suggest that the survey instrument has internal consistency of responses. Therefore the reliability of the instrument was established. For the students' survey instrument, all dimensions except the 'Evaluation' dimension had a Cronbach's alpha result of above 0.67. The 'Evaluation' dimension has a result of .627. For the tutors' survey instrument, there were three dimensions that were below the reliability level benchmark and therefore considered to have not met the consistency criteria. They were the 'Role and Attitude of the Tutor', 'Learning Activities' and 'Assessment'. The reliability scales for these three are .601, .546 and .622. The items under these scales were reviewed and revised. The findings from both aspects of the pilot prompted significant modification of the survey instrument. The table below shows the summary of the Cronbach's alpha result for each of the scales in the student survey. The results indicate that the survey instrument measures consistently.

Table 4.5

Reliability Statistics for Students' Survey Instrument: (32 respondents)

	Scale	Cronbach's Alpha	Number of Items
1.	Learning Resources	.833	3
2.	Knowing the Students	.802	3
3.	Communication	.799	4
4.	Role and Attitude of the Tutor	.890	4
5.	Teaching Methods and Strategies	.847	4
6.	Learning Activities	.846	4
7.	Learning Environment	.928	5
8.	Learning Outcomes	.790	4
9.	Assessment	.706	4
10.	Curriculum Design	.812	4
11.	Evaluation	.626	4

Table 4.6

Reliability Statistics for Tutors' Survey Instrument: (16 respondents)

	Scale	Cronbach's Alpha	Number of Items
1.	Learning Resources	.786	3
2.	Knowing the Students	.723	3
3.	Communication	.710	4
4.	Role and Attitude of the Tutor	.601	4
5.	Teaching Methods and Strategies	.638	4
6.	Learning Activities	.546	4
7.	Learning Environment	.736	5
8.	Learning Outcomes	.772	4
9.	Assessment	.622	4
10.	Curriculum design	.884	4
11.	Evaluation	.729	3

The analysis of the responses and feedback from the pilot supported the process of ensuring the validity of the instrument. In general, the participants in the pilot considered the survey instrument suitable for the study. The colleagues and tutors commented positively on the comprehensive list of the dimensions, stating that it provided a valuable framework to

describe learning and teaching practices aligned with a student-centred learning approach. In addition, the feedback also considered the factors and dimensions demonstrate a holistic approach in providing a quality learning experience for the students. Likewise, the framework was also considered to be a potentially effective evaluative tool for tutors to reflect on and improve their teaching practice.

However, a number of students and tutors as well as the colleagues who reviewed the survey instrument commented that it was too long. They considered that there were too many items and some questions were repeated on different dimensions. Also they noted that some of the questions were complex and long, and needed to be shortened and simplified to one idea per question. There were also inconsistencies in the number of items under each dimension. Comments were also made regarding the lack of a *Kaupapa Māori* (Māori Philosophy) focus, specifically, that the survey instrument was too westernised and “*there was something missing*”. More pointed questions on the Māori cultural and philosophical influences were put to the researcher such as “*What Māori models of learning and teaching influenced your research?*” “*You did not seem to take into consideration that your participants will be dominantly Māori*”. “*What do you know about indigenous ways of knowing? Of Mātauranga Māori*” “*Do you have knowledge of Māori culture, Māori pedagogy and their worldview?*” “*Are you aware of the cultural diversity that we have in the classroom?*” Such feedback and comments required the researcher to consider whether significant changes needed to be made to the survey instrument and also to the overall approach of the study.

The researcher took up the challenge to expand the framework of enquiry by including the aspect on ‘culture’ and to investigate its impact on the quality of learning and

teaching within student-centred approach. Further investigations were also conducted to gain a better understanding of *Kaupapa Māori* and *Mātauranga Māori* (Māori knowledge). To continue with the research as originally intended would have diminished the value of the research for many of the participants are Māori. Māori culture permeates all areas of learning and teaching operations within the institution where this research took place. The changes made based on this feedback supported the research being more culturally responsive and supported a higher quality outcome as it met the participants' expectations that supported their involvement.

Adding the ‘Cultural Awareness’ dimension: An assessment of what needs to change to improve the final study

The various dimensions of student-centred learning in the proposed integrative framework were derived from theories and practice of a number of mainstream researchers imbued with Western and/or Eurocentric concepts and pedagogies. Kennedy (2013) postulated that the framework and its dimensions may not be fully compatible or holistic when applied to a culturally indigenous learning institution albeit the dimensions of student-centred learning are supported by sound research evidence. The dimensions need to be congruent and inclusive of the cultural identity, practices and pedagogical approaches of the institution and the learners. This is aligned with the APA Learner-Centred Psychological Principles where it states under the Individual Differences domain that the differences in learners' linguistic, cultural, and social backgrounds must be taken into account in order for learning to be effective (APA Taskforce on Psychology in Education, 1993). Adding the cultural factor will help provide a multi- faceted understanding of the phenomenon of student-centred learning in all its complexity and richness.

It has been acknowledged that there is a link between Adult Learning and culture and that “culture pervades learning” (McLoughlin & Oliver, 2000, p. 59), therefore “a wide range of cultural influences will affect Adult Learning” (Sparks & Butterwick, 2004, p. 279). For some indigenous cultures, learning and teaching that acknowledges the learner’s cultural identity is seen as vital to their educational success and empowerment. “Culturally relevant adult education can help learners validate their cultural identity and use their cultural knowledge as a basis for personal and social transformation” (Guy, 1999, p. 5).

Understanding of identity (“knowledge of who we are and what groups we belong to”) (Sheets, 2005, p. 50) is crucial both on the part of the learners as well as the tutors for the successful achievement of the students. These views highlight that the learning process of students and how they learn should not be divorced from their cultural upbringing and identity.

Bourdieu’s (1977; Bourdieu & Passeron, 1990) concept on cultural capital (which comes in various distinct types) argues that similar with economic capital, individuals and families have accumulated resources, wealth and knowledge which position them at a much higher level than others. Similarly, Di Maggio (1982) who also explored cultural capital argued that the different aspects of culture also have an impact on cognition and educational achievement. The authors linked cultural capital with educational success. McLoughlin and Oliver (2000) indicated that one of the limitations in the classroom instructional models, “is that they do not fully contextualise the learning experience, and are themselves the product of particular cultures” (p. 58). Tutors’ approaches must be able to facilitate learning that builds upon and relates to students’ background, interest in and relevance to their learning goals. In line with this, McAnany (2009) recommended principles based from the discourses in

multiculturalism: in order to educate and broaden the worldviews of the learners, instructional design must incorporate global concepts and images, must not be offensive and that they must know the learner in order to design their instruction for each specific culture. A grounded understanding of the impact of culture on the design of the learning environment must take into consideration the context, historical as well as current conditions of the students. However, Zhao (2007) highlighted the following pitfall in accommodating students' cultural differences:

We may fall into the trap or reifying superficially or even ethnocentrically understood cultural differences and pigeonholing students simply because of their assumed 'cultural differences'. Applying our simplistic understanding of other cultures could constrain our students. (pp. 473-474)

Educators therefore need to ensure that being culturally aware and sensitive is not lip service, but must be demonstrated by making a genuine connection and providing dynamic and flexible pedagogical strategies to accommodate the cultural diversity in the classroom.

Māori pedagogies

In an indigenous learning institution, the existent cultural elements of beliefs, values, language, heritage, heredity, perspectives and practices are clearly reinforced. The Māori people are the indigenous people of New Zealand, the *tangata whenua* (people of the land). They therefore have their own deeply ingrained Māori values, principles and traditions which are practiced in learning and teaching contexts. According to Bishop (2003) "current educational policies and practices, in Aotearoa/New Zealand, as in most Western countries,

were developed and continue to be developed within a pattern of power imbalance which favours cultural deficit explanations” (p. 221). For the Māori people, the imposition of the dominant Western theories and worldviews which are inconsistent with the Māori epistemologies and pedagogy are found to be ineffective in *akoranga Māori* (Māori learning). Bishop (2003) and Smith (1999) promote the reaffirmation and empowerment of indigenous Māori cultural aspirations through the *Kaupapa Māori* theory and practice which are proven to be beneficial for Māori as a way of addressing the imbalances in the classroom. “In *Kaupapa Māori* contexts, the interrelationships and interaction patterns draw on Māori cultural aspirations and sense-making processes (ways of knowing) rather than on those imposed by another culture” (Bishop, 2003, p. 223). *Mātauranga Māori* (Māori pedagogy), also based from traditional Māori concepts and built upon *Kaupapa Māori* principles, presents learning and teaching approaches which are considered to be effective in engaging Māori learners. A pedagogical practice that acknowledges and respects the distinction of the indigenous customs and traditions is crucial to the success of the learners.

Edwards & Hewitson (2008, p. 98) discussed “creating tertiary educational programmes based on indigenous epistemologies and worldviews as well as adopting systems that normalise Māori epistemologies” as a way of countering hegemony through education. This is the “culturally preferred pedagogy” for Māori which promotes principles for “teaching and learning practices that are unique to *Tikanga Māori*” (Pihamo, Smith, Tahi, & Lee, 2004, p. 47). Rather than being disconnected from Māori philosophy, practice and context, the learning and teaching approaches are designed to be culturally appropriate to empower Māori identity. Embedding Māori ways of knowing and following *Tikanga Māori* and *Mātauranga Māori* principles and philosophies in learning and teaching practices are a way of addressing the disparity in the educational achievement of Māori.

A number of fundamental metaphors with specific meanings for Māori have been identified in the educational settings which allowed them to “develop markedly different modes of theorising and means of addressing educational relationships for and with Māori students in mainstream settings...” (Bishop, 2003, p. 225). For example, the concept of *Ako*, a traditional Māori concept for both learning and teaching, derived from a Māori cultural framework is considered to be the preferred way of learning and teaching for Māori students (J. Lee, 2004). This concept promotes reciprocal learning where power is shared in the classroom. Students and tutors learn from each other; and make meaningful contribution and participation.

A holistic approach to learning is also valued and perceived to work well in culturally diverse students. “Historically, Māori engagement in learning was holistic – meaning that learning occurred in all situations and contexts” (Mlcek et al., 2009, p. 9). The focus was not limited to academic development for the students but also other factors in their well-being such as social, cultural and spiritual well-being. Durie (1994) for example developed the metaphor ‘*Te Whare Tapa Wha*’ (the strong house) where the house represents the learner in the learning and teaching context. Likewise, Māori cultural identities are reinforced through the embedding of *Tikanga Māori* values and traditions in the pedagogical practices. These are exemplified in the classroom through active engagement and participation in a number of Māori traditional, cultural activities. (e.g. starting the day with a *karakia* (thanksgiving and blessings), using *whakatauki* (proverbs), *mihi* (greetings and acknowledgment), singing *waiata* (songs) or participation in *pōwhiri* (welcome ceremony) and *kapa haka* (performance art). They are considered to be pedagogical approaches that will address the disparity in

Māori student achievement in comparison with non-Māori approach. They validate Māori aspirations and strengthen their cultural identity.

The following diagram and table illustrate the modifications to the conceptual framework of the research as well as the proposed Integrative Framework for Student-Centred Learning.

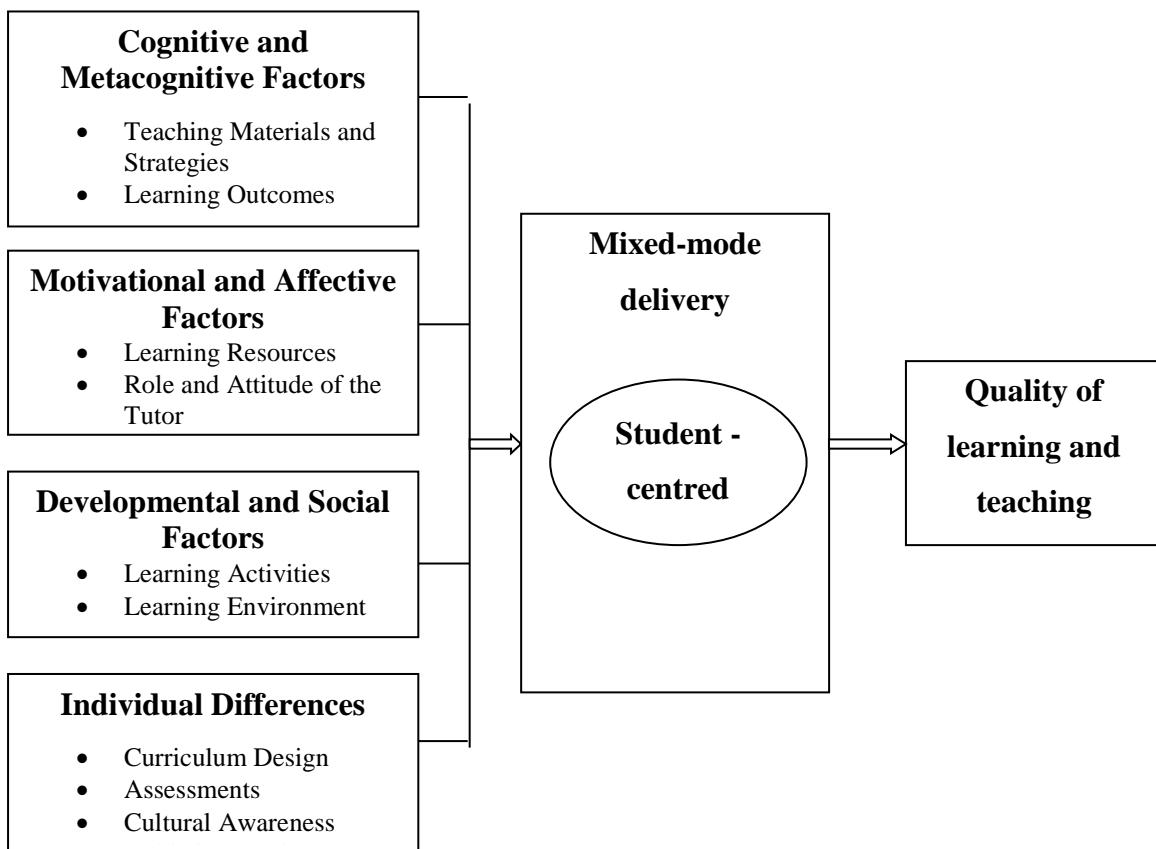


Figure 4.1. Schematic representation of the revised Integrative Framework for Student-Centred Learning

The revised conceptual framework now includes the ‘Cultural Awareness’ dimension which was added as a result of the feedback from the pilot study. Adding the ‘Cultural

'Awareness' dimension recognises the fact that the participants and the institution where this research took place have a very high regard for their cultural identity. Items under the 'Cultural Awareness' dimension provide a description as to how best this dimension is characterized. Table 4.7 shows the source of each dimension/factors and corresponding items used in the survey instrument. The table also shows the additional dimension which is the "Cultural factor" after feedback has been collected and applied to the instrument.

Table 4.7

Revised Integrative Framework for Student-Centred Learning (Post Pilot)

REVISED INTEGRATIVE FRAMEWORK FOR STUDENT-CENTRED LEARNING					
Factors		APA (1993)	Miller (2001)	Ng, Murphy and Jenkins (2002)	Kiley et al. (2000)
Cognitive and meta-cognitive factors	Evaluation	✓	✓	✓	✓
	Teaching Methods and Strategies	✓		✓	✓
	Learning Outcomes	✓	✓		✓
Motivational and affective factors	Learning Resources	✓	✓	✓	
	Role of the Tutor in the Classroom	✓	✓	✓	
Developmental and social factors	Learning Environment	✓	✓		
	Learning Activities	✓	✓		
Individual differences	Curriculum Design	✓	✓		
	Assessments	✓		✓	✓
	Cultural Awareness <i>(added post pilot)</i>	✓			

Refinement of the instrument

The administration of the pilot study led to the modification and revision of the quantitative research instrument to improve its comprehension. The items on the instrument have been refined based on the feedback and subsequent modification of the conceptual framework. The students commented that the survey instrument was too long with 43 items and 6 open-ended questions. There were similar questions that were asked in different ways

more than once. Double barrel or complex questions have also been simplified and shortened, and a number of ambiguous statements have been clarified. The qualitative data collected from the responses for the open-ended questions were analysed which also led to the revision and simplification of the questions. The open-ended questions were reduced from 7 to 5, thus removing the unnecessary and redundant questions. (For details of the changes made to the survey instrument, please see Appendix P).

Ethical considerations

The researcher ensured that ethical conduct and principles were adhered to at all the stages of the research process to maintain the integrity and credibility of the study. Careful consideration was given to the manner in which the researcher approached the participants. The face-to-face communication in explaining the purpose of the research, its aims, ethical considerations and how the data would be managed and analysed ensured that the participants were well informed. Prior approval was granted by Curtin University and TWoA Ethics Committee (See Appendices A and B), followed by permission to conduct the research by the Regional Manager of each campus and the Lead Tutors of the identified programmes. The researcher also distributed the research information sheet to the participants as part of the briefing (See Appendices I and J). Consent forms (See Appendices G and H), completed by the participants, also included how the ethical issues in the proposed research would be addressed. Respect between participants and the researcher was demonstrated by protecting the privacy and anonymity of the participants and maintaining confidentiality of the information provided. Only information relevant to the purpose of the research was collected. The names of the participants were not required. The information collected was used for its intended purpose only. The research activities only required voluntary participation and did

not in any way invade the privacy of the individuals. The participants were advised that they could withdraw without penalty at any time during the survey or interview process. All communications that were sent to the participants highlighted confidentiality, protection and secure storage of the information provided for a definite period. Only the researcher had access to the information. The participants were also assured that there would be no potential risk of any physical harm, loss of privacy, misinterpretation or misrepresentation of the results or any other negative social and psychological consequences. The researcher scheduled the administration of the survey with the tutors at their most convenient time so as to minimise disruption to the classes.

Chapter summary

This chapter has provided a description of the methodology and procedures that were employed in this research. The research used a sequential mixed-methods approach, combining the strengths of both quantitative and qualitative approaches in the survey and semi-structured interviews. The survey instrument contained both close-ended questions for the quantitative data and open-ended questions for the qualitative data. A pilot study was conducted for this study. As a result of the pilot study, there was sufficient justification to include the ‘Cultural Awareness’ dimension in the conceptual framework and the survey instrument. The survey instrument was also edited to remove repetition, ambiguity and complexity. The inclusion of the ‘Cultural Awareness’ dimension added to the face validity and depth of the study as the participants belonged to an institution which epitomises the Māori culture. The factor of ‘culture’ and Māori pedagogies in relation to learning and teaching was explored together with the discussion of the items that were added on the survey instrument. There were two aspects that were tested in the pilot study: to determine whether

the survey instrument was reliable through statistical testing; and whether the survey instrument was acceptable and valid. The survey instrument, although modified and revised, was found to be appropriate and suitable for this research. The methodology and pilot study have taken in to consideration methodological, theoretical and data triangulation to enhance the quality and confidence in the results of this study.

Chapter 5 will present the results drawn from the administration of the survey instrument to the participants. The quantitative data from the survey will determine the degree of student-centeredness of the learning and teaching practices in mixed-mode delivery from the students and tutors' perceptions.

CHAPTER 5

Phase One: Results of the Quantitative Investigation

Introduction

This chapter presents the quantitative results from the survey which was administered to a sample of 194 students and 18 tutors engaged in mixed-mode delivery at *Te Wānanga o Aotearoa*. The purpose of the survey was to determine whether the current learning and teaching practices are aligned with the principles of a student-centred learning approach from the perspectives of tutors and students. This chapter also describes the processes and procedures which were used to collect the quantitative data and the strategies used to analyse these data in relation to the research questions. This chapter presents the findings for the major research question 1 and its two subsidiary questions.

Major research question 1:

How are the current learning and teaching practices utilised in mixed-mode delivery consistent with the principles of a student-centred learning approach at Te Wānanga o Aotearoa?

Subsidiary questions:

- a. *Which aspects of student-centred learning principles have the greatest impact on the quality of learning and teaching activities?*

b. How do tutors' perceptions of the current learning and teaching practices compare with those of students?

The survey

The survey used in this study utilised fields of interest which were derived from the Integrative Framework for Student-Centred Learning (IFSCL) which was presented in full in the Conceptual Framework Chapter (3); a conceptual framework which was developed from the principles of a student-centred learning approach. The components of the IFSCL were based on an extensive review and analysis of the literature and the research of experts in the field of education such as C. Rogers, M. Knowles, D. Brandes, B. McCombs, R. Barr and J. Tag, American Psychological Association (APA) and G. Gibbs and other authors who had examined the implementation of a student-centred learning approach in the classroom. Apart from examining the experiences of both tutors and students as to how closely aligned the learning and teaching practices were with a student-centred learning approach, the survey was also used to examine the factors and dimensions that appeared to have the greatest impact on the quality of learning and teaching as well as comparing the perceptions of both groups of participants. The survey comprised closed and open-ended questions which were extensively tested and piloted for the purpose of establishing validity and reliability. The results of these tests are presented in Chapter 4, Methodology. Significant changes and revisions were made to the survey instrument and the IFSCL framework following feedback from the pilot study. These changes were described in full in Chapter 5 as part of the development of survey items for the pilot study. The final 10 dimensions and 40 items of the framework comprehensively address the aspects of learning and teaching considered salient by both tutors and students.

The procedures undertaken for administering the survey were as follows:

1. Identify the delivery sites, programmes delivered via mixed-mode and the survey sample comprised of tutors and students.
2. Seek permission from the relevant managers and send letters of invitation to the participants.
3. Collect data by administering the survey to students and tutors in the class.
4. Analyse the data using descriptive statistics.

A description of the respondents' characteristics provided a context for the analysis of the data. Percentage distribution of the responses between tutor and student participants allowed for comparisons to be drawn on the alignment of the learning and teaching practices with a student-centred learning approach as well as examining which factors have the most impact on the quality of learning and teaching. The order of the dimensions based on their mean ranking was used as the format to organise and present the results.

The results were divided into students' results first, then the tutors' results for each of the subsidiary questions. The quantitative phase of the study helped inform the second phase involving the collection of qualitative data through semi-structured interviews with the participants. The results of the survey were used as the catalyst for the development of the interview questions. This sequential, mixed-methods approach ensured a more comprehensive picture of the perceptions of the participants as it connects the results of the quantitative phase with the qualitative phase. The presentation of the qualitative findings is the subject of the next chapter.

The survey instrument

The survey instrument was comprised of a list of dimensions and items from the IFSCL to capture students' and tutors' individual perceptions of the alignment of the current learning and teaching practices in mixed-mode programmes utilising a student-centred approach. The subsidiary questions examined which dimension had the most impact on the quality of learning and teaching, whether positively or negatively, and if there was a difference in perceptions between the tutors and students. The survey instrument was divided in three sections with the first section containing the 10 dimensions and 40 items of the IFSCL. A five-point Likert scale (5 - Strongly Agree, 4 - Agree, 3 - Uncertain, 2 - Disagree and 1 - Strongly Disagree) allowed for the selection of a response to each item. The second section of the survey comprised open-ended questions which asked the participants to provide feedback regarding current learning and teaching practices. The second section contained 4 items for students and 5 for tutors respectively. The third section included 3 demographic multiple choice items and one open-ended item. The structure of the instrument can be seen in Appendices K and L. The survey instrument enabled the collection of demographic data in order to gain an understanding of the characteristics of the participants and their perceptions of their experiences of the current learning and teaching practices in mixed-mode programmes. The invitation to participate in the follow-up interview was a component of the survey. The raw data were entered manually on an Excel spreadsheet, then analysed using the Statistical Package for the Social Sciences (SPSS) software. The SPSS software was used to calculate the reliability coefficient, frequency distribution, percentages, mean, mode and standard deviation of the results. The data files from the tutor and students were analysed separately. Descriptive statistics were used to analyse the results.

Quantitative data collection

The data collection replicated the same procedure that was used in the pilot study.

Permission was sought from relevant managers of the tutors who agreed to participate in this study. On the appointed day, the researcher was on hand to distribute the survey in class and to collect the completed documents for reasons of convenience, a higher return rate and for efficient use of time. The tutors were surveyed at the same time as the students. The presence of the researcher in the class allowed the completed survey instruments to be collected immediately as well as fielding potential questions from participants.

From a population of 1,424 enrolled students and 65 tutors engaged in the mixed-mode programmes in the *Tainui* (Waikato) and *Tāmaki Makaurau* (Auckland, Queen St. Campus) regions, 25 classes were purposely selected and invited to participate in the study. Data were collected during the period of July – September, 2010. The researcher attempted to ensure that equal numbers of participants from the identified programmes and mode of delivery were included. However, as the number of students in each class and mode of delivery varied, the larger number of student participants came from ‘Whakaako’ (once a week 3 hour class) mode of delivery. Another consideration was that the students must have been enrolled in a full year mixed-mode programme and must have been attending for at least five to six months to be included. The students in this study were enrolled from the beginning of the academic year (March) while the survey was conducted in the months of July-September. The classes were identified based specifically on this premise.

Not all those who were sent the invitation to participate responded positively. Only 18 out of 34 invited tutors agreed to participate in the survey. Five tutors indicated that they

were unable to participate due to problems with timing. Six tutors said that they had too much programme content to get through and the lessons were already planned. Three tutors responded that the mode of delivery for their programme was face-to-face and not mixed-mode. Two tutors did not return the survey although their class participated. From the 18 tutors who agreed to participate, their enrolled students totalled 281 on the class lists obtained from the Student Registry Office. However, on the day of the survey administration there were a number of students who were absent or did not wish to complete the survey. The final sample count for those who completed the survey was 194 students and 18 tutors.

Figure 5.1 shows the alignment of the responses for the survey instrument, open-ended and interview questions in addressing the research questions:

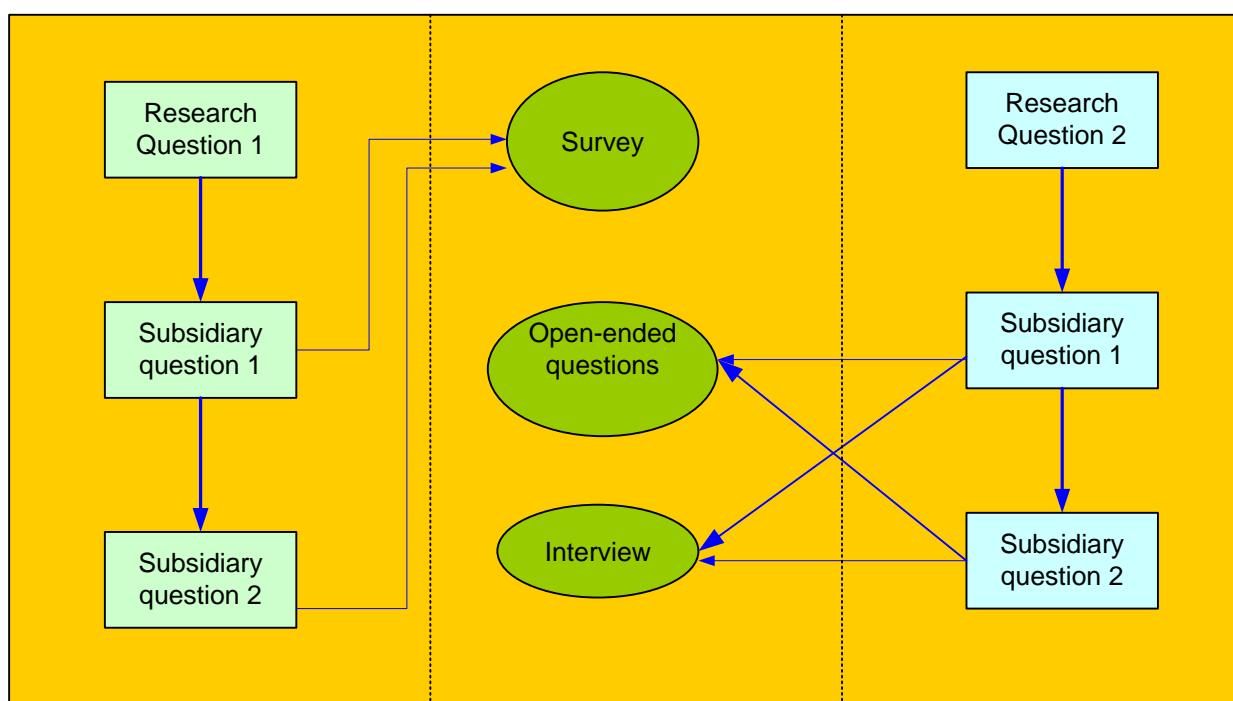


Figure 5.1. Alignment of data collection with research questions

Demographic characteristics of the respondents

Students in the sample were enrolled in programmes delivered through a combination of various modes of delivery, namely *Noho/Noho Marae* (live-in), Computer Assisted Instruction, *Wānanga* (one day workshop a week) delivery and *Whakaako* classes in the *Tainui* (Waikato) and *Tāmaki Makaurau* (Queen St., Auckland campus) regions. These delivery modes utilise a combination of teaching strategies which include tutorials, *nōho/nōho marae* and self-directed learning. During self-directed learning, students are provided with resources in the various media, such as, DVDs, CDs, workbooks and manuals to complete homework, group work, projects or other activities that will require them to apply what they have learnt during their face-to-face interaction with the tutors.

Student sample

Section C of the survey instrument for students contained questions that collected data about gender, mode of delivery and educational background to define their characteristics. Likewise, data regarding gender and the mode of delivery that the tutors were currently teaching were also collected from the tutor. The characteristics of the 194 student participants are shown below.

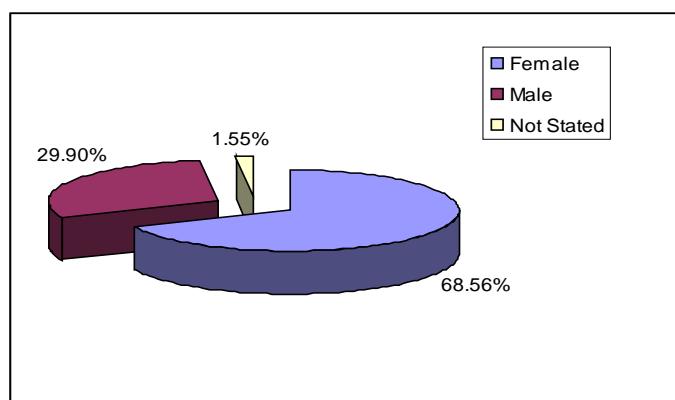


Figure 5.2. Percentage distribution of student respondents based on gender

The female student respondents at 68.56% clearly outnumbered the male participants at 29.90%. Three members of the student sample did not respond to the item regarding gender (1.55%).

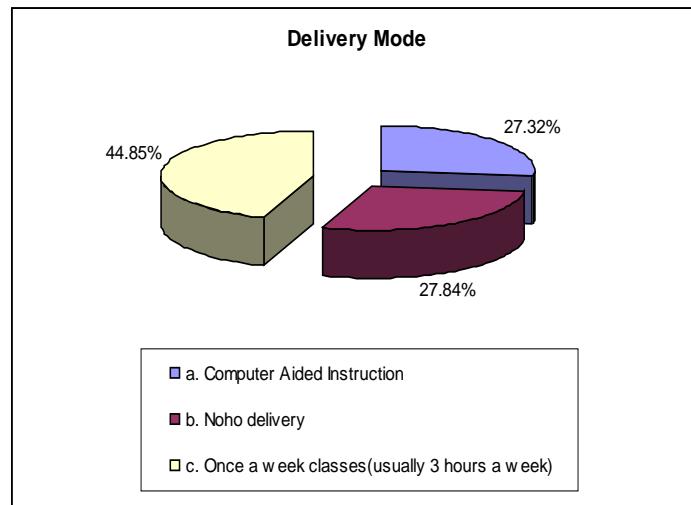


Figure 5.3. Percentage distribution of student respondents based on mode of delivery

There were 44.85% of the respondents who indicated that they were involved in the '*Whakaako*' classes (3 hours per week) programme. This was followed by the *Noho/Noho Maraē* (live-in) based program, 27.84% and lastly, the Computer Assisted Instruction, 27.32%. None of the respondents indicated that they were involved in the *Wānanga* mode of delivery. It was discovered that there were no longer programmes being offered as purely *Wānanga* delivery at the time of the research. Under normal circumstances the *Wānanga* mode of delivery is conducted through a full day workshop once a week.

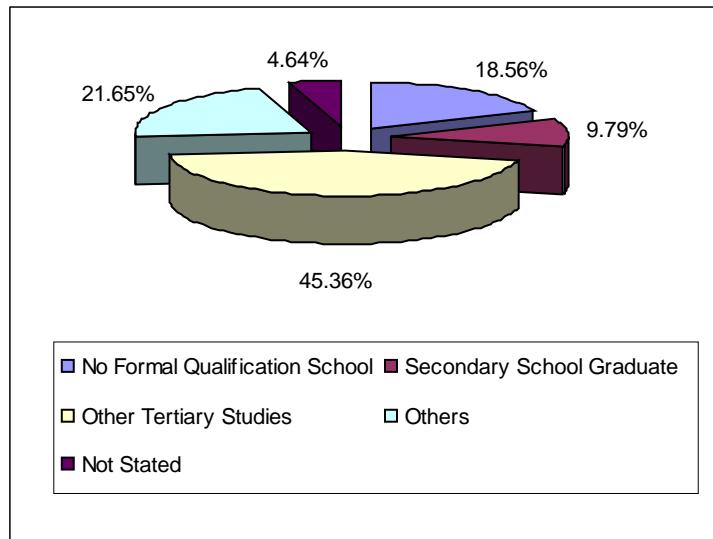


Figure 5.4. Percentage distribution of student respondents based on educational experience

A large number of the respondents indicated that their educational experience originated from other tertiary studies, 45.36%. There were 18.56% who did not have a formal qualification and 9.79% of the sample indicated that they had gained their school certificate/secondary school qualification. There were 21.65% who had other educational experience such as short courses and trainings, while 4.64% of the sample did not respond to this item.

Tutor sample

The characteristics of the 18 tutors were as follows:

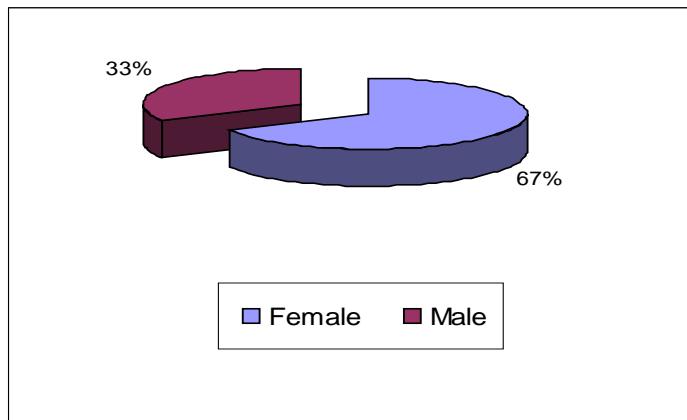


Figure 5.5. Percentage distribution of tutor respondents based on gender

As seen in Figure 6.5, there were more female tutor participants at 67% than male tutor participants at 33% in the survey.

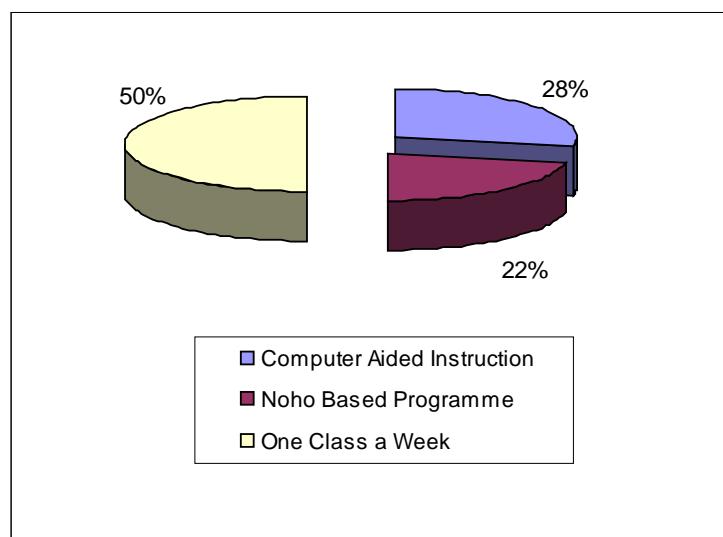


Figure 5.6. Graphical presentation of percentage distribution of respondents based on primary delivery mode of the programme

Half of the tutor sample considered the mode of delivery of their programme as ‘Whakaako’ mode of delivery followed by Computer Assisted Instruction at 28% and lastly, *Noho/Noho Marae* based programme at 22%.

Summary of results: Research question One

This study sought to find answers to the following questions:

Major research question 1:

How are the current learning and teaching practices utilised in mixed-mode delivery consistent with the principles of a student-centred learning approach at Te Wānanga o Aotearoa?

Subsidiary questions:

- a) Which aspects of student-centred learning principles have the greatest impact on the quality of learning and teaching practices?*
- b) How do tutors' perceptions of the current learning and teaching practices compare with those of students?*

To answer the major research question 1 ‘How are the current learning and teaching practices utilised in mixed-mode delivery consistent with the principles of a student-centred learning approach?’, the participants were asked to rate their overall learning experience of student-centred learning principles as experienced in mixed-mode programmes. Questions 1 to 40 of Section A of the survey collected data that were designed to capture the participants’ perceptions of their experience regarding the alignment of the learning and teaching practices with a student-centred learning approach. Section B of the survey included open-ended questions which will be discussed in the next chapter. The following sections of this chapter present the data following the order of the research questions.

Subsidiary question a), sought to identify ‘which aspects of student-centred learning principles have the greatest impact on the quality of learning and teaching activities?’ The survey responses were tabulated for each dimension, then analysed for the percentage distribution and central tendencies of the responses. The dimensions include: ‘Teaching Methods and Strategies’, ‘Learning Outcomes’, ‘Evaluation’, ‘Learning Resources’, ‘Role of the Tutor in the Classroom’, ‘Learning Activities’, ‘Learning Environment’, ‘Curriculum Design’, ‘Assessment’ and ‘Cultural Awareness’. Descriptive statistics were used to examine the quantitative data collected from the survey. For both groups of participants the results

show a significantly positive agreement for all the ten dimensions surveyed. This supports the view that a great majority of tutors and students from the mixed-mode programmes perceived the current learning and teaching practices to be consistently aligned with student-centred learning dimensions.

To further understand which of the principles of a student-centred learning approach have the most impact on the quality of learning and teaching (subsidiary question ‘a’) as perceived by the participants, the ten dimensions were ranked from highest to lowest according to their mean scores. The order of the ranking of the responses not only identified which of these were considered to be the most aligned with student-centred learning, but also demonstrated an insight as to which dimensions have potential issues that need to be addressed. The researcher believes that whether the dimensions have been ranked positively or negatively by the respondents, both have influence on the quality of their learning and teaching experience. The rankings not only highlight which learning and teaching practices need to be promoted, but also which ones need to be scaled up to meet the expectations of the students in regards to the quality of their educational experience in the institution.

The following sections discuss the results of the calculation of the measures for frequency distribution and central tendencies for each dimension from the survey responses. The intention of each item in the survey instrument was to identify the degree of student-centeredness of the current learning and teaching practices. The research questions were addressed after the preliminary data analysis was conducted through SPSS. The analysis for each question and group of participants was conducted separately following the same descriptive statistics procedure. The data were further explored to determine the differences in the perceptions between the two groups of participants.

Students' responses to the dimensions

This section presents the findings of the survey in regards to the degree of student-centeredness of the learning and teaching practices as perceived by the students. This includes rating their responses relating to the items in each dimension. The summarised rankings of the ten learning and teaching dimensions from the completed student survey instrument (n=194) are presented in Table 5.1.

Table 5.1

Reliability and Descriptive Statistics for the SCL Dimensions – Students

Dimension	Cronbach Alpha	No. of items	Lowest mean item	Highest mean item	Mean	SD
Role of the Tutor in the Classroom	.873	4	4.49	4.61	18.19	2.30
Cultural Awareness	.854	4	4.42	4.55	17.91	2.40
Learning Environment	.850	4	4.38	4.49	17.63	2.30
Learning Activities	.822	4	4.28	4.46	17.48	2.50
Learning Resources	.827	4	4.35	4.43	17.48	2.30
Assessments	.782	4	4.15	4.42	17.13	2.42
Teaching Methods and Strategies	.741	4	3.83	4.40	16.94	2.23
Learning Outcomes	.812	4	4.05	4.34	16.64	2.50
Evaluation	.742	4	3.92	4.23	16.48	2.40
Curriculum Design	.758	4	3.84	4.11	15.92	2.60

Table 5.1 provides a summary of the Cronbach's alpha reliability scores and descriptive statistics for the student data (n=194). The table also ranks the dimensions in descending order based on their Mean score, showing their alignment with a student-centred learning approach. Cronbach's alpha reliability scores were calculated to examine the internal consistency and reliability of the dimensions. As can be seen from Table 5.1, the majority of the dimensions received high values for Cronbach's Alpha, ranging from .741 to .873. A reliability score of not lower than .67 is generally considered to be acceptable (Cohen, et al.,

2007), hence suggesting that each dimension had high internal consistency and reliability.

The following results are discussed from highest mean to lowest mean scores.

Students' responses to the dimensions

In order to answer subsidiary research question 1: 'Which aspects of student-centred learning principles have the greatest impact on the quality of learning and teaching activities?', the responses from the survey instrument were analysed by calculating the frequency distribution and central tendencies for all the items in each dimension. The total percentage response and central tendencies to each dimension were presented to highlight the dimensions for the learning and teaching practices which the respondents perceived as closely aligned with a student-centred learning approach. There were 4 items in each dimension which included the expectations that must be present in a student-centred approach for learning and teaching practice. The majority of the responses to each item of a dimension revealed a consistent pattern. Overall, there was strong agreement from both groups of participants that the current learning and teaching practices were aligned with a student-centred learning approach as suggested by the descriptive statistics for each of the dimensions. The mean scores of responses for the items in the dimension range from 3.84 to 4.49, indicating, on average, a significantly high percentage of the students either agreed or strongly agreed with these dimensions.

As seen from Table 5.1, the 'Role of the Tutor in the Classroom' dimension is ranked the highest ($M=18.19$; $SD=2.30$). This indicates that on the average, the students tended to agree with the following descriptors of the tutor's role: the tutor acts as facilitator/mentor in the class, allows flexibility to help the students achieve their learning outcomes, demonstrates

genuine interest in the students and respects differences in the students' characteristics that may affect their learning. The 'Curriculum Design' dimension received the lowest ($M=15.92$; $SD=2.60$) score. This could indicate that the design of the curriculum needs improvement in order to cater to the needs of the students. There were a small percentage of students who answered 'Strongly Disagree', 'Disagree' or 'Uncertain' with some of the items under 'Assessments', 'Teaching Methods and Strategies', 'Learning Outcomes' and 'Evaluation' dimensions. This indicates that although students rated the dimensions positively, there were certain areas in these dimensions that need to be addressed in order to enhance clarity.

The following table shows the range of scores for frequency distribution and central tendencies for the responses to each item in the tutor role dimension.

Table 5.2
Students' Perceptions of the 'Role of the Tutor in the Classroom' Dimension

Role of the Tutor in the Classroom	Total								
	1	2	3	4	5	Mean	SD	Med	Mode
Q17. The tutor acts as a facilitator/mentor in the class.	.5%	.0%	2.1%	33.0%	64.4%	4.61	0.59	5.00	5
Q18. The tutor allows flexibility in facilitating the programme to help me achieve my learning goals	.5%	1.5%	4.1%	27.3%	66.5%	4.58	0.70	5.00	5
Q19. The tutor demonstrates genuine interest towards me.	.5%	1.0%	4.1%	35.1%	59.3%	4.52	0.68	5.00	5
Q20. The tutor respects differences in my characteristics that may impact on my learning.	.5%	1.0%	5.7%	34.5%	58.2%	4.49	0.70	5.00	5

1 - Strongly Agree; 2 - Disagree; 3 - Uncertain; 4 - Agree; 5 - Strongly Agree.

The components of this dimension were more closely examined on Table 5.2. The results indicate that this dimension received the highest agreement from the students representing responses of 'Strongly Agree' and 'Agree' as well as for the composite items that described the tutor's role in improving the learning experience of the students. The results as indicated on Table 5.2 suggest that students perceive the 'Role of the Tutor in the

'Classroom' as pivotal in their learning and this serves as the driving force that sustains their interest in the classroom. Perhaps maintaining a positive tutor-student relationship may be considered fundamental in influencing students' motivation and positive attitude to learning.

Table 5.3
Students' Perceptions of the 'Cultural Awareness' Dimension

Cultural Awareness	Total								
	1	2	3	4	5	Mean	SD	Med	Mode
Q37. The teaching methods utilised in the classroom are culturally sensitive.	1.0%	1.0%	7.2%	32.5%	58.2%	4.46	.75	5.00	5
Q38. My cultural identity is valued by the tutor.	.5%	.0%	6.7%	29.9%	62.9%	4.55	.67	5.00	5
Q39. Diverse perspectives are integrated in my learning and teaching.	1.0%	.0%	7.2%	39.7%	52.1%	4.42	.72	5.00	5
Q40. My tutor employs flexible teaching strategies to accommodate the cultural diversity in the classroom.	.5%	1.0%	6.7%	32.5%	59.3%	4.49	.71	5.00	5

The results on Table 5.3 suggest that students felt a 'sense of belonging' in spite of being in a culturally diverse learning environment. The students also felt valued when their cultural identity and perspective was recognised and respected in the class; and that their tutors employ flexible teaching approaches to cater to the diverse culture in the class. This is especially important for an indigenous institution whose Māori culture and traditions are deeply entrenched in the learning and teaching practices as well as the environment, but is also inclusive of other cultures.

Table 5.4
Students' Perceptions of the 'Learning Environment' Dimension

Learning Environment	Total								
	1	2	3	4	5	Mean	SD	Med	Mode
Q25. The learning environment provided is conducive to my learning.	.5%	2.1%	2.6%	44.3%	50.5%	4.42	.70	5.00	5
Q26. The learning environment enables me to learn collaboratively with others.	.0%	3.1%	3.1%	35.6%	58.2%	4.49	.71	5.00	5
Q27. The learning environment allows me to take control of my own learning.	.0%	3.1%	5.7%	41.8%	49.5%	4.38	.73	4.00	5
Q28. The learning environment provides adequate learning resources.	.0%	1.5%	4.6%	41.8%	52.1%	4.44	.66	5.00	5

In this dimension, students were asked about the elements that must be present in a learning environment in order to assist their learning. The results in Table 5.4 suggest that the students were satisfied with the quality of the learning and teaching space and classroom atmosphere for their programme. The results suggest that the students felt that the learning environment was conducive to their learning; enabled collaboration with others as well as taking control of their own learning; and that it was adequately furnished and resourced. The results indicated that they enjoyed the learning environment and found that it stimulated their learning.

Table 5.5

Students' Perceptions of the 'Learning Activities' Dimension

Learning Activities	Total								
	1	2	3	4	5	Mean	SD	Med	Mode
Q21. A variety of learning activities are provided to help me achieve the learning outcomes.	.0%	3.6%	4.1%	35.1%	57.2%	4.46	.74	5.00	5
Q22. I am given the opportunity to process the information I learnt by doing actual tasks.	.0%	3.6%	3.1%	41.8%	51.5%	4.41	.72	5.00	5
Q23. The learning activities suit my diverse learning preferences.	.5%	4.6%	5.2%	45.9%	43.8%	4.28	.80	4.00	4
Q24. The learning activities are based around real life situations, previous experience and interest.	.0%	2.6%	8.2%	42.8%	46.4%	4.33	.74	4.00	4

The results as depicted in Table 5.5 suggest that the learning activities prepared and completed in the classroom were engaging and focused on the students. The students felt that the diversity of the learning activities they engaged in suit their learning preferences and helped them achieve their learning outcomes by undertaking actual tasks which are based on real-life situations. The results indicate that the students felt that the learning activities were also designed to help them improve their learning.

Table 5.6

Students' Perceptions of the 'Learning Resources' Dimension

Learning Resources	Total								
	1	2	3	4	5	Mean	SD	Med	Mode
Q13. The learning resources used are relevant to real life situations.	.5%	1.5%	5.2%	47.4%	45.4%	4.36	.70	4.00	4
Q14. The learning resources used agree with the learning activities in achieving the learning outcomes.	.0%	3.6%	5.2%	44.3%	46.9%	4.35	.74	4.00	5
Q15. There is a variety of learning resources used in the programme to support me in my learning process.	.0%	2.6%	4.6%	40.2%	52.6%	4.43	.70	5.00	5
Q16. The learning resources provided enabled me to have a deeper understanding of the topic.	.0%	1.0%	6.7%	48.5%	43.8%	4.35	.65	4.00	4

The results in Table 5.6 suggest that students felt that the choice and usage of a variety of learning resources influenced their motivation in their learning process. It appears that the learning resources provided to students which came in various media (DVDs, CDs, workbooks and manuals) were based on real life situations, supported them in achieving the learning outcomes of the course, catered to their diverse learning preferences and facilitated deeper learning and understanding of their course.

Table 5.7
Students' Perceptions of the 'Assessments' Dimension

Assessments	Total								
	1	2	3	4	5	Mean	SD	Med	Mode
Q33. I am assessed based on agreed criteria using different forms of assessment, e.g. self, peer or group assessments.	1.0%	4.6%	8.8%	49.0%	36.6%	4.15	.68	4.00	4
Q34. The assessment tasks are linked to the objectives of the course.	.0%	2.6%	3.1%	49.0%	45.4%	4.40	.86	4.00	4
Q35. The assessment includes formative assessments which enable me to act on feedback.	.5%	6.2%	7.7%	45.4%	40.2%	4.20	.72	4.00	4
Q36. The assessment of the evidence of my learning is non-threatening.	.0%	2.6%	6.2%	38.1%	53.1%	4.42	.68	5.00	5

Table 5.7 presents students' responses to the descriptors of the 'Assessments' dimension demonstrated fairly robust agreement to all the items. There were however higher responses for 'Uncertain', 'Disagree' and 'Strongly Disagree' in a number of the items, compared with the first five dimensions. This indicate that students were not assessed based on agreed criteria using different forms of assessments; that the tasks did not clearly link to the course objectives; and that assessments are found to be daunting and overwhelming. The results suggest that there was a need for the 'Assessments' dimension to be more effective in assessing the evidence of students' progress in their learning.

Table 5.8
Students' Perceptions of the 'Teaching Methods and Strategies' Dimension

Teaching methods and strategies	Total								
	1	2	3	4	5	Mean	SD	Med	Mode
Q1. Appropriate information is provided to me on course content and learning outcomes.	.0%	1.0%	4.1%	53.6%	41.2%	4.35	.61	4.00	4
Q2. The teaching methods and strategies used are appropriate to my learning needs.	.0%	1.5%	6.2%	46.9%	45.4%	4.36	.67	4.00	4
Q3. I am given the opportunity to collaborate with others in performing my tasks.	.5%	1.5%	6.7%	39.7%	51.5%	4.40	.73	5.00	5
Q4. My learning style is assessed to diagnose learning preferences.	4.1%	5.7%	19.6%	44.3%	26.3%	3.83	1.02	4.00	4

The results in Table 5.8 indicate that although a reasonably large number of students responded positively to the 'Teaching Methods and Strategies' dimension, there was also a reasonable number of students who were uncertain, disagreed and strongly disagreed to the items in this dimension. Specifically, there was a lack of positive agreement with the number of students regarding the statement that their learning styles were assessed to diagnose their learning preferences. This may suggest that there was no formal process to discuss the students' learning preferences; or that their learning styles were not assessed. This suggests that there is a need to enhance the teaching methods utilised in the classroom to better support students in achieving their learning goals.

Table 5.9

Students' Perceptions of the 'Learning Outcomes' Dimension

Learning Outcomes	Total								
	1	2	3	4	5	Mean	SD	Med	Mode
Q5. The learning outcomes are communicated clearly to me so that I will have knowledge on what I learn from the process.	.0%	2.6%	5.7%	47.4%	44.3%	4.34	.70	4.00	4
Q6. I am able to negotiate my learning outcomes to the topics suggested according to the curriculum.	.0%	4.1%	18.6%	45.9%	31.4%	4.05	.82	4.00	4
Q7. The tutor and I enter into a learning contract based on my own interests and abilities to succeed.	1.0%	5.2%	15.5%	42.8%	35.6%	4.07	.90	4.00	4
Q8. The achievement of learning outcomes is demonstrated in terms of improvement of learning.	.5%	2.6%	9.3%	52.1%	35.6%	4.20	.75	4.00	4

Although the majority of the students appear to be reasonably satisfied with the 'Learning Outcomes' dimension there was also a significant number of students who were uncertain and disagreed with the items in this dimension as displayed in Table 5.9. It appears that there was no opportunity to negotiate learning outcomes based on student interest and ability. This highlights that utilising a learning contract which is agreed between tutor and students was not widely used in the class, and suggests that students basically complete work as delivered. Further, the students felt that the learning outcomes were not communicated clearly and that evidence of improvement of learning was seemingly not apparent.

Table 5.10
Students' Perceptions of the 'Evaluation' Dimension

Evaluation	Total								
	1	2	3	4	5	Mean	SD	Med	Mode
Q9. Evaluation of my performance is conducted following an agreed set of criteria.	1.9%	3.10%	10.3%	49.5%	36.1%	4.38	2.18	4.00	4
Q10. Ongoing evaluations are done either by myself, by peer/s, with the tutor or with a group.	1.0%	3.1%	10.3%	49.5%	36.1%	4.16	.81	4.00	4
Q11. I conduct self-evaluation based on my own individual learning objectives as agreed on the learning contracts.	1.0%	5.7%	17.0%	52.6%	23.7%	3.92	.85	4.00	4
Q12. The results of the evaluations are fed back to me.	1.0%	3.1%	10.8	45.5	36.1	4.16	.82	4.00	4

Missing 1 = .5%

The results in Table 5.10 indicate that the 'Evaluation' dimension was one of the slightly lower ranked dimensions. There were a number of students who answered 'Uncertain', 'Disagree' and 'Strongly Disagree' to a number of the items indicating that evaluation was not conducted based on an agreed criteria, or that it was done either by students themselves or with others. The results suggest that measures to evaluate students' performance appeared to be not working well in all areas as well as they could. The students were perhaps unsure in regards to the impact of completing/or not completing the evaluation of their own performance in improving learning and teaching because they received little or no feedback as a result of these evaluations.

Table 5.11

Students' Perceptions of the 'Curriculum Design' Dimension

Curriculum Design	Total								
	1	2	3	4	5	Mean	SD	Med	Mode
Q29. The course design allows the learning outcomes to focus on what I will be able to do rather than on the content.	.0%	2.6%	13.9%	53.6%	29.9%	4.11	.73	4.00	4
Q30. Programme facilitates student choice – e.g. I can negotiate my learning outcomes.	1.0%	5.7%	24.2%	46.9%	22.2%	3.84	.87	4.00	4
Q31. Programme design emphasises ability to succeed within context.	2.1%	2.6%	15.5%	51.5%	28.4%	4.02	.85	4.00	4
Q32. My views about the programme are actively sought for future planning.	1.0%	6.7%	18.6%	42.3%	31.4%	3.96	.93	4.00	4

Table 5.11 suggests that a certain percentage responded as 'Uncertain', 'Disagreed' and 'Strongly Disagree' to most of the items in this dimension. This suggests that perhaps students were not consulted regarding the design of the curriculum and that there was no opportunity to negotiate their activities based on their interest or abilities. The design of the curriculum appeared to be based on an inflexible structure. The tutors were expected to deliver the content as specified in the curriculum. Furthermore, it appears the learning and teaching goals, outcomes and assessments were perhaps already set in place and were delivered as per the design of the curriculum.

Summary of students' results

This section reported the results of the survey responses from the student sample (n=194). In order to answer the subsidiary question ‘a’, which aimed to examine which aspects of student-centred learning principles have the greatest impact upon the quality of learning and teaching practices, the responses from the survey were utilised to determine the degree of student-centeredness of the learning and teaching dimensions. The research findings identified that overall, there was a generally positive response with regards to the alignment of the learning and teaching practices with a student-centred learning approach. Although student-centred dimensions were generally perceived to be evident in the delivery of the programme, the level of uncertainty or disagreement for specific items indicate that from the students’ perspective there were specific areas which could better reflect the principles of a student-centred learning approach.

The student participants found the ‘Role of the Tutor in the Classroom’ to be crucial to their learning. They felt that ‘Learning Activities’, ‘Learning Environment’, ‘Learning Resources and Materials’ used in the programme were interactive and helpful in facilitating their learning. However, some concerns were raised in the dimensions of ‘Assessments’, ‘Methods of Teaching and Strategies’, ‘Learning Outcomes’, ‘Evaluation’ and ‘Curriculum Design’. There were specific items in these dimensions that need to be addressed in order for the learning and teaching practice to be more student-centred. These concerns were evident on the items within the dimensions which received the highest level of ‘Disagree’ and ‘Uncertain’ responses. Examples are:

‘Assessments’ dimension: A number of students believed that they were not assessed based on agreed criteria through the use of different forms of assessment which include self, peer or group assessments. In addition, a number of students did not agree that the assessment of their learning included formative assessments which enabled them to act on feedback.

‘Methods of Teaching and Strategies’ dimension: A number of students believed that their learning styles were not assessed in order to diagnose their learning preferences.

‘Learning Outcomes’ dimension: A number of students believed that they were not able to negotiate their learning outcomes, nor did they enter into a learning contract with their tutor based on their own interests and abilities to succeed.

‘Evaluation’ dimension: A number of students raised their 44 in all the items under this particular dimension which was evident on the number of ‘Disagree’ and ‘Uncertain’ responses. A number of the students believed that there were no agreed criteria when evaluating their performance either by themselves or with peers or groups; that the results of the evaluations were not fed back to them; and that there was no learning contract agreed between students and tutor.

‘Curriculum Design’ dimension: Students raised their concerns in all the items. A number of students believed that the course design was not fully reflective of student-centred learning principles in that there was more focus on the content rather than in their ability to complete the learning outcomes; that there was no opportunity to negotiate their learning outcomes; and that they were not consulted during the design

phase of the curriculum. Lastly, a number of students felt that there was a lack of focus on their ability to succeed.

In general, students' rating of the dimensions can still be considered generally positive. However, there were concerns regarding a number of the dimensions as indicated above. These could indicate areas for improvement if the programmes are to be more student-centred in their delivery.

Tutors' responses to the dimensions

The next section of this chapter presents the findings of the tutors' responses (n=18) to the dimensions of the survey instrument. It begins with a summary of the reliability analysis, frequency distribution and descriptive statistics of the aggregated responses to all the items in the 10 dimensions as presented in Table 5.12.

Table 5.12
Reliability and Descriptive Statistics for SCL Dimensions – Tutors

Dimension (Tutor)	Cronbach Alpha	No. of items	Lowest	Highest	Mean	SD
			mean item	mean item		
Role of the Tutor in the Classroom	.930	4	4.89	4.94	19.67	1.03
Cultural Awareness	.865	4	4.56	4.83	18.78	1.67
Learning Activities	.848	4	4.28	4.50	17.56	2.15
Learning Resources	.766	4	4.22	4.50	17.33	1.94
Teaching Methods and Strategies	.621	4	3.78	4.50	16.78	2.10
Assessments	.677	4	4.00	4.28	16.56	2.00
Learning Environment	.936	4	3.94	4.22	16.50	3.30
Learning Outcomes	.889	4	3.50	4.17	15.39	4.62
Evaluation	.885	4	3.56	3.94	14.72	3.50
Curriculum Design	.785	4	3.00	3.50	13.17	3.43

Table 5.12 presents the order of the ranked dimensions as perceived by the tutors in regards to their degree of student-centeredness. All ten dimensions received a high rate of agreement from the tutors on the ‘Agree’ and ‘Strongly Agree’ responses. This indicates that the tutors were generally satisfied with their teaching experiences when delivering mixed-mode programmes. A comparison between tutor and student ranking of the dimensions indicates a level of similarity. As with the student responses to the dimensions, the ‘Role of the Tutor in the Classroom’ received the highest scores from the tutors ($M=19.67$; $SD=1.03$) as presented in Table 5.12. Conversely, ‘Curriculum Design’ received the lowest scores ($M=13.17$; $SD=3.43$) from the tutors. This was similar to the student response. This suggests that there is a consistent pattern from both groups of participants. The following tables include frequency distribution, descriptive statistics for each item in all the dimensions and a brief description of the responses from the tutor participants. The results are presented from highest to lowest mean scores.

Table 5.13
Tutors’ Perceptions of the ‘Role of the Tutor in the Classroom’ Dimension

Role of the Tutor in the Classroom	Total								
	1	2	3	4	5	Mean	SD	Med	Mode
Q17. I see my role as a facilitator or mentor in the class.	.0%	.0%	.0%	5.6%	94.4%	4.94	.24	5.00	5
Q18. I am flexible in my delivery to help students meet their learning goals.	.0%	.0%	.0%	11.1%	88.9%	4.89	.32	5.00	5
Q19. I demonstrate genuine interest to get to know the students better.	.0%	.0%	.0%	5.6%	94.4%	4.94	.24	5.00	5
Q20. I respect differences in students’ characteristics that may impact in their learning.	.0%	.0%	.0%	5.6%	94.4%	4.89	.32	5.00	5

Table 5.13 suggests that all tutors (100%) overwhelmingly agreed with the descriptive statements regarding the ‘Role of the Tutor in the Classroom’. None of the tutor sample

indicated that they were uncertain, disagreed with or strongly disagreed with any of the items. This suggests that all tutor participants in this study appeared to be confident that they were in control of their learning and teaching processes in their classroom. The tutors were positive about the realisation of how critical their role is in student learning. This involved working as a facilitator of learning rather than just concentrating on teacher-directed approaches.

Table 5.14

Tutors' Perceptions of the 'Cultural Awareness' Dimension

Cultural Awareness	Total								
	1	2	3	4	5	Mean	SD	Med	Mode
Q37. I utilize teaching methods that are culturally sensitive	.0%	.0%	5.6%	33.3%	61.1%	4.56	.62	5.00	5
Q38. I value the cultural identity of my students.	.0%	.0%	.0%	16.7%	83.3%	4.83	.34	5.00	5
Q39. I integrate diverse approaches in my teaching.	.0%	.0%	.0%	27.8%	72.2%	4.72	.46	5.00	5
Q40. I employ flexible teaching strategies to accommodate the cultural diversity in the classroom.	.0%	.0%	.0%	33.3%	66.7%	4.67	.48	5.00	5

The data presented in Table 5.14 suggests that the tutors rated themselves very strongly in all the statements of the dimension as shown by the 'Strongly Agree' and 'Agree' responses. There were no responses that disagreed with the statements. This indicates that the tutors believed that respect and recognition of students' cultural identity was very well demonstrated in their teaching approaches; and by promoting positive engagement of all students in the classroom, regardless of their cultural background. The results suggest that the tutors considered themselves to be inclusive and culturally proficient in dealing with diversity in the classroom.

Table 5.15

Tutors' Perceptions of the 'Learning Activities' Dimension

Learning Activities	Total								
	1	2	3	4	5	Mean	SD	Med	Mode
Q21. I provide a variety of learning activities to help students achieve the learning outcomes (e.g. group discussion, problem-based/case studies, projects, etc.).	.0%	.0%	.0%	50%	50%	4.50	.51	4.50	4
Q22. I provide the opportunity for students to process the information they learn by doing actual tasks.	.0%	.0%	5.6%	44.4%	50.0%	4.44	.62	4.50	5
Q23. The learning activities suit the diverse learning preferences of the students.	.0%	.0%	16.7%	38.9%	44.4%	4.28	.75	4.00	5
Q24. The learning activities organized are based around real-life situation, previous experiences and interest.	.0%	.0%	11.1%	44.4%	44.4%	4.33	.69	4.00	4

The data presented in Table 5.15 indicates that most tutors agreed with the items in 'Learning Activities' dimension. This suggests that the tutors believed that they provide a variety of learning activities to assist students to achieve the learning outcomes of the programme. However, a deeper investigation of each individual item indicated that there were a number of tutors who were uncertain in regards to whether the learning activities in their classes matched the diverse learning preferences of the students. It appears that these tutors were not convinced that the learning activities were based in life experience and student interest. This suggests that there was a need for these two particular items to be addressed by providing a range of learning activities and opportunities which are more centred on students' background and preferences.

Table 5.16
Tutors' Perceptions of the 'Learning Resources' Dimension

Learning Resources	Total								
	1	2	3	4	5	Mean	SD	Med	Mode
Q13. The learning resources that I use in my teaching are relevant to real life situations.	.0%	.0%	5.6%	55.6%	38.9%	4.33	.60	4.00	4
Q14. The learning resources I use agree with the learning outcomes.	.0%	.0%	11.1%	50.0%	38.9%	4.28	.67	4.00	4
Q15. I use a variety of learning resources in the programme to support students in their learning.	.0%	.0%	11.1%	27.8%	61.1%	4.50	.71	5.00	5
Q16. The learning resources provided enabled my students to have a deeper understanding of the topic.	.0%	.0%	5.6%	66.7%	27.8%	4.22	.55	4.00	4

The data presented in Table 5.16 indicates that a significant number of the tutors believed that the 'Learning Resources' used in their learning and teaching practices were user-friendly and helpful in facilitating student learning. This suggests that tutors make use of a wide range of learning resources in various media to engage and support students; that the learning resources are relevant; that they meet the learning outcomes; and enable students to have deep learning. There was an average of 8% who answered "Uncertain" to all the items in this dimension. This indicates that perhaps a number of tutors believed that their learning and teaching resources were inadequate or may need improvement.

Table 5.17
Tutors' Perceptions of the 'Learning Environment' Dimension

Learning Environment	Total								
	1	2	3	4	5	Mean	SD	Med	Mode
Q25. The learning environment I provide is conducive for learning.	.0%	5.6%	11.1%	38.9%	44.4%	4.22	.89	4.00	5
Q26. The learning environment enables my students to learn collaboratively with others.	.0%	5.6%	11.1%	38.9%	44.4%	4.22	.89	4.00	5
Q27. The learning environment allows my students to take control of their own learning.	.0%	5.6%	16.7%	38.9%	38.9%	4.11	.90	4.00	4
Q28. The learning environment provides adequate resources to facilitate the learning process.	.0%	11.1%	11.1%	50.0%	27.8%	3.94	.94	4.00	4

The data presented on Table 5.17 suggest that the 'Learning Environment' dimension still received a reasonably high rate of 'Agree' and 'Strongly Agree' responses from tutors in spite of the fact that there were a number who indicated that they either disagreed or were uncertain with the items. This suggests that there were concerns that need to be addressed in order for the learning environment to be more positive. This also indicates that perhaps a number of the tutors believed that the learning environment needed further improvement to become more student-centred. These include providing an environment that is conducive to learning, enabling collaborative learning, allowing student control of their own learning and providing adequate resources.

Table 5.18
Tutors' Perceptions of the 'Teaching Methods and Strategies' Dimension

	Teaching Methods and Strategies	Total								
		1	2	3	4	5	Mean	SD	Med	Mode
Q1.	I provide appropriate information on course content and learning outcomes to the students.	.0%	.0%	5.6%	55.6%	38.9%	4.33	.60	4.00	4
Q2.	The teaching methods and strategies I use are appropriate to the learning needs of students.	.0%	.0%	16.7%	50.0%	33.3%	4.17	.71	4.00	4
Q3.	I provide the opportunity to students to collaborate with one another in performing the tasks.	.0%	.0%	.0%	50.0%	50.0%	4.50	.51	4.50	4
Q4.	I assess the learning styles of my students to diagnose their learning preferences.	5.6%	5.6%	22.2%	38.9%	27.8%	3.78	1.11	4.00	4

The data presented in Table 5.18 suggest that the tutors themselves rated their own 'Teaching Methods and Strategies' lower for this dimension. This is rather concerning as it indicates that there were a number of tutors themselves who felt that they were uncertain in regards to the effectiveness of their own teaching methods and strategies. In addition, there were 22% who responded as being uncertain in regards to tutors completing a diagnostic assessment of the learning styles of their students. Obviously, a number of tutors did not tailor their teaching strategies to suit the individual learning preferences of the students. This indicates that the tutors were in disagreement over this dimension.

Table 5.19

Tutors' Perceptions of the 'Assessments' Dimension

Assessments	Total								
	1	2	3	4	5	Mean	SD	Med	Mode
Q33. I assess my students based on agreed criteria within the context of the course.	.0%	.0%	.0%	72.2%	27.8%	4.28	.46	4.00	4
Q34. The assessments tasks are linked to the objectives of the course.	.0%	.0%	11.1%	55.6%	33.3%	4.22	.65	4.00	4
Q35. The assessment includes formative assessments which enable my students to act on feedback.	.0%	11.1%	5.6%	55.6%	27.8%	4.00	.91	4.00	4
Q36. The assessment of the evidence of my learning performance is non-threatening.	.0%	.0%	22.2%	50.0%	27.8%	4.06	.73	4.00	4

The data presented in Table 5.19 indicates that there were still significant number of tutors who agreed and strongly agreed with all the items on the 'Assessments' dimension, while others were uncertain or disagreed. This suggests that perhaps some tutors believed that their methods of assessments were not relevant to the objectives of the course; that there was lack of formative assessments which enable students to act on feedback; and that students perhaps found the assessments threatening. The results indicated that there were areas regarding assessments that need to be improved in order to enhance a more student-centred approach.

Table 5.20

Tutors' Perceptions of the 'Learning Outcomes' Dimension

	Learning Outcomes	Total								
		1	2	3	4	5	Mean	SD	Med	Mode
Q5.	The learning outcomes are communicated to my students clearly so that they will have knowledge of what they will learn in the process.	5.6%	.0%	.0%	61.1%	33.3%	4.17	.92	4.00	4
Q6.	I provide opportunity to the students to negotiate their learning outcomes of the topics within the curriculum.	22.2%	5.6%	5.6%	33.3%	33.3%	3.50	1.60	4.00	4
Q7.	My students and I enter into a learning contract based on my students' own interests and abilities to succeed.	16.7%	11.1%	5.6%	16.7%	50.0%	3.72	1.60	4.50	5
Q8.	The achievement of the learning outcomes is demonstrated in terms of students' improvement of learning.	5.6%	.0%	22.2%	33.3%	38.9%	4.00	1.08	4.00	5

The data presented in Table 5.20 suggests that there were a number of tutors who responded negatively (Uncertain, Disagree and Strongly Disagree) to the statements regarding the 'Learning Outcomes' dimension. These results suggest that in some cases, there was no agreement or negotiation between tutor and students in regards to meeting the requirements of the course. Students remain passive recipients of what the tutor has already planned for the class. It appears though that the majority of the tutors who agreed and strongly agreed were confident that the learning outcomes were discussed and communicated to their students clearly in order for them to be fully cognizant of the course outcomes and expectations and improve their learning.

Table 5.21
Tutors' Perceptions of the 'Evaluation' Dimension

Evaluation	Total								
	1	2	3	4	5	Mean	SD	Med	Mode
Q9. My students' performances are evaluated following agreed criteria.	.0%	5.6%	22.2%	44.4%	27.8%	3.94	.88	4.00	4
Q10. On-going evaluations are done either by the students themselves, or by peer/s, or with the tutor or with a group.	5.6%	11.1%	16.7%	55.6%	11.1%	3.56	1.04	4.00	4
Q11. I provide the opportunity to the students to conduct self-evaluation based on their own individual learning objectives.	5.6%	5.6%	38.9%	27.8%	22.2%	3.56	1.10	3.50	3
Q12. The results of the analysis of evaluation are fed back to my students.	5.6%	5.6%	22.2%	50.0%	16.7%	3.67	1.02	4.00	4

The data presented in Table 5.21 indicates that a reasonable proportion of the tutors were uncertain, disagreed and strongly disagreed with all the items on the 'Evaluation' dimension. The results suggest that there was seemingly a lack of opportunity for formative evaluation of students' performance while enrolled on the programme based on agreed criteria whether by the students themselves, by peer/s or with tutors. Likewise, the results suggest that students were not informed of the results of the analysis of evaluation. This highlights that while 'Evaluations' required by the institution were conducted in the class, similar to the students' results, a number of the tutors did not find this beneficial in enhancing student learning experience.

Table 5.22

Tutors' Perceptions of the 'Curriculum Design' Dimension

Curriculum Design	Total								
	1	2	3	4	5	Mean	SD	Med	Mode
Q29. The course is designed with a focus on what my students will be able to do, rather than the content.	.0%	11.1%	22.2%	50.0%	11.1%	3.50	1.04	4.00	4
Q30. The course structure facilitates student choices – e.g. negotiation of learning outcomes.	.0%	11.1%	16.7%	33.3%	38.9%	3.00	1.03	3.00	4
Q31. The programme design emphasizes students' ability to succeed within the context of the programme.	5.6%	22.2%	16.7%	44.4%	11.1%	3.33	1.14	4.00	4
Q32. The views of the students about the programme are actively sought for future planning.	11.1%	16.7%	5.6%	61.1%	5.6%	3.33	1.12	4.00	4

The data presented in Table 5.22 indicate that most of the 'Uncertain', 'Disagree' and 'Strongly Disagree' responses indicate that a significant number of tutors felt that they were not contented with the design of the curriculum as developed by the *Mārautanga* (Curriculum) Department. It appears that there was no consultation or collaboration with the students when planning the design of the curriculum; that the design and delivery of the course content was the priority rather than the ability of the student to succeed; and that there was no opportunity for students to negotiate the achievement of the learning outcomes.

Although the last three dimensions scored lower mean rankings, there was nevertheless a considerable level of concurrence with these dimensions that they were consistent with the principles of a student-centred learning approach. This serves to highlight that the majority of the tutors responded favourably to the lower ranked dimension. For some tutors, however, there were specific areas that need improvement in their teaching practice to achieve a better fit with a student-centred approach.

Summary of tutors' results

The preceding section presented the quantitative data from the tutor sample (n=18).

Overall, the research findings indicate that tutors were reasonably positive with regards to the alignment of the learning and teaching practices with a student-centred learning approach. They rated most of the dimensions highly; however, it was also evident from the results of this study that there were some concerns with regards to the lower rated dimensions of 'Learning Outcomes', 'Evaluation' and 'Curriculum Design'. As with the students' results, there were specific items in these dimensions that need to be addressed in order for the learning and teaching practices to be more student-centred. As with the students, these concerns were manifested through the items within the dimensions which received the most 'Disagree' and 'Uncertain' responses. These concerns include:

'Learning Outcomes' dimension: It appears that a number of tutors did not provide the opportunity to the students to negotiate their learning outcomes; that there was no learning contract drawn between tutors and students in regards to completing tasks based on students' interest and abilities; and that the achievement of learning outcomes was not evident in terms of improvement of students' learning.

'Evaluation' dimension: There were items within this dimension where a number of tutors were uncertain, disagreed or strongly disagreed. These include: evaluating students' performance based on agreed criteria; that formative evaluations were completed either by the students themselves, or by peer/s or with tutor or with a group; that they provided opportunity to the students to conduct self-evaluation based

on their own individual learning objectives; and that the results of the analysis of evaluation are fed back to their students.

‘Curriculum Design’ dimension: A number of tutors were also uncertain, disagreed and strongly disagreed with the items within the dimension. These were: the course was designed with a focus on what the students will be able to do, rather than on the content; the course structure facilitated student-choice; the programme design emphasised students’ ability to succeed; and that the views of the students regarding the programme were actively sought for future planning.

These results indicate that the students’ perceptions were validated by the tutors’ perceptions of their experiences.

Comparison of perceptions between tutors and students

Major research question 1:

How are the current learning and teaching practices utilised in mixed-mode delivery consistent with the principles of a student-centred learning approach at Te Wānanga o Aotearoa?

Subsidiary questions:

- a) *Which aspects of student-centred learning principles have the greatest impact on the quality of learning and teaching activities?*
- b) *How do tutors’ perceptions of the current learning and teaching practices compare with those of students?*

In order to answer the subsidiary question ‘b’ which aimed to compare tutors’ perceptions of the learning and teaching practices with those of the students, the data for

groups of participants were examined together. This section indicated that the responses from both groups of participants showed similarities in terms of the mean ranking of the dimensions. The top two and bottom three dimensions were similar for both groups of participants. There was only slight difference in relation to the order of some of the dimensions in the mid-point ranking. Likewise, an examination of the responses at item level indicated that there were some similarities in the perceptions between the responses of the tutors and students even to those items that were rated lowly by the participants. The following section of this chapter presents these similarities and differences.

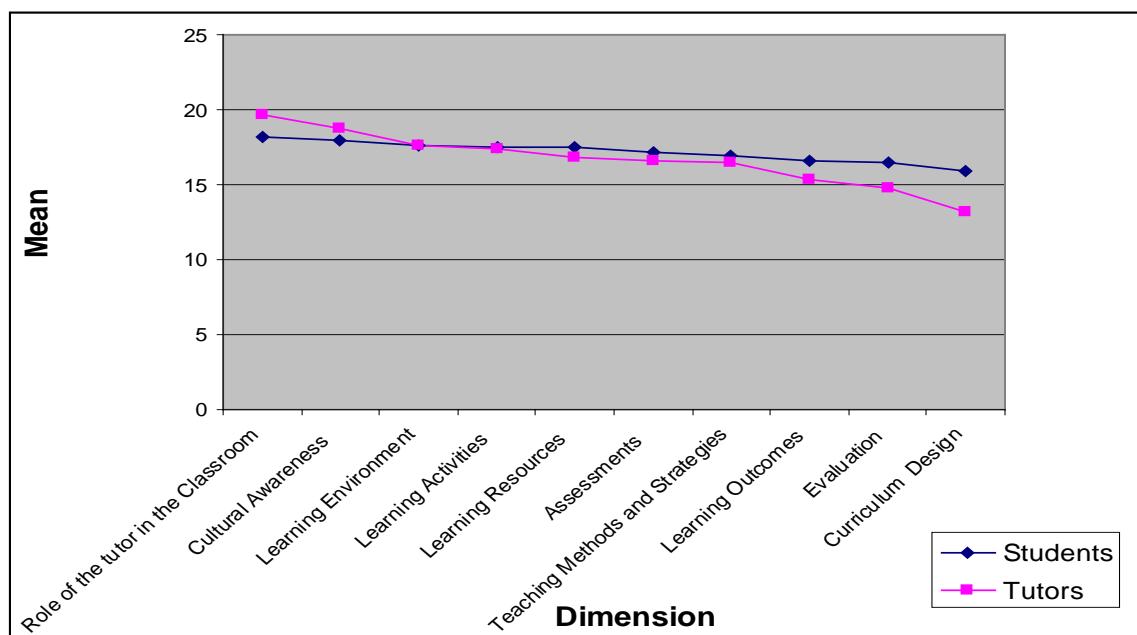


Figure 5.7. Mean comparison between tutor and student responses.

Figure 5.7 presents the data for both groups separately to allow for the comparison of the similarities and differences of dimensions based on the responses of the participants. The results show that the perceptions from both groups of participants were similar in terms of which dimensions were rated highly and which dimensions were rated lowly. Both participants rated ‘Role of the Tutor in the Classroom’ and ‘Cultural Awareness’ as the top two dimensions. Similarly, the participants also rated the ‘Learning Outcomes’, ‘Evaluation’

and ‘Curriculum Design’ dimensions the lowest. Figure 5.7 depicts a line graph to compare their responses visually.

The researcher endeavoured to establish whether there was any significant difference between the responses from both groups of participants. With an uneven sample size of 194 student participants and smaller sample of 18 tutor participants, it was not considered appropriate to calculate the differences statistically. When examining the differences in mean scores which were obtained by subtracting the tutors’ score from the students’ score, the results suggest that there was no significant difference on the mean scores between the two groups. In examining the mean scores for each dimension between students and tutors, the results indicate that they were only a few points apart as presented on Figure 5.8. Students rated the dimensions more highly than the tutors themselves but only slightly. The lowest mean score for an individual item in the dimensions is 3.83 (students) and 3.00 (tutors). The highest mean score is 4.61 from the students and 4.94 from the tutors. It was only for the “Cultural Awareness” and ‘Role of the Tutor in the Classroom’ dimensions that tutors rated higher than the students.

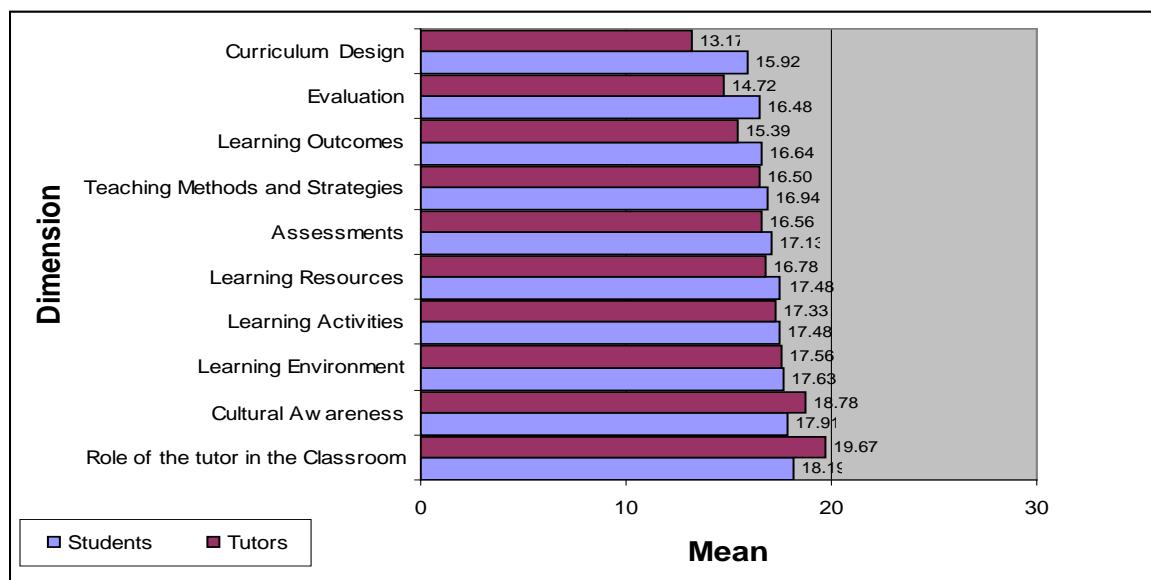


Figure 5.8. Comparison of mean scores between tutor and students responses

Chapter summary

This chapter presented the results and analysis of the responses from the quantitative data gathered from the tutor ($n=18$) and student ($n=194$) surveys. The results of the quantitative investigation were presented in accordance to the research questions as well as the dimensions contained in the Integrative Framework for Student-Centred Learning (IFSCL). The analysis of the quantitative data assisted in addressing the first major research question and the two subsidiary questions.

Results of the two groups of participants were ranked to determine which of the dimensions were considered to have the most impact on the quality of learning and teaching. The top two dimensions which were rated highly and were therefore considered to be the most aligned with a student-centred learning approach were similar for both tutors and students. In the same manner the last three dimensions which were rated as the least aligned with a student-centred learning approach were also similar from both tutors and students.

The results were also compared to determine the similarities and differences in the findings. Of the ten dimensions that were measured, both tutors and students gave the highest rank to the ‘Role of the Tutor in the Classroom’ dimension. In the same manner, both groups also gave the lowest score to the ‘Curriculum Design’ dimension. The mean score for the 40 items range from 3.83 to 4.49. There was a consistent pattern in the responses in that both students and tutors responded positively that the learning and teaching practices were closely aligned with a student-centred learning approach. The description of the results indicates that there was no significant variance in the responses to the dimensions and that the perceptions

in regards to the learning and teaching practices of both tutors and students are almost similar.

When examining the descriptive statistics for each item, responses with a mean score of greater than 3 can be deemed as reasonably positive. This indicates that a greater number of participants perceived their experiences of the dimensions to be mostly aligned with a student-centred learning approach and are therefore leaning towards ‘Agree’ and ‘Strongly Agree’. Similarly, if the mean score is less than 3, this can be considered as leaning towards the negative response of ‘Disagree’ or ‘Strongly Disagree’. The results indicate that were still a certain number of participants who considered their experiences of the dimensions to be less than satisfactory. The responses for the open-ended questions together with the interviews have been analysed and are discussed in Chapter 6 which focuses on the qualitative phase of the data collection.

CHAPTER 6

Phase Two: Findings of the Qualitative Investigation

Introduction

This chapter presents the qualitative findings of the two subsidiary research questions which explored the participants' perceptions of the quality of learning and teaching practices and suggestions for the improvement of delivery in mixed-mode programmes. The combined findings of the subsidiary questions are intended to illuminate the ways in which 'the mixed-mode delivery of the programme impact upon the quality of learning and teaching', the second main focus of the research.

Major research question 2:

In what ways does the mixed- mode programme delivery impact upon the quality of learning and teaching at Te Wānanga o Aotearoa?

Subsidiary questions:

- a) *What are the perceptions of students and tutors regarding the quality of learning and teaching strategies utilised on these programmes?*
- b) *How do the students and tutors perceive improvement in delivery?*

The qualitative data were drawn from two different phases of the data collection process:

- open-ended questions contained in the survey instrument; followed by
- face-to-face interviews with the participants.

Qualitative data procedures

As discussed in Chapter 4, this study adopted a sequential, mixed-methods research approach where the investigation of the qualitative phase was largely influenced by the results of the quantitative phase. Other than the question of ‘how many’, the inquiry into ‘what’, ‘why’, and ‘how’ requires rich and thick responses in qualitative interpretation. The findings from the quantitative data as well as the responses from the open-ended questions helped formulate and frame the interview questions to determine how each dimension in the Integrated Framework for Student-Centred Learning (IFSCL) impacts upon the quality of learning and teaching. The interview schedule developed for students and tutors was similar, but with slight variations. The responses from the open-ended questions and interviews were imported into NVIVO, a software package used for analysing qualitative data. As the responses from the open-ended questions were initially recorded on an Excel spreadsheet, the data had to be converted into a rich text format file prior to the upload to NVIVO for coding and analysis. The use of NVIVO helped to improve the reliability and rigour of the data analysis; allowing the researcher to reflect and gain a better understanding of the data during coding and categorisation.

The second phase of the qualitative investigation involved one-on-one, semi-structured interviews to gain a contextual understanding of the trends and themes that emerged from the quantitative results. The interview covered critical concepts of each dimension of the IFSCL as well as other areas relevant to the quality of learning and teaching practices. A central focus of the data analysis was to establish if there were variances or differences between how tutors perceived the quality of teaching practices in comparison with students’ perceptions of their learning experiences.

To maintain coherence, the textual data collected from the open-ended question and the face-to-face interviews were organised and analysed by:

- research question
- findings for the open-ended questions and interviews
- themes
- group of participants

Qualitative data analysis

Although the results of the quantitative investigation indicated that the participants were generally satisfied with their experiences of learning and teaching in the mixed-mode programmes, this finding lacked specific details regarding their experiences and perceptions. The qualitative component allowed the participants to provide additional commentary regarding their experiences not captured in the survey. The analysis of the qualitative data drew on complementary procedures from Miles and Huberman (1994) and Creswell's (2003) six generic steps for data analysis as outlined below:

- a) Organise and prepare the data for analysis.
- b) Read through all the data.
- c) Begin detailed analysis with a coding process.
- d) Use the coding process to generate a description of the setting or people as well as categories of themes for analysis.
- e) Describe how the description and themes will be represented in the qualitative narrative.
- f) A final step in data analysis involves making an interpretation or meaning of the data (pp. 191-196).

“The heart of the analysis is the coding process by which the researcher is able to detect frequencies (which codes are occurring most commonly) and patterns (which codes occur together)” (Cohen, et al., 2007, p. 478). The verbatim transcription of the interviews were read in their entirety and analysed for similarities, differences, and to discern emergent trends and themes. Concepts were then identified based on the frequency of occurrence and what was considered the emerging themes. Incongruent and redundant data were culled to allow meaningful interpretation and conciseness. The themes that emerged were ranked according to the order of priority as indicated by the frequency of the responses on each theme. The findings were then presented in tables displaying the focal point, comment category, number of occurrences and sample verbatim quotes from the participants. These were then discussed and reviewed for summary conclusions or observations on the findings.

This study also followed a deductive and inductive process. The data were analysed inductively which included citing constructs or themes from the individual participants. This new knowledge collected from the responses was explored to gain meaningful understanding of what they signified. For the interviews, the concepts that linked or shared commonalities as described by the participants in regards to their experiences of the dimensions of the IFSCL were categorised accordingly. The IFSCL captured and synthesised the key themes and concepts considered to be significant from the responses. Using the inductive analysis allowed the researcher to have a fuller understanding of the meaning of the responses and be able to reflect on the patterns and themes, as well as connections, commonalities and variances.

In the deductive process of analysis, the dimensions of the IFSCL served as the framework for coding the responses. The IFSCL developed for this study was based on the

review of literature related to the student-centred learning approach. Relating the themes with the review of literature is a deductive process as the dimensions were already identified prior to collecting the data. In this study, the responses were categorised according to the dimensions on the IFSCL which narrowed and focused the generalisation and analysis of the data. The deductive analysis also allowed the examination of the themes that emerged from the study to demonstrate the connections with the dimensions, whether in terms of supporting or disproving the literature. The responses were summarised according to the questions asked, emerging themes and by grouping of participants. The methodology for the analysis of the qualitative data was described in the *Data Analysis in Mixed-methods Research* section of Chapter Four (Methodology, pp. 154-157).

Organisation of the findings

This section describes the perspectives of the participants in regards to the quality of learning and teaching practices utilised in mixed-mode programmes. It also describes the suggestions made by the participants on how they believed the delivery might improve. The textual data have been simplified by presenting the key themes that emerged and counting the frequency of occurrences of key words or phrases. Sample quotes which reflect the essence of the themes have been reproduced in verbatim to contextualise the responses.

Major research question 2:

In what ways does the mixed-mode programme delivery impact upon the quality of learning and teaching at Te Wānanga o Aotearoa?

Subsidiary questions:

A. *What are the perceptions of students and tutors regarding the quality of*

learning and teaching strategies utilised on these programmes?

I. Research findings for subsidiary question 2a – STUDENTS

A. Findings from the open-ended survey questions

B. Findings from the interviews

B.1. Findings related to the dimensions of the IFSCL

B.2. Findings related to the concept of quality of learning and teaching

II. Research findings for subsidiary question 2a – TUTORS

A. Findings from the open-ended survey questions

B. Findings from interviews

B.1. Findings related to the dimensions of the IFSCL

B.2. Findings related to the concept of quality of learning and teaching

Conclusion to subsidiary question 2a

B. How do the students and tutors perceive improvement in the delivery?

III. Research findings for subsidiary question 2b – STUDENTS

i. Suggestions for improvement

(*Include combined responses from the open-ended survey
and interview questions*)

IV. Research findings for subsidiary question 2b – TUTORS

ii. Suggestions for improvement

(Include combined responses from the open-ended survey and interview questions)

Conclusion to subsidiary question 2b

The interview participants

The one-on-one, semi-structured interviews were conducted two months after the survey was administered. The tutors and students who agreed to participate in the interviews were invited via email and telephone (See Appendix M). The interviews were conducted in an informal environment on campus, at a time convenient to both the researcher and participant. There was participant attrition with those who agreed to participate in the interviews, but declined the invitation when contacted, and those who accepted the invitation but failed to participate. In the final count, 10 tutors and 18 students were eventually interviewed.

The interview schedule (Appendices N and O) was trialled with two students and one tutor who had agreed to be interviewed. It was also peer-reviewed for an indication of the duration of the interview, as well as to test the clarity and flow of the questions. To ensure consistency, a set of standard questions was developed and served as the main interview schedule. From the pilot, changes were made to the interview schedule due to a number of repetitive questions. The interview schedule was the same for both tutors and students but reflecting the teaching or learning focus as required. Generally, the interviews lasted 30 minutes with the exception of a few that continued for 45 minutes to an hour. After completing the 28 interviews and with no more new concepts or insights discussed, a saturation point had been reached.

The participants came from diverse backgrounds in terms of age, ethnicity, programme and campus. From the preliminary conversation with the students, prior to the interview, the researcher gathered that a number of the mature students had returned to study

after a significant break and this was their first attempt at a tertiary institution. There were also students with previous qualifications who wanted to learn new skills or gain new knowledge. The student interviewees ranged from 30 to 60 years of age and provided a balanced representation of the mixed-mode delivery programmes included in this study.

The researcher started the interview session by explaining the purpose of the interview, as well as discussing ethical considerations such as maintaining anonymity, confidentiality and gaining informed consent. The interviews were recorded with the permission of the interviewees. Although the interview schedule was used to guide the process of the interviews, the participants were free to extend their responses while keeping to the focus of the discussion. The interviewees were informed at the close of the interview that a copy of the interview transcript would be provided to enable them to check the accuracy of the document.

I. Research findings for subsidiary question A

This section presents the qualitative findings for subsidiary question 2a:

What are the perceptions of students and tutors regarding the quality of learning and teaching strategies utilised on these programmes?

A. Findings from the open-ended survey questions: Students

The findings discussed here are from three out of the four open-ended questions in section B of the survey instrument. The open-ended questions aimed to capture the students' perceptions towards the usefulness of the pedagogical practices, their perceived benefits and weaknesses. They are summarised in tables and presented in the order of their appearance on

the survey instrument. This has allowed a more thorough analysis of the whole corpus of data and preserved the authenticity of the comments. Sample verbatim comments to substantiate and reflect the thematic classifications, as well as the number of occurrences are highlighted in the table. There were 194 students who completed the open-ended survey questions.

Question B1 asked students if they found the current teaching practices useful in enhancing learning. This is a key question in determining the quality of their educational experience. Ninety five percent of the responses were positive while 5% were negative regarding the usefulness of the teaching practices in enhancing their learning. The results indicate that the students found the learning and teaching practices to be useful and effective. The open-ended question required students to explain their positive or negative answers. Some students provided multiple responses. The positive findings were summarised and are presented in Table 6.1.

Table 6.1
Usefulness of the Teaching Practices in Enhancing Student Learning – Students

Focal Point	Comment Category	Frequency	Sample Comments
Usefulness of the teaching practices in enhancing student learning	Gained knowledge and new skills.	47	<i>"Prior to starting this course, business concept was totally unknown to me and quite daunting. Halfway through, I feel more empowered to start my own business and have the tools and resources to keep me growing".</i>
	Use of a variety of teaching methods and strategies	47	<i>"The teaching practices used in this programme have enhanced my learning".</i>
	Great interaction and collaboration with peers	40	<i>"Class participation and group discussions are great for sharing ideas".</i>
	Effective tutor	38	<i>"The teaching strategies are effective because they focus in facilitating our learning by engaging the students in all activities".</i>

Table 6.1 continues...

Table 6.1 continued.

Focal Point	Comment Category	Frequency	Sample Comments
	Mode of delivery	25	<i>"This mode of delivery allows self-directed learning at home when you have time".</i>
	Great resources	20	<i>"Our resources are well thought out. They are relevant and at the right level".</i>
	Personal development	19	<i>"It's about personal development... I learn independently and the course motivate me to give my best in order to improve myself".</i>
	Practical and relevant	15	<i>"... has a high practical component consistent with usage of real life examples".</i>
	Relaxed/fun learning environment	15	<i>"The key thing is that students make the learning environment conducive for learning. We are all encouraged and expected to participate in open discussions".</i>
	Catered to the different learning styles	11	<i>"Our tutor identifies different learning styles and alternate teaching methods to accommodate all students".</i>

Table 6.1 presents the positive findings for Question B1, which asked the students to indicate the degree of usefulness of the current teaching practices in terms of enhancing their learning. Two of the most frequent themes emerging from the responses were the development of new skills and knowledge relevant to the students' needs and the use of a variety of teaching methods and strategies. This was followed by the interaction, discussion and collaboration with peers which enabled students to work together, learn from each other and build relationships. Nearly as significant, was the effectiveness of the tutor in enhancing learning which enabled students to sustain their motivation and interest in attending the class. The delivery of the programme via mixed-mode allowed students "*to study and work at their own pace, place and time*". A number of responses were positive regarding the resources which supported and complemented student learning. Other responses highlighted the personal development, gradual scaffolding and growth in other aspects including, professional and cultural. Of lesser frequency, were the themes relating to the practical relevance of the learning activities to the workplace or future business endeavours and the range of teaching strategies which ensured that varying learning styles, abilities and preference were catered for. These themes showed that the students experienced a wide array

of elements, some more than the others, which they considered influential in their learning development.

The 5% of the sample who responded negatively to this question identified a number of reasons for this. The students felt that “*too often, class is rushed*” or “*too much information is given every meeting*”, “*resources were delayed and inadequate*” and “*the tutor lacks preparation*”. Other students mentioned that “*there was no information provided regarding the expectations and requirements of the programme*”. Although the students made a number of negative comments, the students’ responses to this question indicated that they were generally content with their learning and teaching experiences.

Question B2 of the survey instrument required the students to identify the benefits or strengths of the current teaching practices used in their programmes. This question aimed to ascertain which strategies students found beneficial in enhancing their learning. The findings are summarised in Table 6.2. The major themes that emerged are similar to those associated with question B1, thus corroborating the findings of both questions.

Table 6.2
Strengths of the Current Teaching Practices – Students

Focal Point	Comment Category	Frequency	Sample Comments
<i>Benefits or strengths of the current teaching practices as perceived by the students.</i>	<i>A variety of effective teaching strategies and learning activities</i>	53	“Teaching practices are inclusive, inspiring and invite tauira (students) to become involved in their learning”.
	<i>Interaction and group collaboration with peers</i>	39	“It is a collaborative style that strengthens the bond between the tutor and students, also students with others”.
	<i>Development of skills, knowledge and deeper understanding</i>	38	“I am able to express my opinion in discussions and group tasks in constructive methods to achieve my objectives of the unit studied. I have learnt more than what I expected”.

Table 6.2 continues...

Table 6.2 continued.

Focal Point	Comment Category	Frequency	Sample Comments
	<i>Effective tutor</i>	26	<i>"...skilled in facilitating learning, ... engage people in their learning, ... reciprocal learning.... do a variety of activities that keep you stimulated. Prepared. On time. Communicates well".</i>
	<i>Stimulating and fun learning environment</i>	25	<i>"Environment is fun that as a student we don't feel we are being talked to but we are part of it".</i>
	<i>Personal development</i>	24	<i>"I have grown and built my confidence and ability... It was the transforming effect".</i>
	<i>Diversity/ Inclusivity</i>	23	<i>"We all come from different cultures but we are all treated the same... with mutual respect".</i>
	<i>Self-directed learning</i>	19	<i>"... it made me a self-managing and self-regulating in my learning..."</i>
	<i>Cultural aspects/ Kaupapa Māori</i>	19	<i>"...opened my eyes about stuff I don't know about my own culture..."</i>
	<i>Mode of delivery/ flexibility</i>	15	<i>"...there is a lot of flexibility which I think is important on our learning. There is a lot of Self-directed Learning, which prepares us for the higher level".</i>
	<i>Practical and relevant</i>	14	<i>"I feel empowered. Everything that is taught can be used in my future plans".</i>
	<i>Great resources</i>	12	<i>"All the materials and everything that I need are there to achieve the learning outcomes".</i>
	<i>Great relationship with tutors and students</i>	10	<i>"There is reciprocal relationship between the tutor and the tauira (students)".</i>

The tutors' use of a variety of effective teaching strategies and learning activities which were considered to be "*cutting edge and high standard*" emerged as the top theme for this question. Central to the learning and teaching strategies, was the interaction and collaboration with peers in group work where students felt non-threatened and secured to discuss their learning. Under "*tutor's effectiveness*", the descriptions ranged from the tutors' knowledge of the subject to "*strength of character and personality*" and an "*open and approachable*" manner. The development of new skills and knowledge and personal growth also emerged as significant benefits of the current teaching practices. The learning environment, described as "*stimulating, fun, relaxing and less formal with a whanau (family) atmosphere*", built on student inclusivity regardless of the differences in background, culture, age and levels of abilities. Personal development for some students included a "*transformational effect and self enhancement process*", and "*personal growth*". A number

of responses mentioned that there was quite a range in the students' backgrounds and levels of abilities in the class. Others enjoyed and appreciated the acknowledgement of their cultural identity and uniqueness. The observance of *Kaupapa Māori* demonstrated respect for one another in that students felt a “*sense of belonging to a community of learners*” and the sharing of Māori and other cultures’ practices.

The degree of interaction allowed students to form close relationships as well as strengthened the bond and connection between tutor and among students. A smaller number of responses mentioned that the activities in the class were practical and relevant to their day to day life and workplace and that they were supported with great resources to achieve their learning outcomes. The findings indicated that the strength of the teaching practice as experienced by the students arose mainly from the calibre of the tutors and their teaching strategies employed in the classroom.

Question B3 focused on the weaknesses of the current teaching practices perceived by the students. Responses to the question are intended to highlight areas of limitations with teaching practice. The findings presented conflicting opinions from the students. Results of the findings are summarised in Table 6.3.

Table 6.3
Weaknesses of the Current Teaching Practices – Students

Focal Point	Comment Category	Frequency	Sample Comments
Weaknesses of the current teaching practices used in the programme	Lack of clarity and in-depth discussion of topics, programme expectations and requirements	55	“ <i>Sometimes the tutor just covers the surface (teaching to the test)</i> ”.
	Ineffective programme design and structure/ too much self-directed learning	47	“ <i>There was not enough amount of time spent in class ... Classes are too far apart</i> ”.

Table 6.3 continues ...

Table 6.3 continued.

Focal Point	Comment Category	Frequency	Sample Comments
	Too much information delivered every meeting	26	<i>"Class times are sometimes very intense with too much information to absorb and process".</i>
	Too much diversity in student background	24	<i>"Too much diversity in the student make-up was regarded as weakness because the varying levels of ability impeded students' progress".</i>
	Inadequate, low quality, delayed distribution of learning resources	22	<i>"Some learning CDs need fine tuning and should be correlated accurately with the workbooks and learning tasks/outcomes..."</i>
	Ineffective tutor	14	<i>"The tutor uses 'one style fits all' approach which does not always suit all participants".</i>
	Environment is not conducive	8	<i>"We had a quite small classroom. If everybody was there, you'll be too close to each other".</i>
	No weaknesses	32	<i>"I cannot think of any weaknesses".</i>
	No response	24	

As shown in Table 6.3, fifty-six responses did not identify any weaknesses or issues with the teaching practice or the question was left unanswered. This could suggest either contentment or apathy with the pedagogical practice. On the contrary, the majority of the responses suggested that there were inadequacies in the learning and teaching practice. The dissatisfaction which resonated most with the students was the apparent *"lack of clarity and in depth discussion of topics, programme expectations and requirements"*. The students felt that the activities and learning processes were rushed through to cover the content. Another significant weakness identified by the students was the lack of face-to-face interaction with the tutor and peers which led to loss of personal motivation due to the length of time which elapsed between classes. A number of responses indicated that the tutor was trying to cover too much content which led to the feeling that *"everything seems to be rushed"* and *"too much information is delivered"* at every class meeting. This was compounded by ineffective tutors described as *"monotonous and boring"*, *"lack (s) preparation and strategy"* and *"unproductive use of self-directed learning component of the programme"*. Others

considered the varying levels of abilities and background of the students in the class as a challenge due to the fact that tutors tried to ensure that students who had lower levels of abilities were also catered for. This apparently slowed down the progress of the discussions. The delay in receiving the learning resources and the low quality of the resources were also identified as a weakness of the teaching practice. Others commented on the environment as being “*not conducive because it was noisy*” and the “*classroom too small for the number of students*”.

Summary of findings from students’ open-ended questions

The section above presented the findings regarding the elements of the teaching practice which students found useful in their learning, the strengths and benefits as well as the weaknesses of the teaching practice. Overall, students indicated a certain level of satisfaction with the teaching practice based on the benefits and strengths that were identified. The students spoke favourably of the various elements that positively influenced their learning.

With regards to the weaknesses of the teaching practice, there was a wide array of concerns that emerged from the findings. These included lack of clarity and in-depth discussion of the programme requirements and expectations, ineffective programme design and structure, too much information delivered at every class time, too much diversity in student background, inadequate and delayed learning resources, ineffective tutors and an unfavourable learning environment. There were also a significant number of students who chose not to answer the question related to the weaknesses or commented that they did not have issues or concerns (56 non-responses). Without additional data, no further interpretation can be made regarding the non-responses.

B. Findings from the interviews: Students

The interview schedule was based on two sets of interview questions. The first set of questions aimed at the perceptions of the participants regarding each dimension of the IFSCL. The framework served as a lens to examine the quality of the current pedagogical practices using the mixed-mode delivery method. The second set of questions explored further aspects of quality learning and teaching, not contained within the IFSCL. The questions aimed to gain insights into the other factors related to the concept of quality learning and teaching experience which were not part of the dimensions in the IFSCL. The interviews were tape recorded, transcribed and uploaded into NVIVO. The responses of each participant were analysed to identify the critical themes that had impact on the quality of learning and teaching. The concepts and terms that were mostly spoken of by the participants were considered the emerging patterns and grouped together into clusters for similar meanings. Words or phrases with no apparent meaning, incongruent or considered inadequate were removed and excluded from the analysis. Where appropriate, quotations have been used in verbatim to exemplify key ideas. Following the deductive approach the responses were examined and analysed using the dimensions within the IFSCL as the framework for categorising the concepts and key themes that emerged.

B.1. Findings related to the dimensions of the IFSCL.

This section presents the findings from the first set of interview questions based on the ten IFSCL dimensions. The questions were derived from the first set of interviews 1 to 20 (See Appendices N and O). The following tables and paragraphs present the interview questions and the findings in order to examine the views of the participants regarding their impact upon the quality of learning and teaching.

Role of the Tutor in the Classroom

Interview items:

- 1) *Can you please describe what an effective tutor is to you?*
- 2) *How do you build relationships with your tutor and with the other students?*

Table 6.4

Responses Related to the ‘Role of the Tutor in the Classroom’ Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Role of the Tutor in the Classroom	Engages everyone and caters to all students with various background through a variety of learning activities	18	<i>“We do a variety of learning activities where everyone is expected to participate and collaborate”.</i>
	Foster positive relationships and establish connection with and among students	12	<i>“He has a very good relationship with us. We can always ask questions. He is never too busy for anything else”.</i>
	Being a facilitator of learning	10	<i>“For me it is about being facilitator of learning rather than just lecturing”.</i>
	Sense of humour	10	<i>“He has a good sense of humour”.</i>

An effective tutor was mostly described as one who “*plans and facilitates their learning*”, “*has a great sense of humour*”, “*engages everyone*” and “*caters to all students with various backgrounds*”. A number of students also commented on the preference for the tutor to be more of a facilitator rather than merely transmitting the subject matter of the course. The students also mentioned that they considered the role of the tutor to set the climate for the learning environment, for example, the tutor’s sense of humour and ability to engage everyone to participate in the discussion. When probed further on how relationships were facilitated in the class, the students described having the opportunity to establish connections in order to get to know one another and the provision of a variety of learning activities that catered to the different learning styles of the students. The responses were unanimous in that the tutor’s personal and professional attributes were pivotal in enhancing the quality of the learning experience for the students, and in their ability to foster positive tutor-student and student-student relationships.

Cultural awareness

Interview items:

- 3) *In your opinion, how is your culture recognised in the classroom?*
- 4) *How does this impact in your learning?*

Table 6.5

Responses Related to the ‘Cultural Awareness’ Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Cultural Awareness	Respect, acceptance and sense of belonging	12	<i>“There is respect, whanau (family)/community of learners, a sense of belonging. All of me is valued (holistic learning) ...”</i>
	Acknowledgment of diversity by being inclusive	10	<i>“The classroom environment and students were very open to any culture or ways of learning”</i>
	Use of holistic learning and teaching strategies	8	<i>“... it actually helps you in going out in the real world... there is holistic development, not just about the course”</i>
	Strong understanding and learning of <i>Tikanga Māori</i>	5	<i>“It is great to be in an environment where my own cultural practices are embedded in everything that we do”.</i>

Students felt that their tutor was culturally responsive in different ways. There was respect, acceptance and a ‘sense of belonging’ regardless of where they came from. Acknowledgment of diversity was apparent through inclusivity, as well as the use of holistic learning and teaching strategies which encompassed the ‘whole person’ development. Gaining a strong understanding and learning of Māori pedagogy and *Tikanga Māori* (Māori custom) was also appreciated by the students. The observance and integration of some aspects of Māori cultural practices in the classroom was accepted as affirmation of the cultural well-being of the students in a Māori organisation. A *non-Māori student commented:* “*It is great to be learning about Maori culture, while sharing my own culture*”. The students generally agreed that the recognition of their individual cultural identity impacted positively upon their learning. The teaching approaches were flexible in terms of adapting to the different ways of learning. The findings indicated that the tutor was responsive in providing a culturally appropriate learning experience, amenable to cultural diversity.

Learning environment

Interview items:

- 5) *What do you think are the necessary elements for the learning environment to be conducive to your learning? Are there things that you would like to change?*

- 6) *What do you think are the things that Te Wānanga o Aotearoa must do in order to improve the learning environment?*

Table 6.6

Responses Related to the ‘Learning Environment’ Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Learning Environment	Relaxed, fun learning, conducive and non-threatening	35	<i>“When we come together it allows us to hear and share each other’s learning. We are able to make mistakes and be corrected in a safe, accepting environment”.</i>
	Well resourced, comfortable and suitable	16	<i>“Our room is suitable for us...the room itself is fine and comfortable. And so are the seats and table”.</i>
	Culturally appropriate	8	<i>“It’s a very welcoming atmosphere and environment for a non-Māori”.</i>

A conducive learning environment was described by some in terms of the physical characteristics of the classroom, i.e. suitable, comfortable and well-resourced. More students were inclined to describe the ambience of the learning environment in that it must be relaxed, fun and non-threatening. Apart from the physical characteristics, students also considered the ‘human factor’, tutor and students, as paramount in enabling a positive learning environment. The students also recognised that despite being a Māori learning environment, it is very welcoming, inclusive and culturally appropriate regardless of their ethnicity. However, they also recognised the need to continually improve the condition of the building and refurbishment of the facilities, (“*our building is looking a bit tired*”) and that each classroom should be well equipped with resources and technology (“**we** need printers and data

projector in our classroom”), and that the activities in the classroom are engaging and allow for collaboration (*I learn a lot when I work with others*).

Learning Activities

Interview items:

- 7) *What do you think are the elements that must be present in the delivery of the programme to meet the varying needs and abilities of the students in the class?*
- 8) *Imagine that I am your tutor for this programme; can you please tell me what your expectations are in this programme for you to complete it successfully?*

Table 6.7
Responses Related to the ‘Learning Activities’ Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Learning Activities	Interactive, fun, engaging, relevant, practical and there was a variety	30	<i>“Sometimes we play games, skits, role play. Sometimes we do written stuff. We also do things on the board. We do a variety of things. He does different things in a different way each time”.</i>
	Supplement and complement learning	8	<i>“The variety of learning activities engaged us more... making our understanding of the subject matter much deeper”.</i>
	Promote group collaboration and participation	8	<i>“... make us work with others, get to know one another, know their own perspectives which help us in our learning”</i>
	Feedback, knowing the course requirements and expectations	10	<i>“...I would expect to know what are the expectations, the course outlines, what we are going to do, when everything is due... how much do I need to invest in this”.</i>
	Effective tutor	8	<i>“I expect my tutor to be the best in everything – discussion, delivery, knowledgeable, but also compassionate, friendly and open-minded”.</i>
	Flexibility and support	7	<i>“...a bit of flexibility and extra support from my kaiako (tutor) will help me get through the course”.</i>

To meet the different needs and abilities of the students, the responses highlighted that the learning activities should be interactive, fun, engaging and varied. They also had to be practical, relevant activities which supplemented and complemented learning. The

practicality and relevance were linked to the connection with the assessments and learning outcomes. Some students mentioned that the “*use of icebreakers and humour to break the monotony of the class*” was given as examples of making learning fun. The students also identified that the learning activities had to promote group collaboration and participation where they can also learn and develop work-related skills. When asked of the students’ expectations to complete the course successfully, the responses were centred on “*knowing the course requirements and expectations*”, “*regular feedback*” on their performance, and “*having an effective, flexible and supportive tutor*”. A number of students indicated that their expectations were met, while others commented the need for improvement for this question.

Learning Resources

Interview items:

- 9) *Can you please make a comment regarding the appropriateness of the learning resources used in your programme in terms of meeting the learning outcomes?*
- 10) *In your opinion, how do the learning resources in this programme support you in achieving your learning goals?*

Table 6.8

Responses Related to the ‘Learning Resources’ Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Learning Resources	Interactive, multimedia, user-friendly	14	“... are very appropriate and user friendly, they also come in various forms, DVD, books, etc.”.
	Supplement and complement our learning	10	“... they support and complement our learning specially when I am at home for our SDL component...”
	Inadequate and delayed	8	“... we received them late...”
	With mistakes and inaccuracies	8	“there were lots of errors in them”

There was no clear consensus on the appropriateness of the learning resources in meeting the learning outcomes of the programme. Negative responses focused on resource inadequacies, poor quality, mistakes, inaccuracies and delay in receiving the resources. Conversely, the positive responses commended the learning resources, “*they support our learning*”, “*are very appropriate*”, “*awesome and they are free*”, “*user-friendly*” and “*there is a variety of them – workbooks, DVDs, etc.*”. When asked as to how the resources supported students in achieving their learning goals, those in support of the resources found them to be valuable especially during their self-directed learning. One student mentioned that “*it is great to have something to refer to when doing studies at home*”. On the contrary, other students indicated that the learning resources needed to be aligned with the discussions and the learning activities in the class.

Assessments

Interview items:

11) How are you assessed in your learning? What are some of the assessment methods used in your programme?

12) How do you know if you have been successful in meeting your expectations in this programme? Do you give feedback to your tutors about your learning needs?

Table 6.9
Responses Related to the ‘Assessments’ Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Assessments	Multiple options and flexible timeframes	16	<i>“...case study report, group reports, essays, short individual essays with open books, multiple choice, oral presentations”.</i>
	‘Achieved’ and ‘Yet to Achieve’ feedback	10	<i>“Each assessment has comments on it. If you are “Yet to Achieve”, then you are given the opportunity to resubmit”.</i>
	Need more comprehensive feedback and formative assessments	10	<i>“Feedback for assignments needs to be more supportive; not just saying that it’s not right, but the tutor should explain why”.</i>

The most frequent response regarding assessment methods was related to the multiple options available to students; followed by assessments with flexible timeframes. The students could choose how they would complete the assessments, either in the form of an essay, oral or PowerPoint presentation, portfolio, project and others. One student commented: *“I don’t like oral presentations, so I do a project”*. Extensions were allowed for valid reasons. The students appreciated the flexibility to choose from a variety of methods of assessments.

When asked how they knew if they had been successful in meeting their expectations of the programme, most of the students replied that it was through the results they obtained from the assessments. However, a number of students expressed their dissatisfaction with the *Te Wānanga o Aotearoa* ‘Achieved’ or ‘Yet to Achieve’ marking system for non-degree programs: *“whether you did excellently or did just ‘okay’, you are graded the same”*. This contrasted with supportive comments such as: *“If I did not do alright, the ‘Yet to Achieve’ means that I still have another opportunity to re-do and pass the assessment”*.

Students also remarked that more formative and comprehensive feedback was required to supplement the ‘Achieved’ or ‘Yet to Achieve’ results. One student highlighted the need for the feedback to be more supportive and explanatory: “*I need more feedback on how I can improve my work; not just a YTA*”. The findings indicated that while there were multiple options in assessment methods, students mostly relied on the marking system to judge if they were successful in achieving their own expectations of the programme.

Teaching Methods and Strategies

Interview items:

- 14) *Imagine that I am your tutor, what would you expect me to tell you on your first day in class?*
- 15) *What do you think are the elements that must be present in the teaching methods and strategies of your tutor to meet the varying needs and abilities of the students in the class?*

Table 6.10

Responses Related to the 'Teaching Methods and Strategies' Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Teaching Methods and Strategies	Orientation to the programme requirements and expectations	25	<i>"I would expect to discuss the outline of the programme, what I will be learning ... how I will be assessed, and the amount of time required of me in and outside of the class".</i>
	Use of a variety of teaching methods to suit the learning styles of the students	12	<i>"We do a variety of activities in the class – all kinds and all sorts – group work, wāiata (Māori songs), games, presentation. This enables all tauira in the class to participate".</i>
	Must enhance learning, gain new skills and knowledge	28	<i>"It builds from what I already know, and we learn more complex thinking and level up, learning new stuff".</i>
	Promote group collaboration, connection and build relationships	28	<i>"Making the connection makes me feel comfortable".</i>
	Kaupapa Māori/ Māori ways of learning and teaching	12	<i>"I enjoy the fact that Māori approaches are utilised in the classroom... not competitive, not daunting, but supportive".</i>

The first meeting was significant for a number of students as it set the foundation for the entire academic year. At the first meeting of the class, students expected their tutor to provide the opportunity to establish connections and get to know one another. This facilitated the building of positive relationships between the tutor and students and among the students themselves. The students also expected the tutor to discuss learning outcomes and expectations; orientation to the programme requirements and a discussion on the teaching styles of the tutor. The elements that students thought should be present in the teaching methods and strategies of the tutor were: the ability to bring about the learning of new skills and new knowledge, the use of a variety of teaching methods to suit the learning styles, learning abilities and cultural background of the students and creating close interaction and

collaboration. A few students indicated that there was not enough variation in the tutor's delivery, or a 'one style fits all' approach would not work. Other students mentioned; "*my tutor was very monotonous and boring*", and "*I want to have more opportunities to work with others*". The findings indicated that this dimension was perceived both positively and negatively by the students.

Learning Outcomes

Interview items:

- 15) *How are the learning outcomes and objectives of your course communicated to you?*
- 16) *Can you explain how you negotiate opportunities for you to meet your learning outcomes?*

Table 6.11
Responses Related to the 'Learning Outcomes' Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Learning Outcomes	Discussions at the beginning of the course and on each module	15	<i>"We discussed the course as a whole, and then she discussed each individual module".</i>
	Matched with assessments	6	<i>"Our activities and assessments are aligned with the learning outcomes and objectives of the course".</i>
	Non-negotiable	6	<i>"I don't think I am in the position to negotiate my learning".</i>

Most of the responses concurred that the learning outcomes were discussed at the beginning of the course and at each module. The students appreciated that the learning outcomes were communicated to them at the start of the course as this enabled them to prepare for their course. On the follow-up question regarding opportunities to negotiate the learning outcomes, the responses mentioned that although the programme was considered flexible, the learning outcomes were prescribed and were therefore not negotiable. Being able

to negotiate one's learning is one of the characteristics of a student-centred learning approach. However, not having the opportunity to negotiate did not appear to be an issue as the students believed that “*my tutor knows best*” and “*I am here to learn*”, were quite unperturbed by this absence of opportunity to negotiate their learning.

Evaluation

Interview items:

- 17) *How are you evaluated in your progress to ensure that you will complete the programme successfully?*
- 18) *What are the performance indicators or benchmarks being used to measure the progress of your learning?*

Table 6.12
Responses Related to the ‘Evaluation’ Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Evaluation	Feedback to and from the tutor	12	“ <i>The kaiako (tutor) give us feedback. He lets us know where we are at</i> ”.
	Performance against learning goals or completion of units	6	“.. <i>having an idea how much we have completed and how much more we need to do ...</i> ”
	Token evaluation	4	“ <i>I don't know what's the point of doing such evaluations when we don't hear about the results anyway</i> ”.
	Feedback loop	4	“ <i>We do Course Evaluation, but I believe it is only a 'tick box' approach. I don't think anyone really cares about what we write</i> ”.

Feedback from the tutor was frequently cited as a method of evaluation of the students' progress; while performance against learning goals were the benchmarks informing students of their progress. Interestingly, setting personal goals and conducting self-review was mentioned by one student. Students also provided feedback to their tutor on the progress of their learning and any difficulties or issues experienced. Evaluation for some students

conjured the standard institution-wide evaluations, and when understood in this light there was discontent about the superficiality and tokenism associated with this. One student commented: “*It will be good to know what they have done with our feedback*”. Institution-wide evaluations lack a ‘feedback loop’ and the students are in most instances resentful of this.

Curriculum Design

Interview items:

- 19) *As a student of this programme, do you get involved in the opportunity to contribute to the development of the course? How?*
- 20) *In your opinion, does the current design of the course allow flexibility to meet the varying needs of the students?*

Table 6.13

Responses Related to the ‘Curriculum Design’ Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Curriculum Design	Not consulted	16	<i>“I don’t think I am in the position to be involved for such activity. I think that is for those who know a lot about the subject matter”.</i>
	Don’t want to participate	8	<i>“I don’t think we should contribute anyway. I don’t think we are confident or know enough that we will give justice”.</i>
	Delivery suits students’ diverse background	26	<i>“The mode of delivery allows for better engagement; delivery suits students with various background and experience”.</i>
	Too much self-directed learning; need more face-to-face; ineffective structure	33	<i>“There is too much self-directed learning component to it which means you need to be resourceful and motivated always to maximise your learning. I believe there is a need to meet more frequently with my kaiako”.</i>

The unanimous response was that none of the students had been given the opportunity to contribute to the development of the course. However, students did not view this as an issue; rather the preference was not to be consulted as they felt they were only learners or

novices in the subject area and would be unable to contribute. They were quite unaware that such opportunity was provided to students, although several of them believed that the only way to contribute to the development or improvement of the curriculum was through the routine evaluations conducted on their course.

The flexibility of the curriculum design drew an almost equal mix of responses. Those who agreed that the curriculum worked well in meeting students' varying needs appreciated its flexibility, "*I can do studies at my own place, at my own pace*"; and the mode of delivery which allowed students to cope with the pressures of study, work and family responsibilities more successfully than full-time, face-to-face classes. Opposing opinions were distributed between the specific need for more face-to-face interaction and less self-directed learning with overall comments that the curriculum design was structured and inflexible. There were a number of suggestions to add additional face-to-face class meetings in order to have more interaction with the tutor and amongst students. Of lesser frequency was the comment regarding "*having a curriculum that is internationally recognized to be able to work outside of New Zealand*".

B.2. Findings related to the concept of quality learning and teaching

The second section of the interview explored the students' perspectives on the quality of learning and teaching, specifically: the mode of delivery, dealing with learning needs and issues, and the definition and indicators of quality learning and teaching. The responses are summarised in the following tables and paragraphs, followed by a discussion of the findings.

Interview item:

- 1) *Can you please describe how this programme was delivered? Do you think this is the best option for this programme and for the students?*

Table 6.14

Students' Responses Regarding the Mode of Delivery

Focal Point	Comment Category	Frequency	Sample Comments
Insights in regards to the mixed-mode delivery	Best option for mode of delivery/ flexible structure	25	<i>"I am able to work and study at the same time without too much stress".</i>
	Combination of a few hours of face-to-face and self-directed learning	18	<i>The course is delivered via mixed-mode. We meet with the tutor every so often, then do things on our own".</i>
	Need more face-to-face contact	8	<i>"Not really the best option. I believe there should be more face- to-face".</i>
	Loss of motivation	7	<i>"Doing things on my own during self-directed learning is a challenge for me. I could easily lose my motivation".</i>

All the responses described the delivery of the programme as mixed-mode with a combination of face-to-face and self-directed learning. For a number of students, mixed-mode delivery also included “*using computer software to learn as well as online learning*”. When probed further if the mode of delivery was the best option for their programme, the responses were divided. The flexibility of the mixed-mode delivery was most valued as it allowed students to organise the demands of daily life alongside their studies. Those reliant on more contact time with the tutor did not think that mixed-mode delivery was optimally structured. One student commented: “*There are times where I felt that I need the tutor to be available to ask for and received feedback from*”. The amount of time and activities allocated for self-directed learning was considered inadequate by a number of students.

Interview item:

- 2) *How do you deal with some learning needs/issues as a student, if you have any?*

Table 6.15

Students' Responses Regarding Dealing with and Supporting Student Learning

Focal Point	Comment Category	Frequency	Sample Comments
Dealing with learning needs/issues	Tutor as first point of support	12	<i>"I always go to the tutor if I have any learning needs or issues..."</i>
	Student Support	6	<i>"If the issue is beyond the tutor, we are referred to the Student Support Services".</i>
	Needs to provide other kinds of support	4	<i>"It will be great if TWoA can also provide support for those that need accommodation close to the campus".</i>

Most of the students were likely to approach their tutor for support in dealing with any learning needs or issues. A few were referred to the Student Support Services for additional assistance if the tutor was unable to help them, for example when "*I need help when applying for loans and allowances at Studylink*". There were a number of students who queried the possibility of providing support services over and above the existing provision. (e.g. accommodation, childcare, transport). In exceptional circumstances, Student Support Services provide Support Worker to assist students with disability in their studies. They also organise workshops on study skills for students to attend. However, this was not consistently provided in all campuses of TWoA.

Interview item:

- 3) *What does “quality learning and teaching” mean to you?*

Table 6.16

Students’ Responses Regarding what Quality Learning and Teaching Means

Focal Point	Comment Category	Frequency	Sample Comments
Idea of what quality and learning and teaching means	Development of skills, knowledge and deeper understanding	18	<i>“... be able to apply it in the real world. So it is about understanding on a deeper level how things are done and applied. Not just doing the assessment, not just passing. It is gaining deeper understanding”.</i>
	Holistic learning and teaching	10	<i>“It is not just about learning about business, but it is also developing in other aspects – culturally, socially, mentally and personally”.</i>
	Caters to the different learning styles	8	<i>“It would be around the learning outcomes. What I had enrolled on is what I had got. That there was really good teaching, that the resources actually support the learning, that the different learning styles are catered to”.</i>
	Successful completion and graduation	8	<i>“... If I am able to complete all the requirements of the course and graduate with a qualification”.</i>
	Relevance, practicality and employability of graduates of curriculum	8	<i>“For me it would be, will I get a job at the end of it? Have I gained the skills and the knowledge expected of me when I finished this course?”</i>

The concept of quality learning and teaching was understood differently by the students with most responses identifying the development of skills and gaining new knowledge. A number of students considered holistic learning and teaching practice, being culturally proficient and catering to the different learning styles as indications of quality. Other comments perceived quality learning and teaching as being able to complete their courses successfully; having relevant and practical curriculum, being employable when they graduate, course as being good value for money; and development of deeper understanding.

Interview item:

- 4) *What do you believe are the important indicators or benchmarks of quality learning and teaching?*

Table 6.17

Students' Responses Regarding Indicators of Quality of Learning and Teaching

Focal Point	Comment Category	Frequency	Sample Comments
Indicators of quality learning and teaching	Successfully passing the course and graduation	14	<i>"For me it is about whether I have completed all the requirements of the course and receive my tohu (certificate) at the end of it".</i>
	Learning new skills and gaining new knowledge and developing higher level thinking	14	<i>"It is about gaining knowledge and skills at a higher level... developing my own knowledge, being able to think critically".</i>
	Employability of graduates	8	<i>"At the end of the day, it is about me getting a better job... and consequently improving my life".</i>
	Holistic development of the students	6	<i>"For me it is about growing and developing as a person in all facets of life holistically".</i>

The findings were centred on student development. Successfully passing the course and graduation vied equally with learning new skills and gaining new knowledge as indicators of quality learning and teaching. A number of students also mentioned that an important indicator of quality education was dependent on their employment outcomes. Holistic development of the individual as a quality benchmark was also cited, although there was some reservation as to how this could be measured due to the fact that aside from quality education, other complex variables were involved.

The findings indicated a wide array of perceptions on the concept of quality learning and teaching, but all with a strong focus on the end product or outcome.

Summary of student findings regarding the quality of learning and teaching

This section presented the findings of the second set of interview questions regarding student perceptions of the quality of the learning and teaching strategies in mixed-mode programmes. In addition to the questions regarding the dimensions on the IFSCL, items related to the delivery of the programme, dealing with student learning needs, views about quality of learning and teaching and its indicators were explored. Students described the mixed-mode delivery as a combination of face-to-face interaction with a high percentage of self-directed learning. The mode of delivery was seen as both an enabling and inhibiting factor. For mature students, it was a great opportunity to return to tertiary study while working and raising a family.

On the contrary, the high percentage of self-directed learning was considered a challenge by a number of students due to the lack of face-to-face interaction with the tutor and peers. The tutor was viewed as the first person students approach for extra support. The responses on quality learning and teaching were wide ranging and included development of deeper understanding, skills and knowledge, holistic learning and teaching, tailored to the various learning preferences, graduation, relevance and practicality of the curriculum, employability of the students and value for money .

II. Research findings from subsidiary Question 2a: Tutors

A. Findings from the open-ended survey questions

The following sections focus on the tutors' perspectives of their teaching practices on the programme. The open-ended questions were similar to those in the students' survey instrument, but modified to suit the teaching focus. The questions were derived from the open-ended survey questions B1 to B4.

Question B1 asked the tutors to comment on the aspects of their current teaching strategies they felt had the greatest influence in enhancing student learning. The themes extracted from the data, the number of comments, and selected verbatim comments reflective of the themes are summarised in Table 6.18.

Table 6.18
Teaching Strategies in Enhancing Student Learning

Focal Point	Comment Category	Frequency	Sample Comments
Aspects of the current teaching strategies that tutors feel have the greatest influence in enhancing student learning	Use of a variety of interactive learning activities and resources	11	<i>"My teaching styles are varied, fun and interactive. I use various teaching strategies, humour, interaction and real-life examples supplemented with a variety of resources".</i>
	Establishing connection and building relationships with students	8	<i>"We establish who we are, where we come from, our whākapapa (genealogy) and whānaunga (kin) from the outset".</i>
	Non-threatening learning environment	7	<i>"I try to provide a learning space that is very welcoming, providing activities that enables everyone to participate and work with one another".</i>
	Holistic teaching	5	<i>"I try to be holistic in my teaching. I make sure that I cover the content of the course inclusive of the different aspects of their well-being".</i>
	Flexibility	5	<i>"I allow flexibility in terms of resubmitting work if students have valid reasons; or meeting with them even outside of the normal meeting schedule if requested".</i>
	Knowledge of learning styles	3	<i>"I try to assess and have knowledge of students' learning styles and provide a non-threatening learning environment".</i>

Table 6.18 presents the summary of the findings for the open-ended question B1 from the survey instrument. Tutors described a range of ways by which they felt their strategies positively influenced the learning experience of the students. Drawing on the tutors' personal and professional qualities, a number of teaching strategies which most influenced learning were described. The responses mentioned the use of a variety of teaching strategies and learning activities supplemented with multimedia resources to cater to the students' learning

needs. Making a connection and establishing a good relationship with the students by getting to know them was another frequently cited strategy to enhance learning. This also included providing opportunities for students to collaborate and engage with one another to establish relationships with their peers. To engage with students and maximise their learning, some felt that creating and maintaining a non-threatening but challenging learning space and environment was important. Emphasising how the *Māori* pedagogy and *Kaupapa Māori* philosophy lends itself well to holistic teaching, some tutors viewed this ‘cultural proficiency’ as an influential teaching strategy. Flexibility as a strategy to enhance learning was defined by the tutors as the ability to have extended timeframes, availability to provide more tutorials and the flexibility of the mixed-mode delivery itself which allowed students to study and engage in paid employment. Of less significant themes, having knowledge and ability to adapt to the students’ learning styles were thought to be influential in enhancing student learning.

Question B2 focused on the challenges or barriers faced by tutors in their current teaching practice. Tutors described a number of factors that could potentially undermine the delivery of quality learning and teaching. The summary findings are presented in Table 7.19.

Table 6.19

Challenges with the Teaching Practices

Focal Point	Comment Category	Frequency	Sample Comments
Challenges or barriers with the current teaching practices as perceived by the tutors	Lack of face-to-face interaction with the students	8	<i>"One of the challenges is the lack of hours concentrated and required across the noho".</i>
	Inadequate resources and facilities	8	<i>"We had a quite small classroom.... I really think there should be appropriate amount of space for learning to be conducive and comfortable. Must have up-to-date technology, programmes...".</i>
	Absenteeism or lack of motivation on the part of the students	5	<i>"The class meetings are too far apart which leads to students losing their motivation so they ended up withdrawing".</i>
	Too much diversity in the class	5	<i>"There is a wide variation in tauira capacity and being constantly aware of not leaving anyone behind".</i>
	Keeping up to date and current with knowledge and teaching strategies	3	<i>"....keeping classes interesting after having taught the same thing for seven years".</i>

Limited face-to-face engagement emerged as a frequent theme in this discussion. As a result of this the tutors tried to deliver as much content as they could at every meeting. A further consequence of the lack of face-to-face interaction was absenteeism and the loss of motivation on the part of the students. Also emerging as a significant theme was the inadequacy of the learning and teaching resources. The issues were the delays in delivery and the level of errors. Facilities were also considered inadequate in that the physical classroom space was also too small for the number of students. The student diversity in terms of age, background, ethnicity, culture and abilities was a challenge for some tutors as they needed to accommodate this in their teaching so that no students were neglected or allowed to fall behind in their achievement. A number of tutors were overwhelmed by the need to keep their knowledge and teaching strategies up to date and current. The points highlighted here detract

from the quality of the learning and teaching practice if these challenges or barriers are not properly addressed.

Question B3 asked tutors what they believed were the strengths of their current teaching practices. As expected, the strengths somewhat mirrored the most influential aspects of their teaching to enhance learning, the focus of question B1. Not surprisingly, the emergent themes from both questions were fairly similar, with noticeably more minor themes emerging from question B3. The findings are summarised in Table 7.20.

Table 6.20
Strengths of the Teaching Practices

Focal Point	Comment Category	Frequency	Sample Comments
Strengths of the current teaching practices as perceived by the tutors	Knowledge, planning and preparation	15	<i>"I consider myself to be an expert in the field that I am teaching. I'm well organised and plan my lessons in advance".</i>
	Variety of teaching strategies/group activities	10	<i>"I mix the kinaesthetic, visual, and audio and incorporate all the models of teaching and do a variety of activities, e.g. role play, presentation, group work, etc.". </i>
	Conducive learning environment	6	<i>"I organise our learning environment to be welcoming, warm, relaxed and conducive to the learning of the students. I make sure it's clean and tidy...".</i>
	Sense of humour	6	<i>"I try to incorporate humour as a way of getting my students' attention. In that way, they feel relaxed and comfortable and ready to learn".</i>
	Establishing connections and building relationships	6	<i>"...It's about getting to know the students pretty well and use different learning and teaching styles. I try to make a connection right at the beginning".</i>
	Holistic teaching	6	<i>"I believe my teaching strategies are holistic, in that I try to make sure that I cover all aspects of their learning".</i>

The dominant theme indicated that the tutors' knowledge of the subject matter, planning and preparation before each class were regarded as strengths of their teaching practice. This also included the efficient use of resources, access to individuals to invite as

guest speakers to the class and the strategy of ‘facilitating’ rather than ‘teaching’. A variety of teaching strategies to cater to the different learning styles and preferences of the students emerged as another frequent response. This included the use of scaffolding strategies and group activities to foster interaction and collaboration among the students. The use of scaffolding strategies allowed students to progressively develop students’ consciousness into higher level. In addition, setting an appropriate climate for learning characterised by a conducive learning environment enabled the students to work collaboratively with others. A conducive learning environment, in terms of temperature, space, location, comfort, being well-equipped, and visually stimulating, was a frequent theme. Equally cited as strengths of the teaching practice were the themes regarding: the use of humour, the importance of establishing connections and building relationships in the classroom. The use of humour and having fun in the class enabled students to engage more effectively with the learning. Part of relationship building also meant getting to know students’ backgrounds in order to foster positive tutor-student relationships, or student-student relationships. The emergent themes on the strengths of the teaching practice were related to the tutors’ personal and professional strengths as opposed to organisational factors.

Question B4 asked what the tutors believed were the weaknesses of their current teaching practices. Table 6.21 presents the summary of the findings.

Table 6.21
Weaknesses of the Teaching Practice

Focal Point	Comment Category	Frequency	Sample Comments
Weaknesses of the current teaching practices	Rigid programme design and structure	7	<i>"I wish I have more time to meet with my students".</i>
	Inadequate and delayed learning resources	5	<i>"Weaknesses occur when resources don't arrive on time".</i>
	Lack of planning	3	<i>"Sometimes I just have those moments when I feel that what I have prepared may not be enough due to a noho class is quite intensive".</i>
	Keeping current with knowledge and teaching strategies	3	<i>"Need to be updated with all the latest teaching strategies".</i>
	Varying levels of ability	2	<i>"It can be time consuming sometimes as the class members have different abilities of understanding and learning styles".</i>

The major theme emerging from the responses was the “*inflexible and rigid*” programme design and structure. This was due to the prescribed *Marau* (Curriculum) document which the tutors were expected to adhere to in delivering the programme. The *Marau* document also determined how the programme was structured with tutors citing the insufficient face-to-face interaction with the students which hampered their ability to meet timeframes in the delivery of the programme. The inadequacy and lateness in the receipt of learning and teaching resources emerged as the next most frequent theme. Lack of planning and focus due to other tasks undertaken by the tutor was one of the less frequent themes, as with the need to maintain current teaching knowledge and strategy, dealing with difficult students and those with varying levels of abilities. The weaknesses as identified by the tutors point to areas of their teaching practice that require attention and improvement.

Summary of findings from tutors' open-ended questions

This section presented the findings from the tutor participants regarding the factors they considered to be influential in enhancing student learning, the strengths and benefits, as well as the challenges and weaknesses of their current learning and teaching practices in mixed-mode delivery. The tutors focused on their own personal and professional qualities as the strengths of their teaching practice which enhanced the students' learning. In regards to the challenges and barriers, the findings identified a combination of different aspects of the tutors' pedagogical strategies, along with a number of institutional elements, not operating at their optimum level which potentially could hinder the effectiveness of providing quality learning and teaching. This underscores that all stakeholders (the organisation, tutor and students) play a pivotal role in enhancing student learning.

B. Findings from the interviews

Replicating the format of the student interview, tutors were asked the same set of questions based on the dimensions of the IFSCL in the first section of the interview. This was followed by the second set of questions regarding the concept of quality learning and teaching.

B.1. Findings related to the dimensions of the IFSCL

The tutors' responses to the interview items on the IFSCL dimensions, though assorted, indicated a pattern of themes, consistent with student-centred learning principles. The findings are presented in the following tables and subsequent discussions.

Role of the Tutor in the Classroom

Interview items:

- 1) *How do you build relationships with the students in the class?*
- 2) *Can you please describe what an effective tutor is to you?*

Table 6.22

Responses Related to the ‘Role of the Tutor in the Classroom Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Role of the Tutor in the Classroom	Engages everyone through the variety of teaching methods and learning activities	20	<i>“I make sure that I engage everyone in all the activities. Whether their contribution is big or small, it doesn’t matter as long as they participate”.</i>
	Establishing connection and positive relationships	16	<i>“I need to establish that good relationship with my students. It is not just about feeding the mind. We also learn from each other. I promote collaboration and ability to work with others”.</i>
	Caters to all students learning needs and background	6	<i>“... Getting to know each student individually... Being flexible within the classroom to change what or how I am teaching if it is not working”.</i>

The tutors considered building relationships as critical and one of the most important elements in their teaching. The tutors placed emphasis on building relationships with the students by facilitating opportunities for them to connect and to get to know one another. Teaching strategies were suitably tailored for all backgrounds. Regarding the question of what an effective tutor was, they defined this by their ability and knowledge of subject matter; to engage students in the learning, being able to cater to all students with various backgrounds and learning styles and the ability to use a variety of teaching methods.

Cultural Awareness

Interview items:

- 3) In what ways do you recognise the cultural identity of your students?
- 4) In your opinion, how does this impact on their learning?

Table 6.23

Responses Related to the ‘Cultural Awareness’ Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Cultural Awareness	Respect, acceptance and understanding	17	<i>“It is never about colour. It’s about treating people with respect no matter who they are. It’s about re-enforcing the values in the classroom”.</i>
	Variety of perspectives	6	<i>“We live in a multi-cultural society. Having a diverse class is a taste of the reality out there... adds a lot to the variety of perspectives”.</i>
	Kaupapa Māori, holistic development	5	<i>“I try to be holistic in my teaching by embedding Māori approaches in my teaching”.</i>

Most of the responses affirmed that the cultural identity of the students was recognised, but fell short on the specific ways in which this was achieved. However, the tutors were unanimous in identifying respect, acceptance and understanding as a way of recognising the diversity of culture in the class. By being inclusive, tutors agreed that this enriched the dynamics in the classroom as well as added to the variety of points of view in the students’ learning. The tutors recognised that diversity of culture in the class was a reflection of the multi-cultural community at large. They realised that they need to adapt their teaching approaches in order to be inclusive. A number of the tutors discussed utilising approaches based on *Kaupapa Māori* framework in order to cater for the holistic development of the students.

Learning Environment

Interview items:

- 5) *What do you think you should do to ensure that the learning environment for your programme is conducive for learning?*
- 6) *What do you think are the things that Te Wānanga o Aotearoa must do in order to improve the learning environment?*

Table 6.24

Responses Related to the ‘Learning Environment’ Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Learning Environment	Relaxed, warm, welcoming and conducive learning environment	14	<i>“... Attempting to create a safe and secure learning environment so students feel confident to participate in all class activities”.</i>
	It’s the people and what they do that make up the learning environment	6	<i>“I try to start the class with fun activities in order to set the tone for a relaxed learning environment. I believe this is effective in engaging the students”.</i>
	Well equipped with resources	6	<i>“My classroom has adequate resources. We have a smart board, DVD player and a projector. It is suitable for my class”.</i>

Most tutors regarded the learning environment as their learning and teaching space in which students could actively participate. The tutors attempted to build a relaxed, non-threatening, and inclusive environment with emphasis on providing the opportunity for each student to learn and grow holistically. A number of the tutors mentioned that being a Māori learning environment, they try to encourage their students to participate in Māori cultural activities which include *karakia*, *waiata* and *powhiri*, “without imposing”. The physical aspects of the learning environment elicited positive and negative comments. A number of tutors mentioned the lack of teaching facilities in their classroom, (e.g. projector, computer, smart board), while others commented that their teaching space was comfortable and well-equipped with appropriate technology. Others referred to the learning environment as

“*setting the tone*” and the “*climate for learning*” in which students were engaged and interested. The attitude, behaviour, respect and cooperation between tutors and students and amongst the students themselves enabled a positive learning environment. A couple of tutors mentioned the need to upgrade the building facilities on campus.

Learning activities

Interview items:

- 7) *What do you think are the elements that must be present in the learning activities of the programme to meet the varying needs and abilities of the students in the class?*
- 8) *Imagine that I am your student for this programme; can you please tell me how you’re going to meet my expectations in this programme in order for me to complete successfully?*

Table 6.25

Responses Related to the ‘Learning Activities’ Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Learning Activities	Promotes class participation and collaboration	19	“ <i>The learning activities enable my students to work collaboratively with one another, and at the same time learning various other skills</i> ”.
	Supplement and complement learning	6	“ <i>... they engaged the students, adding depth and meaning to the topics being discussed</i> ”.
	Provision of two-way feedback	7	“ <i>... they feel free to ask any questions and tell me the difficulties that they are experiencing... I also learn from their suggestions to improve the quality of my teaching</i> ”.
	Offsite learning experience	4	“ <i>Our learning in the classroom must be completed with actual experience</i> ”.

The tutors provided similar responses to both interview questions. While a fairly equal mix of elements were considered essential to meet the different needs and abilities of the students, the dominant clusters were around a high level of class participation and group collaboration involving interactive, engaging and varied learning activities, well

supplemented with resources. The tutors also mentioned that participation and two-way feedback were essential in order to meet the expectations of the students and of the programme. A number of the tutors also indicated that providing experiential learning for the students to apply and extend their learning was critical in the learning process.

Learning Resources:

Interview questions:

- 9) *Can you please make a comment about the appropriateness of the learning resources used in your programme in terms of meeting the learning outcomes?*
- 10) *In your opinion, how do the learning resources in this programme support you in achieving the learning goals of your students?*

Table 6.26

Responses Related to the ‘Learning Resources’ Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Learning Resources	Interactive, multimedia and user friendly	18	<i>“There are a lot of resources and they do complement each other and with the learning outcomes of the unit”.</i>
	Inadequate, delayed and with errors	15	<i>“They are not updated. There is lots of referencing errors and spelling mistakes in the assignments ...”</i>
	Need to improve quality	7	<i>“It is great to have resources to support the learning, but they need to improve the quality – content wise and visuals”.</i>
	Supplements learning and teaching	8	<i>“They supplement what we discuss in the class. They have something to work on when they are at home”.</i>

Positive comments regarding the appropriateness of the learning resources indicated that the multi-media resources were interactive and user-friendly. A number of the tutors commented that the resources supplemented their teaching and that they were “awesome”, “very useful” and “helped me in my delivery”. However there was also dissatisfaction with

the appropriateness of the resources in that they were inadequate, delayed and riddled with mistakes and inaccuracies. A smaller number thought that while the resources might be appropriate, they needed to improve on quality and design. The tutors however recognised the critical value of the learning resources, not only as teaching or learning aids but also in enriching and enlivening the discussions in the classroom. Where programme prescribed resources were found to be lacking, tutors tried to develop their own to supplement their teaching.

Teaching Methods and Strategies

Interview items:

- 11) *Imagine that I am your student, what would I expect you to tell me on my first day in class?*
- 12) *What do you think are the elements that must be present in your teaching methods and strategies to meet the varying needs and abilities of your students?*

Table 6.27

Responses Related to the ‘Teaching Methods and Strategies’ Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Teaching Methods and Strategies	Use of a variety of strategies to cater to all learning styles including Māori pedagogies	14	<i>“We do a variety of activities. We do group work, with peers as well as individual work. We do writing activities, oral presentations, we play games, we watch DVD, we listen to Guest Speakers”.</i>
	Discussion about the programme expectations, learning outcomes and requirements	14	<i>“We go through an induction where I will lay down fully what you expected to learn, the outcomes of the programme, where we are at the moment, and where we will be at the end of the programme”.</i>
	Making the connection, collaboration and build relationships	13	<i>“... We introduce and find out who we are and what actually matters to come to the classroom... I engage and connect the bridge between the students and the tutor... I try my best to start building the trust”.</i>

Table 6.27 continues.

Table 6.27 continued.

	Planning and preparation	7	<i>"I made sure that I am fully prepared for each noho. It's quite an intensive class, 3 days, so I prepare a variety of activities, including guest speakers, presentations, group work, etc.".</i>
	Sense of humour	5	<i>"Making learning fun is the biggest thing of all. Moving, hands on, audio and kinaesthetic. I try to cater to all those different learning needs".</i>
	Holistic teaching strategies	5	<i>"As a kaiako (tutor), I am not only concerned with developing the abilities of my tauira (students) academically. I also tap into their development in other facets of life – socially, culturally, spiritually, and physically... I know that I play a vital role in their development as a holistic individual".</i>

Making the connection and discussing the programme expectations and requirements were the main teaching strategies on the first day of class. The tutors facilitated activities where the students were given the opportunity to get to know one another; who they were, where they came from and their ‘whakapapa’ (genealogy). This is a customary introductory practice for Māori to ‘break the ice’ and set the tone for the remainder of the programme. Most responses generally gave the use of a variety of teaching strategies to cater for all learning styles and backgrounds; and planning and preparation as part of the teaching method and strategy. Other more specific teaching methods were the focus on learning outcomes and promoting interaction and collaboration among students through the learning activities. The use of humour to make learning fun and the environment relaxed was also used as a teaching method. Telling humorous stories relevant to the topic set a light-hearted tone to the discussion. Employing holistic teaching which facilitated the development of the ‘whole person’ rather than academic or cognitive ability alone was also a preferred teaching strategy. A number of tutors mentioned the ‘scaffolding’ strategy to meet the various learning needs of the students. One of the better described strategies to meet the differences in the learning needs of the student was the application of the Māori pedagogy ‘Ako’, which connotes

reciprocity in learning and teaching. The concept of 'Ako' incorporates culturally preferred ways of learning and teaching. Included with this is the Māori concept of *tuakana* (oldest) – *teina* (youngest) reciprocal relationship of looking after and mutual learning between the older and younger students in the group. The tutor's role in this '*tuakana-teina*' relationship was as a facilitator of wisdom, a partner in learning, and not the sole source of all knowledge.

Assessment

Interview items:

- 13) *How do you assess your students? What are some of the assessment methods that you use?*
- 14) *How do you know if you have been successful in meeting the expectations of your students?*

Table 6.28
Responses Related to the 'Assessments' Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Assessments	'Achieved' and 'Yet to Achieve' method of marking	6	"Assessments are marked using the 'Achieve' and 'Yet to Achieve' grading system. This system allows another opportunity for tauira to re-submit if the requirements are not met".
	Variety of options for the assessment methods	4	"My tauira (students) can do their assessments at home at their own pace and choice of method. They can choose from essay, portfolio, presentation or project".
	Matched with the learning outcomes	6	"I make sure that the assessments are aligned with the objectives, activities and discussion in the class".
	Naturally occurring assessments (NOA)	4	"I would like to see more naturally occurring assessments".

A variety of assessment methods were used, as well as natural occurring assessments (NOA) based on observation of students' growth and development of their skills and

knowledge. A greater number responded that they relied on the ‘Achieved’ and ‘Yet to Achieve’ marking system to assess student performance. One tutor however, remarked that there was not much flexibility in the assessment method as it was already outlined in the module workbooks. Another tutor debated the merit of the ‘Achieved’ and ‘Yet to Achieve’ grading system which *Te Wānanga o Aotearoa* utilised.

It is good in a way that it does not give the student a sense of failure; that they still have the opportunity to complete whatever was not met the first time. However, it also does not give them a more realistic assessment of their performance. “*Everyone is treated at the same level; no one appears to be doing better than others, although they actually do*”.

When asked how the tutors knew if they were meeting the expectations of the students, most of the responses agreed that this was apparent when students were demonstrating their acquired skills and knowledge. Other responses were about students being able to complete the programme successfully.

Learning Outcomes

Interview items:

- 15) *How are the learning outcomes and objectives of your course communicated to the students?*
- 16) *Can you explain how you provide opportunities for your students to negotiate their learning outcomes?*

Table 6.29

Responses Related to the ‘Learning Outcomes’ Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Learning Outcomes	Discussion at the beginning of the course and every module	16	<i>“At the start of every module, I start by going through the assessments and identify what the learning outcomes are”.</i>
	Can’t be negotiated	7	<i>“When it comes to negotiating what they can and can’t do, there is no opportunity for negotiation. The assessments are set, therefore they must be met”.</i>

It was very clear from the unanimous response that the learning outcomes were communicated to the students at the beginning of the course and in every module or unit. The tutors emphasised their commitment in delivering and meeting all the learning outcomes of the course. When queried regarding the opportunities for the students to negotiate their learning outcomes, most of the responses revealed that there was no flexibility or opportunity for negotiation as the learning outcomes were set and prescribed by the *Marau* (Curriculum) document, with full expectation on tutors to deliver and achieve the outcomes. While most tutors felt constrained by this, one tutor appreciated the comprehensive nature of the *Marau* document.

Evaluation

Interview items:

17) *How do you evaluate the progress of your students to ensure that they will complete the programme successfully?*

18) *What are the performance indicators or benchmarks that you use to measure the learning progress of your students?*

Table 6.30
Responses Related to the ‘Evaluation’ Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Evaluation	Formative (informal) vs. summative (formal)	8	<i>“As they finish their assessments, ... we give them verbal feedback....we also give them their results back. So they can see them. We also give them monthly report so they know how they are progressing”.</i>
	‘Achieved’ and ‘Yet to Achieve’ feedback	6	<i>“We have the report that shows whether they ‘Achieved’ or ‘Yet to Achieve’. They always know that if they are not up to date with things then I will chase them up. I offer tutorials if they are not up there”.</i>
	Performance against learning goals	5	<i>“I keep them informed where they are at in meeting the learning outcomes... what they have completed and still needs to do including timeframes”.</i>

Tutors relied on the assessment method whether formal, informal, summative or formative to evaluate student progress. Students were kept informed of their progress, and at the same time encouraged to provide feedback to their tutor regarding any concerns that they might have in their learning. With formal assessments, the ‘Achieved’ and ‘Yet to Achieve’ results were used as performance indicators to measure learning progress. Informally, tutors occasionally sent emails to the students or had an informal chat on their progress. Additionally, performance against learning goals was also used as an indicator of student progress. This was determined through the number of modules or units of learning the students were able to successfully complete. For those teaching a *Te Reo Māori* (Māori language) course, students’ improvement in their speaking ability, pronunciation and use of correct grammar was also used as an indication of success. Graduation or successful completion of the course was considered to be one of the most important indicators.

Curriculum Design

Interview items:

19) *As a tutor of this programme, do you get the opportunity to contribute to the development of the course? How?*

20) *In your opinion, does the current design of the course allow flexibility to meet the varying needs of the students?*

Table 6.31

Responses Related to the ‘Curriculum’ Dimension

Focal Point	Comment Category	Frequency	Sample Comments
Curriculum Design	Programme design is flexible	5	<i>“Even though you get your materials and the content, the way we deliver is up to us. As long as we deliver all the content, ... we can do whatever we like in delivering it, within reasons”.</i>
	Programme design is not flexible	5	<i>“The curriculum is not flexible enough to allow me to do more of naturally occurring assessments. I feel that I have to prove myself that this is a valid way of assessing student’s progress”.</i>
	Participation in working/focus groups	4	<i>“If I hear that there is a working party, I will ask if I could be on that. There was a lot of opportunity of involvement in the programme”.</i>
	No opportunity for involvement	5	<i>“I believe there are opportunities to participate in designing the curriculum. However, we can’t all be in it. Only a few are invited to be part of it”.</i>

While some tutors were involved in and consulted regarding the design and development of the curriculum, others were not. Tutors realised that not all of them could be in the consultation group. However, they expected that their feedback, when sought, should generate some reaction or response. There were equally dissenting views on whether the course design allowed flexibility to meet the varying needs of the students. Those agreeing pointed to the flexibility in the methods of assessments while the negative responses alluded to the rigidity and inflexibility of the curriculum. One tutor commented that while most

aspects of the delivery were specified in the curriculum, she had the liberty of being innovative and creative in class to enhance student learning. Most tutors recognised that meeting the needs of the varying levels of students' abilities and preferences was part of the teaching process, but were quite undecided whether the course design allowed flexibility to meet the needs of the students.

In summary, the tutors' findings revealed that for most of the dimensions of the IFSCL, student-centred learning was clearly evident. There was consciousness among the tutors that the students were the centre of what they attempted to achieve in the classroom. In relation to 'Learning Resources', 'Assessments', 'Evaluation' and 'Curriculum Design', it was doubtful that the different levels of student learning needs were being met effectively for these dimensions.

B.2. Findings related to the concept of quality learning and teaching: Tutors

This section presents the tutors' perspectives on the concept of quality learning and teaching. The interview questions were focused on the following aspects: mode of delivery, dealing with student learning needs, personal views about quality learning and teaching, continuous quality improvement, quality indicators and principles that guide them in their teaching practice. The questions were derived from the second set of interview questions 1 to 5. The summary findings are presented in the following tables and paragraphs.

Interview item:

- 1) *Can you please describe how this programme was delivered? Do you think this is the best option for this programme and for the students?*

Table 6.32

Tutors' Responses Regarding the Mode of Delivery

Focal Point	Comment Category	Frequency	Sample Comments
Insights in regards to the mixed-mode delivery	Increase the face-to-face contact hours	5	<i>"I believe it will be great to increase the face-to-face meeting with the students so as to have better chance of improving their outcomes".</i>
	The mixed-mode delivery is great	5	<i>"... the current structure works really well as the students are able to work, study and raise a family at the same time".</i>

Whether the mixed-mode delivery was the best option, half the responses agreed that it was great for students to be able to work, study and raise a family at the same time.

According to the tutors, students appreciated that there was plenty of time allocated to study at home or to complete assessments in between the face-to-face class meetings. For the tutors themselves, there was sufficient time to prepare for the class meeting with the students. Those who could not agree that the mixed-mode was the best option were mainly critical of the ratio of the components in the mix. Some felt more face-to-face interaction was required in view of the overload in content at every meeting which affected the depth in the delivery. In addition, there were students who struggled to maintain their motivation due to the lengthy timeframe in between the face-to-face meetings.

Interview item:

- 2) *How do you deal with learning needs/issues of the students, if they have any? What kinds of extra support do you provide?*

Table 6.33

Tutors' Responses Regarding Dealing with and Supporting Student Learning

Focal Point	Comment Category	Frequency	Sample Comments
Dealing with learning needs/issues	Provide 'extra' to the students	7	<i>"... I always make sure I am available for any request for extra tutorials".</i>
	Flexibility	5	<i>"Sometimes if they have a good reason, I give them more time to finish their assessments".</i>
	Refer to Student Support Services	3	<i>"If their issue is beyond my ability to support I refer them to Student Support Services for assistance".</i>

Most of the responses mentioned “*doing extra*” for their students who may be experiencing difficulties in their studies. The ‘extra’ was in the form of tutorials and workshops to support students who needed assistance. The tutors were also always willing to adapt their teaching strategies in order to suit the students with varying levels of ability. If the issue was beyond the tutor’s ability to help, the students were referred to the Student Support Services. There was also flexibility in the assessment timeframes for students who were unable to achieve on an appropriate level of competence required for each task.

Interview item:

- 3) *What principles govern your teaching?*

Table 6.34

Tutors' Responses Regarding Principles that Govern their Teaching

Focal Point	Comment Category	Frequency	Sample Comments
Principles that govern teaching	Holistic learning and teaching	6	<i>"... to ensure that our tauira grow and develop not only academically, but as well as in other aspects of our well-being".</i>
	Students' success is paramount	6	<i>"It's about supporting the students to succeed. I will do my bit to deliver what is expected of me in terms of the requirements of the course".</i>
	Māori pedagogy/ Sharing of power/ Concept of <i>Ako</i>	4	<i>"One of my guiding principles is always reminding myself that I am not just a tutor, but a learner myself. That is the concept of <i>Ako</i>".</i>
	Philosophy of TWoA	2	<i>"... Knowing, living and making the philosophy of TWoA as my guiding principles in my teaching".</i>

The principles that governed tutors in their teaching enabled them to create optimal learning conditions for the students. The tutors referred to the underlying values which influenced their teaching practice in providing quality learning and teaching. The values were grouped in the following clusters; holistic learning and teaching; the vital importance of students' success; the Māori pedagogy including concept of *Ako* and the philosophy of *Te Wānanga o Aotearoa*. The provision of holistic educational experience was a recurring theme which included a broad range of approaches to develop the 'whole person'. The tutors believed that they shared in the responsibility of creating the conditions for students to reach their potential and be successful in achieving their learning goals. Likewise, the Māori concept of *Ako*, where learning and teaching was based on a reciprocal relationship between

tutors and students was also one of the principles that guided their teaching. In following the philosophy of *Te Wānanga o Aotearoa*, tutors also centred their teaching practice on Māori values and practices.

Interview item:

- 4) What does “quality learning and teaching” mean to you?

Table 6.35

Tutors’ Responses Regarding what Quality Learning and Teaching Means

Focal Point	Comment Category	Frequency	Sample Comments
Views regarding what quality learning and teaching means	Student success and employability	5	“... <i>it is about my tauira making great improvement in their lives because they are able to contribute positively in our society</i> ”.
	Holistic learning and teaching	4	“ <i>Quality learning and teaching is when your students are achieving.... It is not just about receiving a piece of paper, but people improving themselves holistically, becoming more confident</i> ”.
	Relevant curriculum	4	“ <i>Our programmes must enable our tauira to become a better person, learn the skills required in the workforce and perform well</i> ”.
	Concept of <i>Ako</i>	3	“ <i>It is about reciprocal learning.... It's about the concept of Ako. I also learn a lot from my students</i> ”.
	Scaffolding	3	“ <i>Whether the student is able to conceptualize what you are talking, able to comprehend, able to retain in class and complete the course</i> ”.

This question aimed at the epistemological beliefs that shaped the tutors’ teaching strategies and practices, and drew similar responses as question 3 above, suggesting the strong connection between the tutor’s understanding of quality learning and teaching with the principles that underpinned their teaching practice. Quality learning and teaching was

described in terms of student success and their employability after completing the course; the relevance of the curriculum in meeting the needs of the employment market and development of work-related skills; holistic delivery to ensure that students developed in all aspects of their well-being; practising *Mātauranga Māori* concepts including the concept of ‘*Ako*’ where a positive relationship was built based upon reciprocity between the tutor and the learner; and the strategy of scaffolding where teaching strategies were modified and adapted to ensure the gradual and progressive development of the students into higher levels of thinking.

Interview item:

- 5) *What do you believe are the important indicators or benchmarks of quality learning and teaching?*

Table 6.36
Tutors’ Responses Regarding Indicators of Quality Learning and Teaching

Focal Point	Comment Category	Frequency	Sample Comments
Indicators of quality learning and teaching	Improvement in knowledge, skills and deeper understanding	7	<i>“Students gaining knowledge, improving their confidence, demonstrating their competence, and being ready to work or aim to do further higher level studies”.</i>
	Students’ success (completion and graduation) and employability of students	10	<i>“Will they get a job after this? Can they compete with the rest of the world?”</i>
	Assessments and feedback	5	<i>“... Getting response back from the tauira. Quality teaching to me is I feel good for them myself. If I feel good about it, then I know I have delivered quality teaching”.</i>
	Holistic development	3	<i>“I try to incorporate in my strategies a variety of activities to facilitate the development of my students as a person, not just about what the course requires”.</i>
	Tutor’s knowledge and expertise on the subject matter	3	<i>“It’s about more than just delivering the course. It is not only a career nor a job. It’s more than that... I try to up skill myself by doing professional development and I apply that in my teaching”.</i>

Findings for this question further corroborated and validated the responses for questions 3 and 4 in regards to the conceptualisations of quality learning and teaching. From the tutors' perspectives, the indicators of quality learning and teaching were: demonstrated improvement in knowledge and skills and the development of deeper understanding; students' success (completion and graduation); assessments and feedback, employability of students; holistic development, tutor's knowledge and expertise on the subject matter. Holistic education was described as the development of relevant skills and knowledge, behaviour and other values in order to live and work harmoniously. Employability of graduates meant possessing the necessary competencies and skills to enable *Te Wānanga o Aotearoa* graduates to compete successfully for jobs in the employment market. Tutors' expertise in the subject matter was also considered paramount in the provision of quality learning and teaching.

Summary of tutor findings regarding the concept of quality learning and teaching

The tutors' responses highlight that quality learning and teaching is a multi-faceted concept. The findings indicated a wide array of conceptualisations, but mostly centred on student development. Interestingly, tutors did not view quality learning and teaching solely in terms of completion and graduation rates despite the pressure on the organisation to meet these benchmarks set by external agencies, but also defined it by their own expertise and their ability to provide students with holistic education, critical skills, and competencies to enhance their employability. Tutors were also cognisant of the Māori framework built from the cultural values and philosophies influencing their delivery. Their teaching methods and strategies were grounded on an indigenous framework contributing to a positive learning

environment which students from other cultures were not disconnected from. Learning and teaching approaches based on *Kaupapa Māori* and *Mātauranga Māori* were considered to be defining factors in delivering student-centric, quality educational experience to the students. How tutors perceived the concept of quality learning and teaching, the beliefs and principles they held, were reflected in their teaching practice with the aim of ensuring that each student was given the opportunity and support to succeed. There was a high degree of conformity between the tutor findings with that of the students in their individual articulation of what quality learning and teaching meant.

Conclusion to subsidiary question 2a

What are the perceptions of tutors and students regarding the quality of the learning and teaching strategies utilised in mixed-mode programmes?

When comparing the findings on the dimensions of IFSCL between the tutor and student groups, there was noteworthy conformity as well as divergence of opinions. Most of the responses to IFSCL dimensions also drew both positive and negative comments within the two groups as well as between the groups, except ‘Role of the Tutor in the Classroom’ and ‘Cultural Awareness’ which received unanimously positive responses from both groups of participants. Both groups of participants felt that these two dimensions met the principles of student-centred learning and the provision of quality learning and teaching. Both groups identified a wide array of elements in the dimensions which they considered paramount in the provision of quality educational experiences. For example, the physical characteristics and ‘human factor’ of the learning environment, the collaborative aspect and engagement of students in learning activities, the complementary interactive learning resources, the multiple options and flexibility of assessments, the use of a variety of teaching strategies suitable to

the learning preferences, discussion of learning outcomes and expectations, provision of on-going feedback, learning and teaching approaches based on *Kaupapa Māori* and *Mātauranga Māori* and the mixed-mode structure, delivery and design of the curriculum.

The data analysis on the weaknesses and challenges of the pedagogical practices revealed areas in the current teaching practices that could be improved. From both groups of participants, significant weaknesses were identified in the inadequate and poorly equipped learning environments, delayed and low quality learning resources, and lack of balance between face-to-face and self-directed learning and lack of formative and action for the results of evaluation. For the students, the lack of clarity and in-depth class discussions had resulted in the perception that the face-to-face component of the programme design was being crammed with too much information as tutors tried to deliver the programme content within the expected timeframes. The tutors also identified the lack of face-to-face interaction as a major weakness of the programme design. Positive and negative responses to the IFSCL items can be considered as enabling or detracting from the quality of learning in the mixed-mode programmes investigated in this study.

The responses to the concept of quality learning and teaching showed that the tutor's personal and professional attributes, students' approach to their learning, as well as a number of organisational factors had significant influence on the views of the quality of learning and teaching experienced. The responses also identified significant elements which could improve the quality of the student educational experience. In retrospect, a further dimension on establishing connections and building relationships could have been added to the IFSCL for a more comprehensive framework. Overall, the findings revealed that despite the differences in the opinion, negative comments, challenges and weaknesses identified, there

was a general sense that both tutors and students have high regard of the quality of learning and teaching in mixed-mode programmes.

I. Research findings for subsidiary question 2b

How do the students and tutors perceive improvements in delivery?

To determine the opinions of participants regarding how the delivery could be improved, the following questions were asked:

- a) open-ended question (Q4) in the student survey, and (Q5) in the tutor survey.

How could the current teaching practices in this programme be improved to enhance your learning/ teaching?

- b). interview question (Q6) in the student survey and (Q6) in the tutor interviews.

What are the things that you would like to see happen for the continuous quality improvement in this programme?

i. Suggestions for improvement of delivery – Students

The suggestions for improvement of the teaching practice were clustered into themes as summarised in Table 6.37.

Table 6.37

Students' Suggestions for Improvements

Focal Point	Comment Category	Frequency	Sample Comments
Suggestions for improvement of delivery	Improve tutors' performance in terms of planning and strategies	76	"I would benefit from more hands-on, interactive work with my peers".
	Improve the quality of learning and teaching resources	59	"The quality of the resources must be pre-moderated to ensure that the content relate to the learning outcomes, tasks, and activities".
	Improve assessments and feedback	51	"Our Kaiako (tutor) should give us more feedback on how we are going throughout the course, not just at the end".

Table 6.37 continues...

Table 6.37 continued.

Focal Point	Comment Category	Frequency	Sample Comments
	Need more face-to-face contact with the tutor	41	<i>"There is a huge amount of information packed in three-hours of class... There is a need for more contact hours with the tutor".</i>
	Improve learning environment	26	<i>"Match the appropriate space, size and environment to the subject of the course. Since it's Computing, all computers are there, but sometimes we do need a bit of space to do other work".</i>
	More offsite learning experience	15	<i>"This type of course needs actual learning experience which can't be obtained by sitting in the classroom alone".</i>
	Need more student support	15	<i>"The Kaiako (tutor) should show a little bit more concern to us, not just simply discussing the topic. We also want to get to know our peers, so there should be activities to allow us to work more closely together".</i>
Comments in regards to the continuous quality improvement of the programme	Improvement of services, facilities and learning tools	12	<i>"The only criticism I have is that the buildings are looking a bit tired, and sometimes the classroom is dirty".</i>
	Action plan for the results of the evaluations	10	<i>"It would be around the feedback loop. It's knowing what has been done regarding the course evaluations that we seem to constantly get".</i>
	Improving tutor's efficiency	8	<i>"There must be varieties happening all the time. Not just reading. ...having different activities, VARK activities".</i>

Question 4 of the open-ended question and question 6 of the interviews asked students what their suggestions for improvement of delivery were. The suggestions have been summarised into the following:

- Students suggested that the tutor's performance could be improved in terms of planning, delivery, and the use of a variety of teaching strategies to ensure that the learning experience is of high quality..
- Improving the quality and timeliness in the distribution of the learning and teaching resources also rated high with the students.
- The students recommended increasing the face-to-face meetings with the tutor, citing the need for more tutorial sessions, discussion and practices on the topics.

- Students felt that assessments could be improved if they were more formative and the language used was clear and specific. Feedback on the assessments could also be improved if it was more supportive, on-going, informative and clear.
- Improvements to the learning environment included the physical conditions of the classrooms, its facilities as well as creating a relaxed and friendly classroom atmosphere.
- Improvements were also suggested in the provision of student support services, including academic workshops and other pastoral care services that would support and enhance student learning.
- Having more off-site learning experiences, work placement and field engagements to apply or complement the learning in the classroom appealed to a smaller group.
- Students commented on the lack of feedback or action plan following an evaluation survey. Students were expecting positive changes as a result of the feedback they had given in the evaluations.

ii. Suggestions for improvement of delivery: Tutors

The tutors identified a number of factors they believed were needed to improve the quality of the learning and teaching experience to help students achieve better outcomes. Questions were derived from open-ended question 5 and interview question 6 from the second set of interview questions.

Table 6.38
Tutors' Suggestions for Improvements

Focal Point	Comment Category	Frequency	Sample Comments
Suggestions for improvement of delivery	Improve learning and teaching resources	22	<i>"Up to date resources not just for students but kaiako resources as well, including the facilities".</i>
	More professional development/more focus on research	22	<i>"I would appreciate more professional development opportunities,...as well as support to do research".</i>
	Improve the learning environment	12	<i>"The classroom must always be clean and tidy, with all the learning resources and technology working. The visuals and the atmosphere must be engaging".</i>
	Improve mode of delivery – efficient management of face-to-face and self-directed learning	10	<i>"I spend time with my students a lot more than the required number of hours. I believe, there is a need to increase our official face-to-face time if we really want our students to succeed".</i>
	Improve relevance and practicality curriculum and employability of students	8	<i>"We need to ensure that our tauira (student) secures a job and have learnt the necessary skills in landing to one".</i>
Comments in regards to the continuous quality improvement of the programme	Improvement of resources (physical and human resources (e.g. facilities, learning tools and more tutors' professional development)	17	<i>"Students and tutors deserve to have the best and latest learning and teaching tools and facilities. I think TWoA need to invest in building high standard classroom and facilities. The classrooms must be well equipped with all the tools to make our delivery easier – smart board, projector, and computers".</i>

Table 6.38 continues...

Table 6.38 continued.

Focal Point	Comment Category	Frequency	Sample Comments
	Relevance, practicality of curriculum and employability of graduates	7	<i>"I wondered how much thought was put in to ensure that the content of our course is comparable to what is being offered by other institutions. We need to ensure that our graduates are employable once they graduate".</i>
	Organisational factors and Strategic direction and plan	6	<i>"There is a push for higher completion and retention rate. I believe they will improve if we will have more time to meet with our students so we can expound and discuss each topic in a more in depth manner".</i>
	Catering to the diversity of student population	6	<i>"Our students come from all kinds of background with varying levels of ability, age, culture, etc. It is important that I am able to adapt my teaching to the diversity in the class".</i>

Table 6.38 highlights the tutors' suggestions for improvement.

- Most responses highlighted the need for improvement in the timeliness, accuracy, quality and functionality of the learning resources and tools, used by both tutors and students.
- More opportunities for professional development were suggested to help tutors to continuously improve their practice and keep abreast with the latest teaching strategies. In line with this, tutors also wanted more resources and support mechanisms to allow them to conduct academic research.

- The improvement to the learning environment targeted the refurbishment of the conditions of the immediate classroom as well as the facilities and buildings in general.
- A smaller number suggested that in the area of curriculum design and development, improvements could be made to ensure that the curriculum delivered was responsive, current and relevant to meet the needs of the students and society at large. The suggestion also indicated that the *Maraau* (curriculum) document should include activities based on real-life examples as well as incorporate opportunities for work experiences in the relevant industry to improve the employability of the students.
- A number of the tutors believed there was a need to increase the face-to-face contact time with the students in order to increase the opportunity for them to achieve better outcomes.

The suggestions for improvement as discussed here include not only the tutor's pedagogical practices but as well as the organisation's role in enhancing the quality of the learning and teaching experience for the students.

Conclusion to subsidiary question 2b

How do the students and tutors perceive improvement in delivery?

The findings revealed similar suggestions from tutors and students. High on the list for both groups were the improvements to the learning and teaching resources and tutors'

performance. Tutors wanted more professional development support from the organisation to improve their teaching practice. Both groups also highlighted the need for the mixed-mode programmes to increase the face-to-face component with appropriate off-site learning built into the programme design, in addition to a well-equipped and well-maintained learning environment. The areas in which the student suggestions differed from the tutors were: more formative assessments, quality and frequency of tutor feedback, action plan for the results of evaluation and the provision of additional student support services. Overall, both groups of participants felt that while the quality of learning and teaching was valued favourably, there were a number of factors that must be taken into consideration for continuous quality improvement to provide an optimum learning experience for the students.

Credibility and trustworthiness of qualitative data

Unlike quantitative research where validity and reliability of research can be measured by mathematical processes and statistical testing, the credibility of qualitative research “requires careful documentation of how the research was conducted and the associated data analysis and interpretation processes, as well as the thinking processes of the researcher” (Mertens, 2010, p. 255). Two different approaches were employed to gather the qualitative data, the survey instrument and one-on-one interviews, from two different sources (students and tutors). The interview items were derived from the major themes emerging from the survey data.

An interview guide, peer reviewed for clarity and appropriateness for the research question, was used consistently across all participants to ensure a standard format to the interviews. Piloting the interviews enabled the researcher to be familiar with the interview

techniques, such as how to conduct the interviews, probing, prompting and clarifying the responses, allowing flexibility and at the same time keeping to the focus of the interview. This encouraged confidence in the researcher during the interview, which was recorded in full.

The researcher was mindful of the potential for bias arising from insider knowledge of the organisation, misunderstanding, misrepresentation or pre-conception, and so was careful to minimise or eliminate such bias as much as possible. The use of the NVIVO qualitative data analysis software and further peer review enhanced the validity of the data analysis. For much of the research process, the researcher also conferred with colleagues on the analysis, discussion, interpretation and presentation of the findings to mitigate the bias factor. Verbatim quotes were used to contextualise the study and confirm the authenticity of the findings.

Chapter summary

This chapter examined the quality of the learning and teaching strategies in the mixed-mode programmes from the perspectives of both students and tutors. The first set of interview questions focused on determining the quality of learning and teaching against the dimensions of the Integrated Framework for Student-Centred Learning (IFSCL). The second set of interview questions focused on other elements, not part of the dimensions, but equally important in the provision of quality educational experiences for the students.

The data analysis yielded interesting similarities and differences between the tutors' and students' perceptions of the quality of learning and teaching in mixed-mode programmes.

While both groups generally rated their experiences positively, the learning and teaching practices were not without flaws. The data revealed a number of concerns to be addressed. There were perceived inadequacies in almost all the dimensions on the IFSCL except for the ‘Role of the Tutor in the Classroom’ and the ‘Cultural Awareness’ dimensions. There were recurring themes that were consistently highlighted for both the positive and negative views, indicating their impact on the provision of quality educational experiences. Some of the findings were contradictory, while the others demonstrated general concurrence particularly in the suggestions to improve the quality of the learning and teaching experience.

More importantly, the results have served to emphasise that all elements need to work in harmony for students and tutors to manage the rigours of learning and teaching. The range and diversity of the responses showed the complexity of the concept of quality learning and teaching even for the tutors themselves. What was consistent though was that both tutors and students were clear about what they wanted in a quality learning and teaching experience.

Chapter 7 provides a summary of the study and its contribution in the field. The findings of the investigation will be discussed in detail as well as its implications to practice.

CHAPTER 7

Discussion

Introduction

The discussion in this chapter connects the findings from the quantitative (survey) and qualitative (open-ended questions and interviews) investigations with the literature review and conceptual framework to elucidate the answers to the research questions. This process illuminated the findings and links them directly to the research questions. The quantitative and qualitative data are integrated in order to provide a complete picture of the findings as they relate to the research questions. Being a mixed-methods study, a combination of research methods were employed in the collection of the data and the findings were analysed using mixed worldviews, connecting the quantitative with qualitative investigation

The format to frame the discussion is as follows:

- Presentation of the integrated findings from both groups of participants, in relation to the Integrated Framework for Student-centred Learning (IFSCL), to address the research questions.
- Connection of the findings to the review of literature and theoretical concepts derived from a student-centred learning approach, conceptions of learning and teaching, mixed-mode delivery and quality of learning and teaching.
- Practical implications of the findings to learning and teaching practice.

Figure 7.1 which follows, displays the overall structure of the discussion.

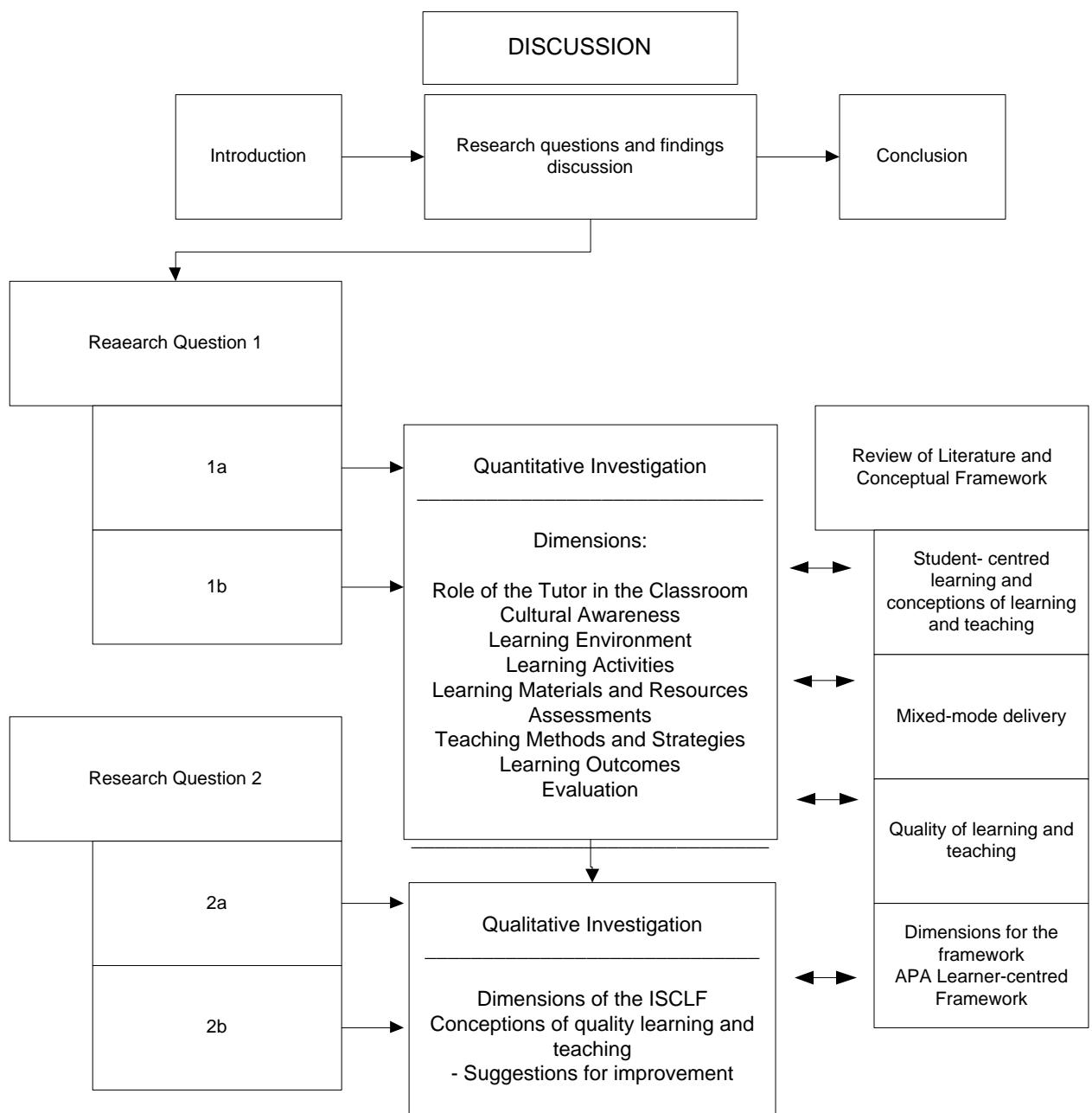


Figure 7.1. Structure of the presentation of the discussion chapter

Summary of the study

The purpose of this sequential mixed-methods research was to investigate the alignment of pedagogical practices with the principles of a student-centred learning approach from the perspective of tutors and students engaged in mixed-mode delivery at *Te Wānanga o Aotearoa*. A ten-dimension framework, the Integrated Framework for Student-Centred Learning, was developed as a lens for the investigation. The participants' views on the concept of quality learning and teaching, and their suggestions for quality improvement were also examined. Diverse approaches were employed to ensure the credibility and trustworthiness of the study; from design and process to the presentation of outcomes.

Phase one of the study was the administration of a survey instrument consisting of closed and open-ended questions, aimed at addressing the first research question and its subsidiary questions. Quantitative results were analysed providing descriptive statistics detailing the frequency of responses to each dimension. The results indicated which dimensions were considered to be the most aligned with a student-centred learning approach and which were the least aligned, although the overall ratings of each were quite high. A number of the dimensions (although appearing to be working well as indicated by the high mean result) revealed limitations of the learning and teaching practices. Two dimensions ('Role of the Tutor in the Classroom' and 'Cultural Awareness') were unanimously rated highly by both groups of participants.

Phase two of the study addressed the second research question. This focused on examining the participants' perceptions of the concept of quality learning and teaching as well as their suggestions for improvement. The qualitative investigation expanded on the

quantitative results through the use of semi-structured interviews and the open-ended survey questions. The findings of the qualitative investigation substantiated the results of the quantitative phase in that, the ‘Role of the Tutor in the Classroom’ and the ‘Cultural Awareness’ dimensions drew very similar perceptions from both groups of participants. The findings also highlighted effective approaches and strategies identified by both groups of participants in order to enhance the quality of the learning and teaching experience and outcomes for the students. The suggestions are presented as propositions in the next chapter.

Discussion of findings for research question 1

A review of the extant student-centred literature presented a plethora of models on learning strategies and processes (referred to by different names; such as experiential, inquiry, active, situated and collaborative learning) to enhance the quality of the educational experience. Despite the numerous documented attempts at implementing student-centred learning in the classroom, the practical application of the concept remains an unsuccessful reality for many. This could be due to the confusing definitions and articulations of student-centred learning, an apparent reluctance to implement new strategies which deviate from well-established practices or simply the reality of implementation. Designing and creating a student-centred learning environment appears to be fraught with flaws and challenges.

The increasingly wide use of technology and digital learning resources add to the flexibility of student-centred learning approach and are not intended to replace the traditional student-tutor face-to-face instruction but to provide further assurance of quality learning and teaching. There are various options available on ‘how’, ‘where’ and ‘when’ learning and teaching can happen; all depending on the students’ preferences. Offering programmes in a

mixed-mode delivery is aimed at improving the quality of education in order to meet the changing and complex needs of the students. However, regardless of the infusion of technology and the offering of courses with mixed-mode options, educational quality assurance is complex and difficult to define. Questions have been raised regarding the impact on the quality of the teaching practice by implementing student-centred learning principles in mixed-mode programmes. The concern is due to the loss or diminishing nature of various factors (e.g. face-to-face interaction, visual communication, immediate feedback) which have been the cornerstones of traditional face-to-face delivery. There are also other risks and challenges associated with mixed-mode delivery (e.g. costs, hardware and software updates, designing the learning environment, developing learning resources, technology ‘know-how’ of both tutors and students, and inefficient use of self-directed learning, among others).

In this chapter, the discussions of the findings from the survey and interviews have been drawn together in their entirety. This process provided for conclusions and recommendations about this study in general. Some of the themes have not been prevalent in the literature; therefore the findings of this study will contribute to the body of knowledge regarding learning and teaching in general and in particular, student-centred learning in relation to mixed-mode delivery. Unanticipated themes emerged as a result of this study. Consequently, additional literature was investigated in order to complement the findings. The research findings for research questions 1 (including both subsidiary questions) are discussed below.

Major research question 1

How are the current learning and teaching practices utilised in mixed-mode delivery consistent with the principles of a student-centred learning approach at Te Wānanga o Aotearoa?

Subsidiary questions:

- a) *Which aspects of student-centred learning have the greatest implication on the quality of learning and teaching activities?*
- b) *How do the tutors' perceptions of the current learning and teaching practices compare with those of students?*

The APA Learner-Centred Domains and the dimensions of the IFSCL

To interpret the findings of this study, an in-depth analysis of the data was carried out.

As discussed in Chapter 3 (Conceptual Framework) the dimensions of the IFSCL were clustered according to the APA Learner-Centred Domains. The integration of IFSCL with the APA Learner-Centred Domains in teaching serves as an embodiment of student-centred principles and practices. The significant findings from the survey and interviews and their implications for practice, are discussed below, under the sub-headings of the APA domains.

Cognitive and Meta-cognitive Domains

'Curriculum Design', 'Learning Outcomes' and 'Evaluation' were the IFSCL dimensions pertaining to the APA Cognitive and Meta-cognitive Domains. Students were provided with experiences to scaffold their development of knowledge and skills into higher levels of thinking and deeper understanding as prescribed by the design of the curriculum and

learning outcomes. The evaluation process allowed students to reflect upon and assess their progress towards their learning goals.

Curriculum Design

‘Curriculum Design’ focuses on the sound match between programme philosophy, course objectives, learning outcomes, assessments, learning timeframe, delivery and cost/revenue elements. It is the interlocking of these components that enables the delivery of a quality educational experience.

In the survey findings, both tutors and students recorded most disagreement or uncertainty with ‘Curriculum Design’ as it had the lowest mean ranking, suggesting a lack of alignment with a student-centred learning approach. When probed further in the interviews, there was a unanimous view from the students that they thought it inappropriate for them to be involved in the consultation and design of curriculum, due to their lack of knowledge in subject area. From a student-centred point of view, students and tutors are very much engaged in curriculum design and development (see Chapter 3: *Curriculum Design*, pp. 114-115). Gibbs (1992) and Trigwell and Prosser (1999b) postulated that providing the opportunity for students to contribute to the development of curriculum design supports the development of deep learning.

The design of the curriculum also appeared to have fallen short of students’ and tutors’ expectations as it focused on what needed to be delivered rather than what the students could do. According to the tutors’ feedback, the development, design and/or revision of the course curriculum was driven by the *Te Wānanga O Aotearoa’s Marautanga* (Academic)

Department. The department was responsible for the development of curriculum for every programme, a common practice noted by Shortt (2002), where much of the curriculum design was managed and controlled by tutors or pre-determined by curriculum developers. In this study, tutors revealed that they had little control of the curriculum design, despite the consultation process at *Te Wānanga o Aotearoa*, which is meant to include the community, *iwi* (tribe), industry, students, tutors and subject experts. Curriculum development and design has been regulated and centralised to ensure a standard quality across all programmes.

The findings also suggested that not all tutor participants favoured the specificity and prescription of the *Maraau* (Curriculum document) as it did not allow innovation and flexibility. As advocated by Kember et al. (2010 p. 49), there must be “a balance between providing students with depth of knowledge and allowing freedom of choice to maximise interest”. Tutor participants commented on a lack of curriculum relevance to the realities of daily life and the workplace. Students also felt that this relevance was not explicit in the learning process. The Curriculum Design, on the basis of negotiation and its relevance, is contrary to a student-centred curriculum framework. This view also differs from the views of Nygaard and Holthan (2008) who asserted that the design of the curriculum should focus more on the facilitation of the learning process including the pedagogical activities as well as continuous assessment and evaluation of student progress and not just on academic content. This is supported by Arnold (2010) who indicated that it is the “acquisition of skills rather than the accumulation formation” (p. 5) which is paramount when planning and developing curriculum. Kember et al. (2010) emphasised the importance of curriculum, saying that “whether or not students were interested in a subject was dependent upon the curriculum design, the nature of teaching and the way in which content was taught” (p. 48). These facets are critical as they have impact upon students’ motivation to learn.

Flexibility of the curriculum design was experienced in different ways by students.

Some students expressed satisfaction with the flexibility in submitting assessments and attending tutorials for classes that they had missed. Others identified the opportunity of being able to work and study at the same time as a benefit. This meant that at other times when students were not in the class, they could continue their learning with support from online facilities and multimedia learning resources. This practice is aimed at encouraging lifelong learning in adults who are continually enhancing their minds and learning new skills (Eisen, 2005). On the contrary, a number of tutor participants indicated that there was not a lot of flexibility in the curriculum as everything was pre-determined and prescribed by the *Maraau* document which was developed by another department and group of staff.

The inclusion of a substantive self-directed learning component in the curriculum was perceived as both enabling and inhibiting in the learning process. A number of students and tutors indicated that the self-directed component of the course allowed students to take responsibility and accountability for their learning. Self-directed learning allowed students to learn on their own at their own pace, place and time. It enabled those who were working full time and raising a family to go back to tertiary learning and up-skill themselves. This is consistent with the theories of Adult Learning where mature students are considered likely to be independent, autonomous and self-directed (see Chapter 2: *Adult Learning, Andragogy, Self-directed Learning*, pp. 67-86). However, there were also a number of students and tutors who felt that there was too much self-directed learning in the course, and this was perceived as a deterrent to quality learning.

In order to have a student-centred curriculum design framework, there is a need to ensure that all stakeholders support and focus on the growth and development of learners. In this study, the findings indicated that tutors had very little leeway to tailor the curriculum to each individual student as they had to work with a narrowly prescribed curriculum.

Learning Outcomes

Learning outcomes “clarify the focus of the course”, “provide a framework for the structure of the course”, and “communicate clear expectations of course content and performance to the students” (Lightner & Benander, 2010, p.34). The learning outcomes state what students will learn and what they will be able to do at the end of the programme. This includes key skills, knowledge of the subject and other competencies set out in the curriculum (see Chapter 3: *Learning Outcomes*, p.115-116). The participants reported that the learning outcomes of the programme were discussed at the beginning of the course. This gave them an understanding of the expectations of the course as well as the timeframes for submitting assessments and other requirements. Aligning the learning outcomes with the learning activities and assessments provided students with an appreciation of the relevance of the learning to the assessment activities. Students commented that understanding the programme expectations also enabled them to determine whether their own expectations would be met (in terms of the knowledge and skills that they would develop on the course).

Although the majority of the participants were largely positive regarding the ‘Learning Outcomes’ dimension, there were particular items that scored low in the survey and interviews. Specifically, the items ‘*providing opportunity to the students to negotiate their learning outcomes of the topics within the curriculum*’ and “*the students and tutor enter into a learning contract based on students’ own interests and abilities to succeed*” scored poorly. The results suggested that learning outcomes were non-negotiable, a contradiction to the principle of a student-centred learning approach (see Chapter 3: *Learning Outcomes* p. 115-116) and Constructivism (see Chapter 2: *Constructivism*, pp. 58-64). It also defies Harvey and Green’s (1993) conceptualisations of quality which view the ability of the students to select and have the options to manage and control their own learning as a way of

developing empowerment. This understanding was also shared by Gibbs (1992b) and indicated that one strategy in encouraging a deep approach is “involving students in the design of the assessments, choice of assessment task and negotiation criteria...” (p. 17).

Similarly, other researchers have discussed learner empowerment through negotiation, involvement and consultation (e.g. Doyle, 2008; Gibbs, 1992a; Kiley, et al., 2000; Leach, 2003; McMahon & O'Neill, 2005).

Both groups of participants indicated that there was relatively limited flexibility in terms of being able to negotiate learning based on students' preferences and choices. Students thought it was inappropriate for them to negotiate their learning as they believed ‘the tutor knows best’. Although the aim to empower students by providing them with the opportunity to negotiate learning outcomes was one aspect of student-centred learning, the student participants were actually not keen to do so. While tutors afforded students some flexibility in terms of providing various assessment approaches to choose from, the learning outcomes were pre-determined. This is in contradiction with the principle of a student-centred learning approach which asserts that control over students' learning should be shared with the students themselves (Doyle, 2008; Gibbs, 1992b; Kiley, et al., 2000; Leach, 2003; McMahon & O'Neill, 2005) allowing them to be more active participants in the learning process. The ‘tutor knows best’ position is in stark contrast with the principles of a student-centred learning approach where students negotiate with their tutor regarding what they can do based on their own abilities and interest .

The findings also revealed that tutors and students did not enter into a formal learning contract where students shared in the responsibility of determining the ‘what’ and ‘how’ of their learning processes (including assessments). This absence of learning contracts was not

surprising as it was not a common practice students were accustomed to. In most cases, students were often instructed by the expert tutor on the requirements of the course. This is contrary to Knowles et al. (Knowles, et al., 1990) stipulation that the use of learning contracts mutually formulated by both tutor and students facilitates the enhancement of learning. The students also believed that the teaching methods utilised were standard across all students, not tailored to individual needs. This was also confirmed by a number of tutors who expressed difficulty with designing a learning plan for each individual student. They felt obliged to deliver the prescribed course content, but allowed flexibility in terms of allowing extensions for assessments if there were valid reasons. Studies such as that of Shortt (2002) and Weimer (2002) revealed that relinquishing some of the control and applying more flexibility in terms of designing class sessions in order to meet individual students' specific needs resulted in improved outcomes.

In this study, the learning outcomes were prescriptive as indicated by the findings. They not only included what was to be delivered, but also specified what students will be able to do in order to complete successfully. The weakness which lies in a lack of opportunity to negotiate what students can learn was offset through flexibility in other aspects of their learning, e.g. flexibility in the submission of assessments. Regardless, in order to remain student-centred, the focus of the learning outcomes must integrate all the necessary elements in order to provide a quality, meaningful experience for students.

Evaluation

Evaluation, formal or informal, is recognised and accepted as part of the educational experience. It has been described as "... an integral part of good professional practice" where

“expertise in teaching... depends on the regular monitoring of teaching performance to pinpoint achievements and strengths, and to identify areas where there is scope for improvement” (Hounsell, 2003, p.373). More broadly, this process enables a two-way feedback wherein both tutors and students are able to make judgments on the quality of the educational experience. Evaluation is one way of measuring student satisfaction of their learning (Bramming, 2007) and empowering students (Harvey & Green, 1993). Soliciting feedback from students is fundamental to helping tutors improve and make changes in their teaching practice in order to enhance the learning experience of students (Beran & Rokosh, 2009; Gibbs, 1992b; Jaques, Gibbs, & Rust, 1993; Spiller & Bruce-Ferguson, 2011).

The findings from this study showed that this dimension was not favourably ranked and drew conflicting views from the participants. The student findings suggested that in many cases a formal regular review of student performance against their learning goals either by themselves, with peers or the tutor was not happening. Formative evaluation of student learning is important in order to have an understanding of student progress and to identify any learning issues. (See Chapter 3: *Evaluation*, p. 116-117). Findings indicated that students preferred to have formative evaluation as opposed to summative evaluation. Hounsell (2003) points out that embarking upon evaluation at the end of the course is not favourable to tutors or students as it is no longer productive by that point. Only one student revealed that she monitored her own progress against her learning goals. Self-evaluation enables students to develop self-awareness and judge the quality of their work, and with that knowledge they are able to self-correct or seek out further support for improvement (Doyle, 2008). This can be done according to a mutually agreed standards and criteria in order to reflect the improvement in their learning. On the contrary, tutors believed that the provision of feedback to their students was adequate and worked well. A number of the tutors reported that they

attempted to engage and involve students in conducting evaluation of their own progress in the learning process.

Other findings from the participants challenged the usefulness and relevance of evaluation as it was seen as form of tokenism with no feedback loop. Students indicated that the feedback collected was not appropriately addressed. Although they were given the opportunity to voice their views and opinions through evaluation surveys, they felt that the student voice had little impact in improving the quality of learning and teaching. Participants mentioned that the evaluation was perfunctory and there was an apparent lack of meaningful and thoughtful consideration accorded to their feedback. When conducting evaluation, according to Hounsell (2003), “it must be made clear as to the focus and purpose for feedback, stating how, when and from whom it will be collected” (p. 375). Hounsell (2003) adds that there is no ideal way of acting on or providing a response to feedback as sometimes the feedback has other implications that may need further investigation before a response could be made.

Evaluation is an important process in order to continually improve the teaching approaches and learning activities. A meaningful evaluation must be completed in order to optimise the quality of the learning experience of the students. There should be on-going evaluation of student performance against certain standards which may include achievement of learning new knowledge and skills, as well as improving the quality of their work or even personal development. There is also a need for more responsive action in addressing the results of evaluation.

Motivational and Affective Domains

The ‘Learning Resources’, ‘Role of the Tutor in the Classroom’ and ‘Cultural Awareness’ dimensions are characterised under the APA Motivational and Affective Domains which influence students’ motivation to learn. Likewise, recognition of cultural identity and heredity by being inclusive in teaching practices also influences students’ motivation to learn. The role of the tutor in enhancing student learning is not limited to cognitive development of students but also the non-intellectual and affective aspects of student development.

Cultural Awareness

To be an effective cross-cultural tutor, the critical role that culture plays in the learning and teaching process must be acknowledged, understood and empathised with (DiMaggio, 1982, 1997; Guy, 1999; Kennedy, 2013; Lang & Evans, 2006; Nguyen, Elliott, Terlouw, & Pilot, 2009; Sheets, 2005, 2009). *Te Wānanga o Aotearoa* is an indigenous, Māori organisation with a culturally diverse student population. The cultural awareness dimension received the second highest favourable perception in both the quantitative and qualitative findings. This indicates that tutors display appropriate levels of cultural proficiency in their teaching approaches. Likewise, the findings indicated that students who came from various cultural and ethnic backgrounds were contented with their experiences in a Māori learning environment. The survey findings were corroborated with the responses from the participants’ interview. The findings also agreed with Sheets’ Diversity Pedagogy Theory (DPT) (2005, 2009). “The Diversity Pedagogy Theory is a set of principles that point out the natural and inseparable connection between culture and cognition” (Sheets, 2009, p.1). This also concurs with the views of Di Maggio (1997), Lang and Evans (2006) and

Bourdieu (1977; 1990) which indicate that recognising the cultural identity of students has a positive impact in their outcomes (See Chapter 4: *Adding “Cultural Awareness” dimension*, pp. 167-169).

The emergent themes from the qualitative findings were: a) acknowledging diversity by being inclusive; b) respect, acceptance and ‘sense of belonging’; c) based on Māori pedagogy; and d) holistic learning and teaching strategies. A range of strategies were utilised to acknowledge diversity within classes. This diversity included different background, culture and ethnicity, age range, social and personal circumstances, experience and levels of knowledge, abilities and learning needs. The sheer range of backgrounds, experience and levels of learning were of concern to some students who felt that their learning development was compromised. However, most students commented positively on the pedagogical strategies employed by the tutors as culturally responsive, proficient and showed they valued the cultural identity of the students. Tutors worked hard to engage students positively and consequently, students felt accepted and valued regardless of their background. Overall there was affirmation of multiculturalism in the classroom through mutual respect and understanding.

In addition, the participants reported that diverse approaches and perspectives were employed in the classroom. Students’ distinctiveness in terms of their culture was considered a resource, enriching the class discussions with multiple worldviews. The link between recognition of cultural identity with educational outcomes is supported by a number of authors (See Chapter 5: *Adding the ‘Cultural Awareness’ dimension*: pp. 184-189). McAnany (2009) argued that the integration of global concepts was required when teaching in order to connect with much broader cross-cultural and wider world views. Tutors likewise commented

on the benefits of embracing and encouraging diverse perspectives and views. This positively reinforces cultural identity which in turn reverberates positively in the learning environment. Simple integration of a number of differing cultural perspectives does not really guarantee cultural proficiency. This allows for the opportunity and realisation that though cultural contexts and expectations may be different, there are also similarities between them. With this, McAnany's (2009) argument was not applicable at *Te Wānanga o Aotearoa* as he postulated that the apparent connection between enhanced learning and multicultural perspectives remains to be a considerable difficulty in the learning and teaching environment. This happens when there is a perceived lack of appreciation of multiculturalism in the classroom, which was not the case at *Te Wānanga o Aotearoa*.

A ‘sense of belonging’ to a community and learning environment where there was acceptance, *whanau* atmosphere and familiarity was also experienced by the student participants. Programme structure and curriculum design allowed for students to be together throughout the entirety of their course. Thus, a positive relationship was built among students. A ‘sense of belonging’ was established when students were required to work together and cooperate in group work or projects. According to Kember et al. (2010), “sense of belonging was a social form which boosted motivation when there were strong interpersonal links between students in a class” (p. 43). This finding was also shared by Wisely (2009) and Marshall et al. (2008) where a ‘sense of belonging’ was considered to be one of the factors for student retention and the set-up of links and connections amongst a community of learners. Both the development of a ‘sense of belonging’ and being inclusive of all cultures were identified as key components for creating a holistic and student-centred learning environment by Marshall, Baldwin and Peach (2008), McCombs and Miller (2007) and Kember et al. (2010).

In their view to be holistic in their teaching approaches, the tutors discussed embedding Māori pedagogy, *Tikanga Māori* and *Mātauranga Māori* in their practices (See Chapter 4: *Maori pedagogies*, pp. 169-172). This was appreciated by the students, both Māori and non-Māori. For non-Māori, they enjoyed having a better understanding of Māori culture as well as participating in Māori traditional practices. They also found the Māori teaching approaches to be “*positively different*” and “*more effective*” for student learning compared to learning in the mainstream. There is “*no feeling of having to compete or outdo one another*”. There is a *whānau* atmosphere which makes students feel supported in their learning. For Māori students, they “*felt great to be in an environment where my own cultural practices are embedded in everything that we do*”. There are a number of Māori authors who have promoted indigenous ways of knowing, and education derived from a Māori cultural framework in a Māori setting in order for students to achieve successfully (Bishop, 2003; Edwards & Hewitson, 2008; J. Lee, 2004; Pihamo, et al., 2004). These authors lament that mainstream and Western educational systems lacked consideration for the integration of Māori values and philosophies in the learning environment (See Chapter 4: *Maori pedagogies*, pp. 169-172).

Valuing diversity by being inclusive both in the learning environment and in the teaching approach enhances the educational experience of students. This expands worldviews and fosters the development of life skills and competencies to function effectively in the working environment and in society in general. In addition, recognition of the influence of culture in student growth and development has implications for the quality of the educational experience of students as well as their cognitive development.

Learning Resources

Learning resources are considered to be one of the fundamental means of engaging the learners. They are provided to students to support learning and help them achieve their learning goals. Resources are the primary medium for delivering content and thereby supporting students in achieving the expectations of the programme (See Chapter 3: *Learning Resources*, p. 117-118). Leach (2000) discussed that learning resources are critical in supporting students to work on their own, or in collaboration with others during self-directed learning. The quality, usefulness and presentation of resources are always open to scrutiny by students and tutors. According to Isman (2011), educational materials must be related to the goals and objectives of the course in order for students to construct new knowledge. In this study, various multimedia learning resources were used in the self-directed learning components of the course. Multimedia learning resources “can add clarity through multiple views”, “provide depth through additional information channels and resources” and “add richness and meaning” (Shank, 2008, p.1).

The participants generally responded positively to this dimension in the quantitative results. Findings indicated that most of the resources included information and activities which were tailored to the content of the course and that they supplemented the delivery of the programme. These tools enhanced the student-centredness of the learning process (Isman, 2011; Neo, et al., 2010). Participants confirmed that the learning resources supported students during their self-directed learning, which was a component of all mixed-mode programmes. Consequently, students were able to take more responsibility for their own learning. Their interaction with the learning resources motivated and supported them in their achievement of the course requirements. According to the participants, these resources (which came in multi-media form) made what at first seemed to be a dull and boring subject more exciting. The

resources suited the varying needs of students with differing learning styles as they were visual, audio, and with graphics and animation. Students reported that they could play a DVD as much as they liked in order to gain a deeper understanding of the topic. This is consistent with Shank's (2008) identification of the potentials of using multimedia learning resources which appealed to the diverse learning preferences, enabling users to learn more easily. However, there have been arguments regarding the degree to which the use of technology and multimedia resources contributes to deeper understanding. The debate is inconclusive because of the complexity of measuring the effectiveness of the learning resources (Jenkinson, 2009). Indeed, one participant mentioned that the impact of the resources to student success in learning was still dependent on how well the resources are utilised.

Contrary to the positive quantitative findings, the qualitative results revealed some concerns in the adequacy, timeliness and quality of the learning resources. A few students commented that they found some of the learning materials ineffective due to a lack of alignment with what they were doing in the classroom, and even that some materials were not needed for their course. A number of students mentioned errors, design, context issues and inconsistencies in the learning resources. In addition, the need to have updated and functioning tools including computer and smart boards were also mentioned as one of the weaknesses of the learning resources. Shank (2008) cautioned that if the use of multimedia learning resources was not carefully planned, there can be information overload, complexity and frustration, and they can ultimately detract students from learning rather than offering support. Likewise, the emphasis must be on the usefulness of multimedia resources in improving pedagogy and in meeting successful outcomes (Knowlton, 2000).

Learning resources can present opportunities for enhancing student learning; but they can also become a deterrent if not used and applied effectively. For resources to be effective in augmenting student learning, they need to be carefully designed and produced at a high level. They also need to be meaningfully interwoven and integrated into the delivery of the requirements of the course.

Developmental and Social Domain

The ‘Learning Environment’ and ‘Learning Activities’ dimensions are related to the Developmental and Social Domains, where students’ holistic development in all aspects of their well-being is influenced by the interaction and relationships they make with others. The dimensions influence learning positively when students are given the opportunity to interact and collaborate with others. Their growth and development are facilitated through their interpersonal communication with others.

Learning Environment

The design and creation of an authentic learning environment is critical to the implementation of a student-centred learning approach (Herrington & Herrington, 2006). A learning environment that is based on learner-centred principles meets the learning needs of the students and facilitates positive relationships in the classroom. “This is in contrast with a teacher-directed learning environment where students are considered passive receivers of knowledge” (Cornelius-White & Harbaugh, 2010, p. 70). The quantitative and qualitative findings indicated that both tutor and student participants considered the environment to be positive and effective in facilitating and supporting learning. The combination of physical characteristics, ambience, positive interaction and cultural inclusivity between tutors and peers resonated frequently in the findings. This is consistent with one of the principles of

Andragogy where Knowles considered ‘setting the climate’, physical and psychological, as pivotal in enhancing the learning process (Leach, 2003). In a wider context, the learning environment is also influenced by the curriculum design, choice of resources and activities as well as assessments, which all contribute to the holistic development of the students (Gonczi, 2004; Guest, 2005).

Both groups of participants described the physical characteristics of an optimal learning environment. It must be comfortable, well-resourced, equipped with modern technology and other learning resources and must also be suitable for the content delivered. There was strong satisfaction amongst the students and tutors with the Māori learning environment at *Te Wānanga o Aotearoa* where *Tikanga Māori* and *Kaupapa Māori* pervade both the teaching approaches and physical surroundings. The physical characteristics of the learning environment as described by the participants are in congruence with the conclusion made by Herrington and Herrington (2006) that an authentic student-centred learning environment “needs to encompass a physical environment which reflects how the knowledge will be used and a large number of resources to enable sustained examination from different perspectives” (p. 4). Dorman, Aldridge and Fraser (2006) and Leach (2003) also regarded that the physical setting such as the ambience, tone and climate improved learning.

Along with the physical characteristics of the learning environment was the human dimension where the participants themselves and their activities were also considered fundamental to quality learning. The provision of a relaxed, fun, non-threatening and collaborative classroom atmosphere supported learning. Students also described a supportive learning environment, with peers offering support that was akin to the Māori concepts of *whanaungatanga* (family, kinship), *aroha* (respect, caring, loving) and *manaakitanga*

(nurturing and caring for one another). These concepts also represent principles of collective responsibility and accountability for the mutual benefit of the community (Bishop, 2003; Bishop & Glynn, 1999). When applied to the learning and teaching context, it implies the preference for learning as a collective, rather than being individualistic. For a number of students, this gave them a feeling of safety and security. A student-centred learning environment is often described as one that is focused on creating interpersonal relationships and a positive classroom climate where there is mutual respect, sense of belonging and appreciation of the uniqueness of individual students (McCombs & Miller, 2007; Nordgren, 2006; Zualkernan, 2006). Forming positive relationships with peers and tutors fosters the building of a community of learners. For some students being in a learning environment where constructive support was made available either from their peers or tutor reinforced self-confidence and the development of a ‘sense of belonging’. Likewise, the tutor demonstrating a caring nature and concern for students’ well-being was also highly valued by the students. These findings mirrored the views of a number of authors on student-entered learning environment (See Chapter 3: *Learning Environment*, p. 120-121).

Various activities and resources support students to achieve learning outcomes, acquire new skills and gain knowledge (Guest 2005; Herrington and Herrington 2006). The participants acknowledged that *Te Wānanga o Aotearoa* provided a conducive learning environment for second chance, mature, returning adult students to restore or reconstruct from their unsatisfactory previous experience in the mainstream education. This is in contradiction with the Instruction Paradigm where the classroom environment is “competitive and individualistic” and reflects the view that “life is a ‘win-lose’ proposition” (Barr and Tagg 1995, p.23). However, this is in harmony with the Learning Paradigm where “learning

environments while challenging are win-win environments that are cooperative, collaborative and supportive" (Barr and Tagg 1995, p.23).

The provision of a student-centred learning environment facilitates a quality educational experience. The organisation of the whole setting, which includes the positive engagement and participation of students in various activities along with the physical environment contribute significantly to student growth and development. Creating a constructive learning environment that supports and fosters group collaboration motivates students to engage more meaningfully in their learning.

Learning Activities

The provision of a range of interactive learning activities must be connected with the learning outcomes and objectives of the course while at the same time taking into consideration the learning preferences of students. These learning activities are in most cases supported by interactive multimedia resources that enable students to work by themselves or with others (See Chapter 3: *Learning Activities*, pp. 121-122). Participants reported that interactive learning activities other than the conventional and traditional lectures enriched the discussion, and enabled students to meet the requirements of the course as well as develop their skills and knowledge. In a student-centred environment, the learning activities should be engaging and challenging and designed to motivate and encourage students to participate and work in collaboration with others (Challis, 2006; Cornelius-White & Harbaugh, 2010; Herrington & Herrington, 2006; C. Rogers, 1965). Variety, interactivity, practicality and relevance to real-life were some of the positive factors identified by both tutors and students. Tutors integrated resources in the learning activities which promoted collaboration and interaction among the students. This supports the literature on active learning and on the

significance of employing a variety of activities in both developing the knowledge and skills of students, and in completing the requirements of the course (e.g. Cannon & Newble, 2000b; DeWitt, 2010; Kiley, et al., 2000; Leong, 2005; Lynch & Polich, 2009).

Comments from both groups of participants indicated that the learning activities promoted collaboration and interaction among students. Earlier research by Piaget (1972) and Vygotsky (1978) and more current findings including Nygaard and Holtham (2008), argue that learning is both an individual and social process, as well as contextual. The interaction and fostering of positive relationships with tutors and students through the sharing of their experiences play a vital role in the quality of learning. Students appreciated the various group activities they were engaged in, which allowed for the development of their skills and knowledge. These were in accordance with a learner-centred environment where “collaboration is the norm” (Doyle, 2008, p. xv), and where students were encouraged to be self-managing and to make their own choices for their own learning while at the same time interacting with others. Learners taking full responsibility for their learning and having a quality positive relationship with and among their peers is in congruence with the main principles of student-centred learning as discussed by a number of authors (e.g. Brandes & Ginnis, 1986; Kauchak, et al., 2005; C. Rogers, 1965).

The ability to collaborate in a group project or a problem solving activity enables students to gain multiple perspectives, think critically and construct knowledge socially (Challis, 2006; Herrington & Herrington, 2006; C. Rogers, 1965). “The social nature of learning was explained by the theory of humanism and Constructivism where the goal is to develop the skills and abilities for people to participate and contribute to collective goals” (Cornelius-White & Harbaugh, 2010, p. 19) while learning from each other (Brandes &

Ginnis, 1986; C. Rogers, 1965, 1983). Learning the perspectives of others and supplementing their own, strengthens and enriches students' world view. This can be achieved if the activities provided are wide ranging and cover all aspects of the students' learning dispositions. This is also aligned with a number of Māori pedagogies including *Ako*, *tuakana-teina*, *whanaungatanga*, *whanau* and *Te Whare Tapa wha* (See Chapter 4: *Māori pedagogies*, pp. 168-172). These metaphors are Māori pedagogical approaches which are considered to be culturally appropriate and relevant.

Both groups of participants indicated that the use of a variety of learning activities designed to meet the various learning styles provided a rich and varied learning experience. One tutor suggested that such exposure could potentially develop and expand students' learning preferences to the other styles as well. A number of authors highlighted the relationship between the provision of a variety of learning activities and improved learner achievement (e.g. Entwistle, 1997; Entwistle & Entwistle, 1997; Entwistle & Ramsden, 1983; Kiley, et al., 2000). When students engage in a wide range of learning and teaching activities, the learner is an active participant in their learning process, synthesizing, making connections and constructing new knowledge through scaffolding (DeWitt, 2010; Isman, 2011; Lightner & Benander, 2010). The preceding discussions that connected mainstream and Western viewpoints with the findings of the study are very much consistent with a number of indigenous and Māori pedagogical approaches as discussed in Chapter 4. These are the Māori pedagogies and approaches which are considered to be culturally relevant and responsive to the Māori ways of learning which aim to develop the 'whole' person.

This dimension was considered to be student-centred in that it provided collaborative experiences for students which in turn supported their ability to be involved meaningfully in

their own learning. The repertoire of activities provided were aimed at developing the ‘whole-person’, including life and work skills as well as competencies needed for future professional endeavours.

Individual Difference Domain

The ‘Role of the Tutor in the Classroom’, ‘Teaching Methods and Strategies’ and ‘Assessments’ refer to the approaches of the tutor in setting the appropriate learning environment for the engagement of students as well as measuring their individual progress in order to meet their learning goals. Students learn more effectively if their uniqueness and individual differences, background, as well as strengths and weaknesses are taken into consideration in the learning process.

Role of the Tutor in the Classroom

The ‘Role of the Tutor in the Classroom’ is primarily to engage students in their learning. Tutors are expected to be well equipped with competencies, attributes and experiences to undertake this task. Various research (e.g. Hansen & Stephens, 2000; McCombs & Whisler, 1997; S. Merriam & Caffarella, 1999; 2007; C. Rogers, 1969) has highlighted the important role that tutors (or teachers) play while others question the teacher’s role especially with the advent of technology, as well as the proliferation of blended or mixed-mode deliveries where the face-to-face interaction with the tutor is reduced (See Chapter 3: *The Role of the Tutor in the Classroom*, pp. 123-124).

The ‘Role of the Tutor in the Classroom’ was the highest rated dimension from the survey and interview findings. It is perhaps not surprising that there was unanimous agreement amongst tutors to all the descriptors of this dimension, overwhelmingly

demonstrating their confidence in their role. The results indicated that both groups felt that it was the tutor who was responsible for fostering and building high quality learning experiences that motivate, engage and challenge students to achieve their learning goals.

The dimension items rated highly by both tutors and students were the personal qualities and professional competence of the tutor. Not only did students expect tutors to be knowledgeable and a subject expert, they also expected them to have a warm and caring personality. As identified by Rogers (1965, 1983), McCombs and Miller (2007) and Arnold (2010), effective tutors must possess professional attributes or pedagogical knowledge of the subject matter as well as personal qualities. From the interview findings, the professional competence and experience of the tutor was evident in the: a) facilitating of student learning through active engagement and use of a variety of teaching approaches; and b) establishing connections and fostering relationships both amongst students and between students and tutor. The personal qualities of the tutors that students valued highly were: a) demonstrating genuine interest towards the students regardless of their differences; and b) a great sense of humour, thereby making learning fun.

In examining the pedagogical and professional competence of the tutor, “the process of learning, centred on learner need, is seen as more important than the content; therefore, when educators are involved in the learning process, their most important role is to act as facilitators or guides”. (S. Merriam & Caffarella, 1999, p. 43). This suggests that each individual student can flourish in their learning if facilitated and guided by an effective tutor. It is the tutor that “creates a context of learning which encourages students to actively engage in subject matter...” (Ramsden, 1992, p. 114). The tutor as a facilitator in the learning process concurs with the thinking of a number of other authors (e.g. Hansen & Stephens,

2000; Hoover, 1996; Jones & Richardson, 2002; Lang & Evans, 2006; Pedersen & Liu, 2003; C. Rogers, 1969, 1983) and belongs to the Constructivist view (See Chapter 2: *Pedagogical perspectives and theoretical foundations underpinning student-centred learning*, pp. 57-64) and the principles of Adult Learning (See Chapter 2: *Adult Learning*, pp. 67-81). Similar to the principles of Constructivism, the tutor engages the student to be an active participant, making new meaning and constructing knowledge in collaboration with others. The tutor was there to guide, facilitate and prepare the learning environment for this to happen. Being a facilitator of learning is one aspects of effective teaching (Brandes & Ginnis, 1986; Jones & Richardson, 2002; Lang & Evans, 2006; S. Merriam & Caffarella, 1991; C. Rogers, 1965).

The findings also suggested that establishing connections and forming positive student-tutor and student-student relationships through tutors' facilitation was also pivotal in optimising student learning. A number of authors postulated that the true essence of being a facilitator of learning is based on the personal relationship built between student and tutor (e.g. Cannon & Newble, 2000b; Kirschenbaum & Henderson, 1989; McCombs & Miller, 2007; C. Rogers, 1969). The participants also valued the importance of *Whakawhanaungatanga* (the process of establishing relationships) where connections are established between students as they get to know one another; and the Māori concept of *Ako* where both tutors and students were considered to be a source of knowledge. These particular findings regarding the connection between recognizing cultural identity with educational outcomes are not explicit in mainstream tertiary education environments, but noted in studies of indigenous learning environments (Pewewardy, 2002). These approaches based on an indigenous paradigm are found to be effective for Māori (J. Lee, 2004; Pere, 1991; Pihama, et al., 2004). This, therefore, adds considerably to the understanding and practice of the educational strategies at *Te Wānanga o Aotearoa*. Students considered having a good tutor-

student relationship as critical in their motivation to learn. The personal relationships built between learners and their teachers are considered to be at the heart of student-centred learning (Cannon & Newble, 2000a; Kirschenbaum & Henderson, 1989; McCombs & Miller, 2007; C. Rogers, 1965, 1969) and make for exceptional teachers as alluded to by Arnold (2010), "...teachers' willingness to put their creative energy into interacting with students and knowledge is what identifies a really good teacher as well as a great one" (p. 3). This also concurs with Roger's propositions.

When focusing on the personal qualities of the tutor, the participants commented that they believed their tutors did not only provide for their academic development but also made them feel valued and respected in the classroom regardless of their backgrounds. The tutor demonstrated genuine concern and interest towards the students. Participants commented that their tutors went beyond their normal call of duty in order to support students to complete their courses successfully. The findings agreed with Carl Rogers' (1969, 1983) proposition that every tutor must possess 'realness' or 'genuineness', 'acceptance', 'prizing', 'trust', 'empathy' and 'congruence'. These qualities will facilitate the establishment of positive tutor-student relationships, and help increase student motivation in their learning. This also mirrors Knowles' principles of Adult Learning and Andragogy where the tutor is seen as a mentor or a guide in student learning as opposed to simply delivering the content of the course (See Chapter Two: *Adult Learning*, pp. 71-75).

The use of humour, as commented by one tutor, made the delivery of lessons more pleasurable and eliminated student apprehension. Students remarked that the curriculum itself was probably not fun to teach, but it was the tutor who made the course enjoyable. Both groups of participants found that a non-threatening learning atmosphere led to positive and

enjoyable learning which increased students' motivation and confidence. Students indicated that a tutor with a sense of humour made them want to engage more in the discussion. Pewewardy (2002) in his study of the learning styles of American Indian/Alaska Native students, found the use of humour a useful strategy for all ages. Citing other research, Pewewardy (2002) highlighted that humour can "bring students together", "reaffirm bonds of kinship" and provide a "sense of connectedness"(p.19). Likewise, Wagner and Goldsmith (1981) stated that "humour can add a refreshingly positive dimension to the teaching process"(p. 12) as well as promote social bonding in the interaction among students.

Indeed, the effectiveness of the tutor is seen as crucial in influencing the outcomes of student learning. Students placed high value in having a very knowledgeable and subject expert tutor but more so in having a caring tutor who builds positive relationships with and among students and as well as posing challenges in order for the students to develop holistically.

Teaching Methods and Strategies

The effectiveness of teaching approaches is dependent on a number of factors; the obvious being the tutor as the driver who will deliver and adapt to achieve the learning outcomes of the course. The teaching methods and strategies aim to engage students to actively participate in their learning (See Chapter 3: *Teaching Methods and Strategies*, pp. 124-125). These strategies must be learner-centred and work synergistically in order to cause profound and deep-seated changes with lasting effect in the classroom (Lang & Evans, 2006; Weimer, 2002, 2003). Findings from the survey and interviews indicated that the majority of the students perceived the learning and teaching methods used in the programmes as generally effective. Both groups of participants considered the pedagogical strategies as

appropriate and useful in enhancing student learning. A wide spectrum of methods and strategies were employed by the tutor, recognising the diverse background of the students.

One of the themes most frequently brought up by students was related to the tutors' planning and strong academic background. Students expected their tutors to be very knowledgeable in their subject areas and to come to class prepared. Tutors' facilitation of in-depth discussions with the use of a variety of fun learning activities supported by interactive learning resources was well favoured by the students. Student participants commented that through the use of these strategies, their interest was sustained; they felt empowered with more confidence and motivation. The development of new skills and knowledge was an expectation that students had of the teaching methods and strategies, especially in terms of the development of meta-cognitive, higher order critical thinking skills. They appreciated that the tutor was able to translate difficult topics in a comprehensible and easily understood manner while maintaining depth and meaning. The above view is consistent with the deep learning approach (See Chapter 2: *Conceptions of learning and teaching* pp. 46-51). Both groups of participants expressed their preference for 'deep learning' which developed critical thinking rather than covering a large content with no comprehensive discussion and learning. This also concurs with the view regarding tutors' conceptions of teaching (See Chapter 2: *Conceptions of learning and teaching* pp. 51-57). Tutors' strategies impact how students learn and therefore their outcomes (Biggs, 1994; Kember & Gow, 1994; Martens & Prosser, 1998; Weimer, 2003).

A holistic approach to the learning and teaching strategies was overwhelmingly valued by both groups of participants. In these situations, it was described that the focus was not limited to academic development for the students but also other factors in their well-being

such as social, cultural and spiritual well-being. This concurs with Evans and Lang (2006) and (Srikanthan & Dalrymple, 2004) indicating that it is no longer enough to simply focus on the cognitive development of students. Durie's (2001) work on the metaphor *Te Whare Tapa Wha* (strong house) framework argued that a balanced well-being consists of focus on all the dimensions *te taha hinengaro* (psychological health); *te taha wairua* (spiritual health); *te taha tinana* (physical health); and *te taha whānau* (family health). When applied to a learning context, Durie's model embodies a holistic approach to teaching utilising culturally relevant practices. Students also believed that embracing and observing *Kaupapa Māori* (Māori ideology) through the provision of holistic Māori pedagogy was important in their learning. This included the principle of 'Ako', characterised by reciprocal and collaborative learning and teaching between tutors and learners with shared power in the classroom. The principle of 'Ako' is not limited to Māori only. This concept also concurs with what McCombs wrote in the forward of the book by Cornelius-White and Harbaugh, (2010): "learning is seen as a true partnership between teachers and their students, with roles that can interchange depending on who knows the most about a topic at any given time" (p. xiv). Everyone was involved and engaged in the learning process.

Similarly, the tutor participants also mentioned the *tuakana* (oldest) – *teina* (youngest) Māori teaching approach, where they assist and support one another in order to advance their learning. For example, a student who was more familiar with the topic guides and supports those who were less familiar with the lessons. In other cases, the students were also given the opportunity to assume the role of the tutor in the classroom. This is opposed to the traditional notion of the tutor as the only purveyor of knowledge who transmits the information in the class. In Māori pedagogy, the tutors and learners engage in reciprocal roles where the tutor Self-directed Learning also learns from and with their students. A number of Māori authors

identified these concepts as part of Māori pedagogical practices (e.g. Bishop, 2003; Hemara, 2000 ; Pere, 1991) which are more responsive to the learning needs of Māori. These views agree with several Constructivists and Adult Learning theorists that decision-making must be shared between tutors and students (Gibbs, 1992b; McCombs & Miller, 2007; C. Rogers, 1965; Weimer, 2002, 2003).

Tutors also used teaching strategies which recognised students' previous experiences, and were relevant to real life experiences. According to Dewey (1938) and Lev Vygotsky (1978), student learning is strongly reinforced through the use of teaching methods and strategies which are based on practical and real life situations. The recognition of students' previous experience is part of the Adult Learning Theory (Knowles, 1984, 1990; Knowles, et al., 2005), Andragogy (Knowles, 1980, 1984) and Constructivism (Piaget, 1972; Vygotsky, 1978) (See Chapter 2: *Pedagogical perspectives and theoretical foundations underpinning student-centred learning*, pp. 57-81) where experience is seen as "both a resource and stimulus for learning" (S. Merriam & Caffarella, 1999, p.148). This means that students were able to build from their previous knowledge and experience.

One of the strengths of the programme, cited by the students, was their personal transformation which saw them develop their confidence and self-efficacy in taking responsibility for their own learning. A number of students spoke highly of the opportunity, as returning adult students in a non-competitive, non-threatening environment, to redress their previous negative experiences in mainstream education. They embraced the notion of self-directed learning and with it, accountability and responsibility for their learning. This is aligned with Carl Roger's 'client-centred therapy' (C. Rogers, 1969, 1983) and other authors (See Chapter 2: *Self-directed Learning*, pp. 76-79) where students gained significant learning

which led to their personal growth and development and their value as a person. This is also very much grounded in humanistic learning theory where potential for growth is the emphasis for learning (S. Merriam, et al., 2007).

The specific item with which both groups did not agree or were uncertain about was that the '*assessment of learning styles is completed to diagnose learning preferences*'. Participants felt that their learning style was catered for through the implementation of different learning activities and a wide range of learning approaches. The extensive activities catered to the diverse ways that students preferred to learn or feel confident in (visual, auditory, kinaesthetic learners). These activities accommodated not only the students' stronger preference, but also provided them the opportunity to experience all categories of learning styles. According to Arnold (2010) "the combination of verbal, aural, kinaesthetic and visual learning skills enables deeper and richer learning that is easier for the students to undertake" (p. 8). Students may have different preferences or approaches to their learning depending on the context and circumstances that they are in. Culture, for example, has a strong influence and connection with the learning style and preferences of students (See Chapter 4: *Adding the 'Cultural Awareness' dimension*, pp. 167-169). In addition, there is a need for tutors to possess a deep and more profound understanding of individual differences in learning to allow equal opportunity for all learners to achieve successfully (Guild, 2001). A number of authors report the benefit of recognising students' individual uniqueness by catering to their learning preferences (Hawk & Shah, 2007; Lang & Evans, 2006; Soylu & Akkoyunlu, 2009). For Māori learners, utilising learning and teaching approaches drawn from Māori paradigm and framework enable them to be more successful in their learning (See Chapter 4: *Māori pedagogies*, pp. 169-173).

However, not all participants agreed that their learning style was formally assessed and catered for. Some tutors admitted that they did not formally assess their students' learning preferences but they ensured that they utilised a variety of teaching methods. A number of tutors reported that they found it difficult and time consuming to prepare different activities to address individual student learning styles. This contradicts the "differentiated instruction" promoted by Tomlison (2000, 2004) which was supported by K. Brown (2003) where they recognised the uniqueness of each student by catering to their individual needs (See Chapter 3: *Learning Activities*, pp. 121-122). Some tutors did not see the point of assessing learning styles as they believed this did not help at all in enhancing student learning. Soylu and Akkoyunlu (2009) concluded, in their experimental study on the effect of learning styles on achievement; "learning styles do not have effect on the achievement of students in different learning environments" (p. 49). Although there have been many questions and challenges regarding the pedagogical validity and impact of assessing learning styles, it is still considered a very popular practice and one that is encouraged at *Te Wānanga o Aotearoa*.

In addition, a number of student participants reported that the teaching methods of some tutors either lacked depth or focus or that they were just "*teaching to the test*". Students were not able to construct and make meaningful comprehension of what they were learning. They reported that discussions were only centred on what was included in the assessments. These students expressed dissatisfaction and argued that the focus needed to be more on the depth of learning as opposed to simple coverage of content. The ability of the tutor to integrate effective pedagogical approaches and strategies plays a significant role in the provision of quality educational experiences for the students. Tutors create learning conditions through the use of a repertoire of strategies catered to meet the diverse learning

dispositions of the students. The strategies employed must facilitate the enhancement of student learning and sustain motivation and meaningful engagement (See Chapter 2: *Teaching Methods and Strategies*, pp.123-124).

Assessments

Passing or failing assessments is usually used as the measure of how well (or how poorly) the student has progressed in his/her learning. According to Arnold (2010), when we devise a curriculum, “the assessment is the central and significant aspect of its content and delivery” (p. 7). Likewise, Gibbs (1992a) stipulated that “how learning is measured and marked through the assessments and learning activities have impact upon the way the students approach their learning”(p. 17). Cullen and Harris (2009) also argued that “assessment is both the single-most important gauge of learning that drives the educational processes” (p. 115).

Findings from both the quantitative and qualitative investigations indicated that the participants considered the assessments in their current form as both enabling and disabling their learning and that there were issues to be addressed from a student-centred approach. Participants rated the assessments favourably in that some of the tutors provided a variety of options of how assessments could be completed depending on students’ preferences. Some of the options included essay writing, a project, portfolio or a PowerPoint presentation. This finding concurs with a number of various seminal works by authors who indicated that in order to empower students they should be given the option of negotiating their evidence for assessment (e.g. Doyle, 2008; Gibbs, 1992a, 1992b; Guest, 2005; Harvey & Green, 1993; McMahon, et al., 2007). (Also, see Chapter 3: *Assessments*, pp. 125-126). In addition, students were positive of the flexible extensions in submitting their assessments. Assessments

were considered non-threatening if there was a degree of flexibility in the timeframes, although there was little in the literature to support this, apart from Allsopp (2002), recognising that flexibility in assessment had merit due to the differences in the rate and ways that students learn. Tutors' openness to combine traditional and more student-centred approaches (which aim not only to measure how much and how well students learn, but also supported students to succeed) is in accordance with Constructivism and Adult Learning principles (See Chapter 2: *Pedagogical perspectives and theoretical foundations underpinning student-centred learning*, pp. 57-97).

The findings also revealed that both groups of participants favoured formative and on-going assessments to complement the summative assessments. Students commented that it was far better to have a regular measure of their learning as they progressed and that assessments need not be formal. On-going demonstration of their learning and development, observed by the tutor at different times during the programme would be preferred. Students would then be more involved and better able to make adjustments to their learning for a successful outcome. Tutors also wanted more formative assessments where feedback was provided during the learning process, rather than at the end, allowing them to modify and adapt their teaching strategies according to student progress and need. This finding concurs with the view that the use of formative assessment and constructive feedback benefit students in their learning (Berry, 2011; Clark, 2011; Gibbs, 1995; Kiley, et al., 2000; McMahon & O'Neill, 2005). Gibbs (1992b) suggested the deep approach, "through integrating assessment into the learning process so that what is assessed is the total learning experience rather than chunks or portions of what is learnt" (p. 17). A number of tutors felt that the curriculum document itself was an obstacle that precluded integrating the assessment into the learning process.

The grading system ‘Achieve’ and ‘Yet to Achieve’ for competency based assessments, is a judgement of whether students have developed and can demonstrate the skill, learnt the concept or gained the knowledge. The ‘Yet to Achieve’ result allows students to re-do the assessments until such time they are able to successfully demonstrate that they have achieved or completed the expected learning outcomes of the course. This system at *Te Wānanga o Aotearoa* eliminates grading students based on their achievement, regarded detrimental to an otherwise confidence-building and transformative experience. This policy supports the organisation’s endeavour not to discriminate or compare students based on their grading. This is based on the Māori concept of *Ako* which promotes ‘assessment for learning’, as opposed to ‘assessment of learning’. Gipps (1994) made the distinction between ‘assessment of learning’ which is about “evaluating what has been learnt” and ‘assessment for learning’ which is about “using evaluation to feed into the learning and teaching process and thus improve... learning” (as cited in McDowell, Wakelin, Montgomery, & King, 2011, p.749). Berry (2011) concurs with this, saying that the concept of ‘assessment for learning’ is used to support learning rather than using testing to determine what students can recall or remember which promotes surface learning. Clark (2011) elucidated that ‘assessment for learning’ is focused on the students’ achievements of their learning goals by providing scaffolded teaching and regular feedback. McDowell, L., Wakelin, D., Montgomery, C., and King, S. (2011) concluded in their study which explored student experience regarding assessments that there was in general a positive response to the modules delivered using ‘assessments for learning’ principles. The findings also highlighted students’ inclination towards deep approach which led to improved quality of learning.

The marking system for assessments received conflicting responses. For a number of students, the marking system was great as it did not distinguish those who did extremely well from those who did not. For others however, the marking system did not reflect how well students performed in the assessments as it did not demonstrate the level of knowledge, understanding and competence acquired by the students. The findings suggested a need for this measure of learning to be made more meaningful to the students. Tutors discussed the option of using Naturally Occurring Assessments (NOA) to assess through observation the work completed by students, without the formality of written or other formal assessments. Under NOA, tutors are required to record evidence as to when the learning outcome was consistently observed, demonstrated and achieved (Lewis, 2007). This contrasts with the conventional assessment approach, believed to be linear and cumulative as the learning grows in proportions or chunks (Barr & Tagg, 1995). Lewis (2007) discussed further that the ‘assessment for learning’ is woven and incorporated into all learning and teaching activities and includes providing progressive feedback to students on their achievement. There is relatively limited literature regarding the use of NOA as a method of assessment. However, NOA is similar to the principles of ‘assessment for learning’ (Berry 2011) where students are assessed comprehensively and formatively at all the stages of their learning.

Assessments can detract from student learning if not properly administered. The results of assessments are used as a measurement of how well the students have learnt as well as a determinant of the quality of learning and teaching to stakeholders. Assessment practices must inform the tutor of what teaching strategies to adapt or revise in order to support the achievement of the learning goals. Assessments also need to be supportive by incorporating the provision of feedback throughout the different phases of learning.

Summary of discussion related to research question 1

How are the current learning and teaching practices utilised in mixed-mode delivery consistent with the principles of a student-centred learning approach?

The dimensions of the IFSCL is an embodiment of the different elements of a student-centred learning approach, incorporating the principles of Adult Learning, APA learner-centred domains, and conceptions regarding quality learning and teaching as discussed in Chapter 2. The IFSCL used as theoretical lens in this study, allows the findings to be measured against an encapsulation of critical approaches and principles, focused on the holistic development of students.

In summary, the findings have highlighted aspects of the learning and teaching practice in the mixed-mode programmes which exhibited strong associations with the student-centred approach as well as areas that deviated from it, in particular negotiable learning outcomes, meaningful two-way evaluation process and on-going formative assessments. There are implications for changes to the current learning and teaching practice, either in re-examining the strategies in the classroom, or a shift in paradigm in the management of the programmes. There were additional insights and perspectives gained from the findings which were not indicated in the items of the dimensions. These include: stronger focus in forming a good relationships with the tutor and among the students, importance of completion and retention, recognition of the programme globally, employability of the students and personal transformation as evidenced of quality education, among others. In line with this, additional literature was sought to support the new perspectives. The findings presented the multi-dimensional principles of a student-centred learning approach and how

they are interwoven in the aim to deliver a quality learning and teaching experience in programmes delivered through mixed-modes.

Discussion of findings for research question 2

The second research question in this study relates to concepts of quality learning and teaching as perceived by the participants as well as how they believed the delivery could be improved. The quality concepts that emerged showed a certain degree of overlap with the findings of the first research question. The major themes selected for discussion are based on the concepts most frequently broached by the interview participants.

Research question 2

In what ways does the mixed-mode of programme delivery impact upon the quality of learning and teaching?

Subsidiary questions

- a) *What are the perceptions of students and tutors regarding the quality of learning and teaching strategies utilised on these programmes?*
- b) *How do the students and tutors believe the delivery might improve?*

Conceptions of ‘Quality Learning and Teaching’

Chapter 2, Review of the Literature, revealed that conceptions regarding learning and teaching are a fundamental dimension of the concept of quality. There is extensive research on the correlation of the conceptions of learning and teaching with the quality of the

educational practice as experienced by students (Entwistle & Walker, 2000; Ginns, Kitay, & Prosser, 2008; Gonzales, 2011; Kember & Gow, 1994; Kennedy, 2010; Marton & Säljö, 1976). Previous studies have highlighted that the teaching focus should be on improving the quality of student learning and that teaching practices must be continually reflected upon in order to improve teaching. Further, it was found that conceptions regarding the quality of learning and teaching experience also have influence on students' outcomes (See Chapter 2: *Conceptions of quality, Conceptions of learning, Conceptions of teaching*, pp. 37-57).

Quality remains a priority for all stakeholders in higher education and has been the subject of several studies in regards to its assurance and measurement. The quality standards and benchmarks set by different quality assurance bodies encompass the multi-dimensional elements of learning and teaching. Several tertiary institutions have allocated resources to ensure that quality improvements occur continuously in their institution, thus protecting their reputation and the quality of their programmes. In this study, the theory and practice of a student-centred learning in the mixed-mode programmes was considered to be the approach to ensure that optimum quality learning and teaching. Harvey and Green (1993) argued that quality is “a relative concept” in that “quality is relative to the user of the term and circumstances in which it is invoked” (p. 10). This, however, makes it worthwhile to investigate if there are common concepts in how students and tutors perceive quality and whether their perceptions approximate student-centred learning approach.

Conceptions of quality in mixed-mode programmes

The offering of programmes delivered through various modes of flexible delivery supported by the use of technology and multimedia learning resources is an approach widely

employed in higher education. Driven by the increasing demands of the changing student population and environmental conditions, mixed-mode delivery (or blended delivery for some) broadly refers to a mode of delivery coupled with the infusion of advancements in technology. The current structure of mixed-mode delivery is characterised by a combination of the traditional face-to-face interaction with a significant number of hours allocated for self-directed learning, supplemented with multi-media learning resources. The integration of the use of digital learning resources and technology is to complement student learning during their non-contact time (See Chapter 1: *Mixed-mode delivery*, pp. 15-20). While mixed-mode deliveries combined with the use of technology presented not only opportunities to enhance student learning in a more integrated and holistic way (Jenkinson, 2009), it was also associated with risks to the quality of delivery. Concerns have been raised about the quality of mixed-mode delivery where the face-to-face component was diluted through the combination of self-directed learning, online learning and other multimedia resources.

The mixed-mode of delivery is a break from the dominant, proven and tested, traditional face-to-face delivery; hence the apprehension surrounding the quality of learning that students receive. Findings from both groups of participants of this study indicated conflicting opinions regarding the effectiveness of mixed-mode delivery. A number of students rated the mode of delivery very high for its flexibility and accessibility. The flexibility of the mixed-mode delivery allowed students to study, raise a family and work at the same time, due to the limited time that students are required to physically attend face-to-face classes. This view promotes lifelong learning where students are able to further their education in order to have better employment opportunities (Eisen, 2005). On the contrary, a number of participants from both groups regarded the limited face-to-face interaction with tutors as a weakness and a challenge. Likewise, the lack of in-class interaction, immediate

feedback and separation from the tutors and peers during self-directed learning was a concern for many. It may well be that the students were not ready or prepared for self-directed learning. As cautioned by Bouchard (2009), that while mixed-mode delivery supported by technology, multimedia resources and online learning has the potential to support the development of self-directed learning skills that empower students, it can also be a powerful deterrent. Jenkinson (2009) suggested a need for an evaluative framework that would accurately capture the impact of technology on student learning.

Sadler-Smith and Smith (2004) noted the tendency for teaching strategies in flexible learning to disregard the differences in the learning disposition of the students, which may result in undermining the quality and student-centeredness of the learning experience. Similarly, Kirshchner, Sweller and Clark (2006) in their study of a number of flexible learning modalities (Constructivist, Discover, Problem-Based, Experiential and Inquiry-based Teaching), characterised by minimal guidance during instruction argued that “not only is unguided instruction normally less effective; there is also evidence that it may have negative results when students acquire misconceptions or incomplete or disorganised knowledge” (p.75). The authors discussed the lack of guided instruction, leaving students to learn and construct new knowledge by themselves, could be detrimental to their learning if they do not have sufficient support to start with. It was apparent from this study that not all students were well-prepared to manage their own learning. “In Self-directed Learning, students must be independent and self-managing in order to engage and participate effectively in their learning process” (Sadler-Smith & Smith, 2004, p. 398). This was perceived as both enabling and disabling by tutors and students (See Chapter 2: *Self-directed Learning*, pp. 75-78).

There is no doubt that technology with multimedia learning resources will continue to be utilised in mixed-mode delivery in order to meet the needs of the students and society at large. These are considered powerful tools in enhancing both learning and teaching regardless of the mode of delivery. Mixed-mode delivery deviates from conventional and traditional methods of delivery but affords flexibility and accessibility to students and will remain a strong and legitimate option for delivering the curriculum. In order to continually meet the principles of student-centred learning, the use of technology, multimedia learning resources and properly guided self-direction need to be well integrated in the design of curriculum.

Characteristics of ‘Quality Learning and Teaching’

The findings of this section presented interesting connections between the principles of a student-centred learning approach as defined in the Integrated Framework for Student-Centred Learning and the participants’ concept of quality learning and teaching. Organised according to the following emergent characteristics, the discussion will also be linked to the theoretical concepts and framework underpinning this study.

The findings drawn from the qualitative investigations were considered under the following emergent themes and will be called the ‘characteristics of quality learning and teaching’. The following paragraphs discuss these findings in full:

- a) Quality is holistic learning and teaching;
- b) Quality is the development of skills, knowledge and deeper understanding;
- c) Quality is meeting the diverse learning needs and preferences of students;
- d) Quality is relevance and practicality of curriculum and employability of graduates;

- e) Quality is adequate physical facilities, resources and support services;
- f) Quality is personal transformation; and
- g) Quality is successful completion and graduation.

Quality is holistic learning and teaching

One of the highlights of the findings was that both groups of participants viewed quality learning and teaching as inclusive of holistic growth and development of the student. The notion of holistic learning and teaching encompasses not only the cognitive development of the student, but also learning and teaching practices catering to the emotional, social, spiritual, and cultural aspects of the student's well-being. There are apparently not many academic institutions who uphold the last two aspects. At *Te Wānanga o Aotearoa*, importance is placed on the spiritual and cultural well-being of students. Opportunities to participate in activities which support spiritual and cultural well-being are open to those who would like to be involved.

The quality concept of holistic development has been well-documented in student-centred and constructivist literature Herrington and Herrington (2006), Gibbs (1992b) Barr and Tagg (1995) and Patel (2003), advocating the development of the whole person in the learning process. Gonczi (2004) and Harvey and Green (1993) discussed providing an authentic learning environment in order for this to happen. This view also concurs with one of the student-centred learning principles promoted by Rogers' (1965) where he argued that students must experience confluence in their education. Likewise, this characteristic is also similar to one of the principles of Learning Paradigm postulated by Barr and Tagg (1995), as well as the views of Patel (2003), where learning is framed holistically. The learner is the

principal agent in the process, actively discovering and constructing new knowledge, and thereby becoming more critical and self-reliant.

In addition, a number of Māori authors also promoted the holistic development of the well-being of the students based on an indigenous framework. Durie's (1994) metaphor '*Te Whare Tapa Wha*' (the strong house) promotes the development of a balanced well-being of the learner reinforced by four pillar of dimension (psychological, spiritual, physical and family health). Similarly, Pere's *Te Wheke* (octopus) model represents the integration of the various dimensions considered to be important for the holistic development of a person, which include not only the mental aspect, but as well as the emotional, cultural and spiritual aspects of the individual and the family. These models were originally applied to health and wellness for Māori but have since been applied and made relevant to the learning and teaching processes. These activities prepare the students to achieve optimal learning.

The student participants described having greater confidence and developing higher-level perspectives and awareness. The tutor participants endeavoured to be holistic in their teaching approaches by ensuring that students were supported in other areas of their well-being apart from the delivery of content. Both groups acknowledged that tutors were caring and supportive of the students in their learning. For the tutors, this was about providing the opportunities for students to grow and reach their fullest potential. A number of tutor participants were guided by *Te Wānanga o Aotearoa* quality management philosophy, grounded in *Ngā Uara* (Values), values by which all work practices should be conducted to ensure students experience a quality education:

Our values of *Te Aroha*, *Te Whakapono*, *Ngā Ture* and *Kotahitanga* are embedded in and woven through the actions we take to achieve successful outcomes for our tauira, as by having success for our tauira we achieve success as an organisation. Our values also provide an ongoing cycle of evaluation and improvement that contributes to the achievement of our kaupapa and our goals. *Te Wānanga o Aotearoa* defines its values as follows:

Te Aroha: Having regard for one another and those for whom we are responsible and who to whom we are accountable.

Te Whakapono: The basis of our beliefs and the confidence that what we are doing is right.

Nga Ture: The knowledge that our actions are morally and ethically right and that we are acting in an honourable manner.

Kotahitanga: Unity amongst iwi and other ethnicities; standing as one.

(*Te Wānanga o Aotearoa*, 2011, p.5)

In this study, the recognition of cultural identity as a considerable influential factor in improving the quality of educational experiences for students is well-established. In line with the findings of a number of studies on the influence of culture in quality educational settings (Berry, 2011; Bourdieu, 1977; Breidlid, 2009; DiMaggio, 1982, 1997; Nguyen, et al., 2009; Sheets, 2005, 2009), the observance of Māori culture is very much embedded in the learning environment at *Te Wānanga o Aotearoa*. Students and tutors from all cultures also have the opportunity to embrace and exhibit their own cultural identity as well as learning other cultural practices. The recognition of differences (as well as the similarities) in culture by providing a learning environment that is culturally safe and responsive was appreciated by the students. When tutors are not able to utilise teaching strategies which are culturally responsive, there is cultural incongruence in the learning and teaching process which results in students' disillusionment (McLoughlin & Oliver, 2000; Pewewardy, 2002; Phuong-Mai,

Terlouw, Pilot, & Elliott, 2009). Strategies which are affirming and accepting of students' cultural identity should be interwoven in the teaching practice (See Chapter 5: *Cultural Awareness*, pp. 184-189). Di Maggio (1997), for example, argued for the connection of different aspects of culture with the cognitive development of the individuals while Bourdieu (1977; Bourdieu & Passeron, 1990) promoted the concept of cultural capital in improving educational outcomes.

These findings are also confirmed in Marshall, Baldwin and Peach's (2008) report on good pedagogical practice in Māori and Pasifika Private Training Establishments (PTEs). The report identified a number of factors considered critical in enhancing the learning of students. These were: accepting a surrogate family/*whānau* concept, creating a sense of belonging and creating a sense of greater humanity. Likewise, Pewewardy's (2002) study on the learning styles of American Indian/Alaska native students also affirmed the influence of culture in the quality of their learning. Patel (2003) developed the Holistic Approach to Learning and Teaching Interaction (HALTI) over a period of 9 years of reflective practice and thinking which aimed to develop critical learners. He identified a holistic interlocking of various aspects which leads to a process of self-improvement. These include: self, professional and personal development, discipline and learning and teaching. According to Patel, the holistic approach resulted in enhanced performance and improved learning on the part of the students.

One can conclude that holistic development of the student as a quality concept is not only limited to the findings of this study but also well supported from previous research and literature. The implications for teaching practice include placing value on the relationships built in the classroom, the self-actualisation process, and other activities that foster the

‘whole-person’ growth which are based on an indigenous framework. This results in a deviation from the traditional transactional notion of education.

Quality is development of skills, knowledge and deeper understanding

“The development of student skills and abilities is the most fundamental aim of tertiary education” (Srikanthan & Dalrymple, 2004, p. 266). Both groups of participants discussed going beyond the delivery of course content as a characteristic of quality learning and teaching. Participants mentioned that student development took place through the use of scaffolding strategies to develop critical thinking skills. A number of students reported that this method of teaching was effective and beneficial, particularly for the returning adult students. Scaffolding allows the student to progressively increase their learning by building from their previous experience or starting with less complex tasks. Scaffolding strategies were utilised in a number of flexible learning modalities that supported and provided opportunities in the construction of knowledge into more complex levels (Hmelo-Silver, Duncan, & Chinn, 2007). Tutors in this study reported starting on lower level tasks until students demonstrated competence before moving on to higher level or more complex ones. According to both groups, scaffolding learning activities through incremental steps enabled students to focus and achieve progressively as they completed their tasks. It has been shown in a number of historical and recent studies that learning develops progressively by building on learners’ prior knowledge and implementing a well-defined step-by-step process (e.g. Harkema & Schout, 2008; Vygotsky, 1978; Zualkernan, 2006). Lev Vygotsky (1978) described this as the zone of proximal development where students were supported in their

learning through ‘baby steps’ until they reached competence and were able to work independently.

For a number of the participants, quality learning and teaching was about students developing deeper understanding and higher levels of thinking based on interactions in the classroom. Participants mentioned that delivery of the programme should not concentrate on assessing how much students could remember and recall from their discussions. Rather they asserted that it was about developing their own critical thinking on what had been presented to them; being able to question, raise arguments, critically solve problems and develop skills and competencies. There was an expectation from the student participants to be provided with interactive and meaningful learning activities that allowed them to prepare for and connect to the realities beyond the four walls of the classroom. Tutor participants explained the strategies they employed to create a learning environment that encouraged students to think critically, act and perform at higher levels.

Such a concept of quality learning and teaching is consistent with the principles of Constructivism and Adult Learning theory (See Chapter 2: Pedagogical perspectives and theoretical foundations underpinning student-centred learning, pp. 57-71) as well as the research on conceptions of learning and teaching (See Chapter 2: *Conceptions of learning and teaching*, pp. 46-57). Zirbel’s (2006) study explained that deep understanding could be achieved when students made a conceptual change from their pre-existing knowledge and experience to meaningful connections and constructing new knowledge. This resembles the deep approach where new knowledge is understood and interpreted in a much more profound way (Gibbs, 1992b; Marton, et al., 1993; Ramsden, 1992). Singleton and Newman (2009) suggested the use of brief writing strategies and discussions woven throughout the class

meeting to ensure that students could process, reflect, apply, synthesise and evaluate what they had learnt. Harvey and Green (1993) considered the development of students' critical ability, by challenging the notions of others as well as their own, as one way of empowering students. Similarly, the Learning Paradigm promotes Gardner's (1985) claim for "education for understanding" which involved "mastery of functional, knowledge-based intellectual frameworks rather than short-term retention of fractioned, contextual cues" (Barr & Tagg, 1995, p. 22).

The development of skills, knowledge and deeper understanding as a characteristic of quality learning and teaching implies that learning and teaching should be well-scaffolded so that students are able to develop their learning incrementally until such time that they are able to work on more complex learning activities. Learning and assessments situations also need to become more challenging, practical and provide opportunities for students to apply their learning, skills, knowledge and understanding previously gained. As opposed to just merely passively receiving knowledge, students are able to construct, synthesise and apply their learning, thus developing a deeper understanding of the knowledge. This should prepare students to have the skills and knowledge needed for real world application.

Quality is meeting the diverse learning needs and preferences of the students

Although referred to by different terminology (e.g. learning styles, learning approaches, learning orientation, and learning preferences) the focus is on enhancing student learning by adapting to the students' strong learning preference. The literature is rich with research that has examined and investigated the validity of this quality concept without any conclusive findings. The concept itself is fraught with criticisms and problems from definition, implementation to measures of efficacy (Cuthbert, 2005). Proponents of the

concept such as Hawk and Shah (2007) and Soylu and Akkonyulu (2009), concluded in their review of learning styles and instruments, that using such strategies will enhance the effectiveness and quality of the educational experience for students. Likewise, Lang and Evans (2006) concur saying that student outcomes can be improved if the teaching strategies focus on building from students' dominant learning orientation. Meeting the diverse needs and preferences of the students is a Constructivist view (see Chapter 2: *Pedagogical perspectives and theoretical foundations underpinning student-centred learning*, pp. 57-71), recognising the uniqueness of individual students and how they prefer to learn and construct new knowledge. It is also favoured by the deep approach to learning (Gibbs, 1992b; Marton & Säljö, 1976). This is in contrast with the adage 'one size fits all' where learning and teaching is facilitated in the same way and using the same methods for all students.

The tutors in this study believed that they adapted to the learning orientation and preferences of the students through the integration of a variety of learning activities. Beck (2001) indicated that "this practice of providing a wide spectrum of activities to address the differences in the learning preferences of the student also expands tutors' flexibility and resourcefulness" (p. 13). The tutors conceded that no formal process was used for diagnosing the learning styles of students, but they tried to incorporate a wide variety of activities to encompass the diverse learning preferences of the students. Likewise, students indicated that they preferred a variety of interactive learning activities as opposed to their habitual, preferred way of learning or doing. Learning styles are aligned with the multiple intelligences theory of Gardner (1985, 1993) where tutors tailor their teaching approaches according to the eight intelligences, thereby providing students with more opportunities to succeed.

One tutor expressed the opinion that learning preferences were not static, but could change and students could be influenced to change their learning approach depending on the teaching practice. It is important that learning activities are varied to cater for the various ways of learning as well as to expose students to other ways of learning. This finding is supported by Beck(2001), Gibbs (1992b) and Entwistle and Ramsden (1983) who indicated that student learning approaches can change and are flexible depending on the context and situation. However, they also report that starting from the student's frame of reference facilitates their progress into more complex learning. Beck (2001) indicated that "discerning tutors are very well aware of the importance of not only addressing the dominant learning style of the students but also of broadening and expanding students' preferences for other styles" (p. 2).

The implications for practice mean that teaching strategies need to recognise differing abilities and ways of learning among students. Strategies must be appropriate and fit to the orientation and abilities of the students and at the same time provide a learning environment where students can expand their learning styles. Beck (2001) signalled that tutors are more likely to make an effort to accommodate learning style differences if they are aware of them. Learning could be optimised if teaching approaches are patterned according to the way students had developed their learning preference. However, students must be given the opportunity to experience and incrementally develop other orientations to further improve their learning.

Quality is relevance and practicality of curriculum and employability of graduates

For both groups the relevance and practicality of the curriculum in preparing students for the workforce was recognised as concept of quality learning and teaching (See Chapter 3: *Curriculum*, pp. 114-115). How well graduates are prepared and whether they acquired the competencies and capabilities to compete in securing jobs in the labour market was considered an important determinant of the quality of education. Development of work related skills, life skills and a wide range of qualities were the ultimate outcomes of a quality education (Nicolescu & P[acaron]un, 2009; Storen & Aamodt, 2010). More significant than the quantitative element of education (the number of students who complete their qualification) is the quality of skills that graduates bring to their workplace (Earle, 2010). These include the ability to work in a team, critical thinking skills, problem-solving skills, communication skills, positive attitude to work and self-discipline. However, the reality indicates “a gap between deliveries of higher education services and necessities of individuals and organisations” (Nicolescu & P[acaron]un, 2009 p. 18).

A large number of student participants have returned to study after unsuccessful experiences in mainstream education and often after a lapse from education. They re-engage in higher education to prepare themselves to secure better employment opportunities, thereby improving their lives and that of their families. Both tutors and students considered the development and application of transferrable work-related and life skills as a pivotal measurement of quality learning and teaching. This is endorsed by Earle’s (2010) opinion: “What matters most in tertiary education is the quality and relevance of the skills and knowledge that people gain. This is more important than increasing the number of people with qualifications alone” (p. 12).

For both groups of participants, the alignment and responsiveness of the curriculum to the needs of the students and the economy in general, as well as the transferability of the qualification in the wider employment market, determined the relevance of the curriculum.

Both tutors and students were of the opinion that all the learning should connect to its usefulness in the labour market. Indeed, where the organisation stands in the labour market, that is the reputation of the organisation, the quality of its courses and the consequent potential for employability of its graduates are some of the concerns of its stakeholders (Wimshurst, et al., 2006). According to Kember et al. (2010), “students require a course to be both interesting and career relevant. Establishing relevance to the profession was helpful in motivating student learning...” (p. 49).

Earle (2010) indicated that acquiring skills relevant to their future life and work is a determinant of the quality of education students received, a view supported by Houston, Robertson and Prebble’s (2008) study where the employability of the graduates and their ability to perform in the workforce was one of the thresholds for measuring outcomes of quality learning and teaching. This confirms the relationship between quality education and economic growth and development. However, this hasn’t been easy to achieve as stipulated by Challis (2006) who indicated that: “A compelling challenge for tertiary educators is to respond meaningfully to pressures to provide curricula that translate readily into real-world professional experience” (p. 34).

The implication in meeting the changing needs of the labour market and the contribution that education makes to the economy requires on-going analysis of the curriculum in order to develop relevant student capabilities, skills, competencies and qualities. However, it remains a “compelling challenge for tertiary educators to respond

meaningfully to pressures to provide curricula that translate readily into real-world professional experience" (Challis (2006, p.34).

Quality is adequate physical facilities, resources and support services

The students and tutors also characterised quality learning and teaching by institutional provision such as, an efficient range of student support services, modern, well equipped with internet and communication technology and quality learning resources. The role that Student Support Services plays in improving the quality of student learning experiences is well acknowledged (Peach, 2005). Peach (2005) discussed that such services must be effective, connected and aligned with the "shared commitment to the motives of quality, equity, concern for individual development and student retention" (p.2). The provision and accessibility of student support services was one of the key findings that emerged from both groups of participants, especially with the greater number of students studying after hours or at weekends. Students were mostly referred to the Student Support Services by their tutors for student loans and allowances application support, disability support, guidance, counselling and in other administrative areas where the tutor was unable to help.

There was an expectation from students that other than the teaching, there were other types of learning support required such as: study skills, APA referencing, guidance and counselling, career advice, child care, transport, accommodation support, budget advice, tutorial services, library access after-hours, online support, and extra-curricular activities. The support services mentioned by students did not only include support for their academic development but also pastoral care support in order for them to have a quality educational

experience. The findings indicated that there was a need for a wider range of support services which were accessible to all students regardless of the mode of delivery.

A majority of student participants did not access Student Support Services as they did not know what they offered, that what they offered was not the support they sought, or that support was not available when and where required. The availability and quality of support was inequitably delivered and fragmented due to the varying time and day students were on campus. There was a need for support services to be relevant to the needs of the students and aligned with the delivery hours of the programmes. Students mentioned that there was lack of Student Support presence during their weekend classes attended by a large number of students and that there should be adequate and suitably qualified support staff to meet the number and needs of the students. It was evident from the findings that there were concerns regarding the lack of accessibility and consistency of the services provided. Peach (2005) advised that for student support services to contribute to the improvement of the quality of the educational experience and to ensure student success, there is a need to continually evaluate the effectiveness of the services provided to the students.

Both participant groups found the condition of some of the physical infrastructure lacking and poorly maintained. Some campus facilities were old and in need of refurbishment. The provision of quality facilities, buildings and classrooms is basic and necessary to the provision of quality learning and teaching experiences (See Chapter 3: *Learning Resources*, pp. 117-118). Students therefore, expect buildings, facilities and the classrooms to be relatively modern and well-equipped with learning and teaching resources. A number of studies of different learning environments concluded that adequacy and condition of the physical environment, including temperature, ventilation, lighting, acoustics

and aesthetics, have impact on academic outcomes, (Buckley, Schneider, & Shang, 2004; Schneider, 2002; Uline & Tschannen-Moran, 2008). Uline and Tschannen-Moran (2008) identified that “human comfort, pleasing appearance, adequacy of space, functional furniture and equipment, a clean and orderly environment, and regular maintenance affects occupants’ sense of well-being and thus their ability to learn” (p. 71). Although these studies were conducted in primary and secondary schools, the findings are applicable across all levels of the learning environment.

The adequacy and availability of high quality teaching, learning tools and resources also emerged in the findings from both groups. These refer to resources tutors use in the classroom and learning support materials for the self-directed component. This is especially important since their programmes were delivered via mixed-mode delivery where a significant amount of their learning was done on their own, away from the tutor. The delivery was divided into face-to-face interaction and self-directed learning which was supplemented by learning resources. Most of the learning and teaching resources were digitised multi-media and included the Internet. Among the blend of various elements that positively influence student outcomes, the application of advanced technologies has been the key driver and catalyst for the paradigm shift and growing trend into mixed-mode delivery (Burns, 2002; Desai, et al., 2008; Guest, 2005; T. Nunan, George, & McCausland, 2000; Rovai & Jordan, 2004). The integration of multi-media and other learning resources not only enlivens the delivery and the learning process, but also transforms the activities in the classroom. Brett’s (1996) findings supported the view that students viewed the integration of multimedia in the curriculum as a replacement for contact hours favourably, and that there was strong potential for it to facilitate effective learning.

The provision of quality physical facilities, learning resources and student support are integral to the enhancement of the educational experience, and as such the institution needs to continually ensure that physical facilities are maintained and upgraded where required, learning resources are functional and updated and support services are accessible, comprehensive and relevant to the needs of the students.

Quality is personal transformation

For both tutors and students, quality in learning and teaching also meant the personal development of students through self-managing which empowered them to take full responsibility not only of their learning, but other aspects of life. Imel (1998), Harvey and Green (1993), Knowles (Knowles, 1980, 1984; 2005) and Rogers (1969, 1983) argued that for transformative learning to occur in adult education, the roles of both teacher and the learner should be considered, as well as the rational and affective aspects of learning. Both tutor and students share in the process of transformation, changing their perspectives so as to engage more meaningfully (Coombes & Danaher, 2006; Harvey & Green, 1993; C. Rogers, 1969, 1983). Similar to holistic development, personal transformation for the study participants was more than just acquisition of knowledge; there was added value in learning to be a better, empowered person and eventually improving their lives. This is aligned with the principles of a student-centred learning approach (See Chapter 2: *Student-centred learning approach*, pp. 81-97) and Harvey and Green's (1993) conception of quality.

Two students mentioned that their transformation liberated them from a sense of ‘failure’ in mainstream education through their success as second chance learners in a learning environment like *Te Wānanga o Aotearoa*. Tutors also aimed for transformative

learning when delivering the content of the course. By having a frame of reference, transformative learning changes how individuals understand and experience the world (Mezirow, 1997). Mezirow's cognitive-rational approach to transformative learning results in 'perspective transformation' (Mezirow, 1991, 1997, 2000) where the focus is on the importance of experience, critical reflection and reflective discourse evaluating the world view of the learners and action by living the new perspective . Students become more cognisant of their purpose and meaning in life, gain new worldviews and become more discerning.

Quality learning and teaching as a transformational experience, despite a tenet of student-centred learning and the constructivist approach, is probably one of the most difficult to measure as there are a number of other complex variables involved in the transformation of an individual. However, research suggests that the 'transforming' value of quality learning and teaching, putting aside its problematic measurement. Harvey and Green (1993) defined quality as an "on-going process of transformation", "adding value", "enhancing and empowering" and that it "effects changes and presumably enhances the participant" (p. 24). This refers to a deep-seated change not only of the students but also of the approaches of the tutors. The survey by Carmichael et al. (2001) on the quality of various student-centred teaching approaches in the different educational sectors, acknowledged that the value of this transformative effect on the learning process was not only confined to the students but also to the institution as the driver to continually improve on what they do in order to meet the needs of the students. Likewise, in Bramming's (2007) presentation of the concept of 'strong learning' as "transformation" (what the students have become) and as "an ontological condition for learning" (p. 46), learners are very much involved and are active participants in the learning process as opposed to just being consumers or recipients of a service transaction

provided by institutions. This is very much consistent with the principles of a student-centred learning approach (See Chapter 2: *Student-centred learning approach*, pp. 81-97) and resonates well with Rogers' proposition (1969, 1983) and that of Harvey and Green (1993). A generic model for quality in education developed by Srikanthan and Darlymple (2002, 2004) also focused on transformation in terms of adding value and empowering learners. Likewise, Constructivist approaches are also intended to facilitate transformative learning.

Personal transformation as an educational quality aspiration must be shared by all stakeholders, the institution, tutors and students. The role of the tutor as a guide and facilitator with holistic approaches in his/her teaching practice is critical, as are the students who must be open and ready to participate in an educational experience that could potentially change their attitude and motivation. The institution must also seek to empower tutors and students by engaging with them in the learning and teaching decision-making process.

Quality is successful completion and graduation

Most of the student participants in this study were returning adult learners, some of whom already had a qualification and others who were embarking on their first tertiary experience. The drivers for successful completion were the students themselves wanting to succeed, the tutors' commitment, and also the government's increased focus on improved educational outcomes. The government requires regular reporting of student outcomes which include completion, retention, attrition, and graduation rates as well as job placement and transfer rates (Eaton, 2006). "In an increasingly competitive educational environment, measures such as completion and retention also form the basis for the evaluation of institutional and student performance " (S. Smith et al., 2011, p.31). Governments have utilised the 'carrot and stick' motivational approach to enable tertiary institutions to remain

accountable and meet the expectations of the stakeholders. As part of the government's strategy in investing in New Zealand Tertiary Education, the government has imposed compliance requirements connected to funding. In order to remain compliant and continue to receive government funding, completion, retention and graduation are some of the key measures in evaluating the performance of the institution. The institution then uses the same measures to assess the performance of their academic staff by tracking the number of students who complete the course successfully. The funding mechanism is structured to improve quality learning and teaching by focusing on outcomes rather than on student numbers. However, for Barr and Tagg (1995), this form of funding mechanism severely constrains the paradigm shift in the classroom to a student-centred, holistic, transformational learning approach. They suggest instead that governments should "give institutions the latitude and incentives to develop new structures for learning" (Barr & Tagg, 1995, p. 25).

At a personal level, graduation for many student participants was the ultimate measure or evidence of their successful educational journey. The tutor participants felt very strongly about their commitment to support and assist their students to complete the course successfully. Tutors also expressed genuine desire to see their students develop holistically and hopefully secure a stable job upon graduation. One tutor indicated that some students were happy to learn just a component of the course rather than complete the full qualification. For these students, educational success may not mean graduation from their programme. Thus, for some, success is relative.

The implication of graduation and successful completion as a characteristic of quality learning and teaching is not only about what happens in the learning environment but also about other institutional processes that must support such a quality goal. The government's

educational policies and funding mechanisms need to be broader to incorporate more student-centred measures of quality in learning and teaching. The biggest challenge is for the institution to devise innovative strategies and processes to reconcile the demands of graduation as a statistic and graduation as an educational outcome that ensures a transformative, empowering learning experience for their graduates. Students' personal situations, characteristics, background and motivation for learning as well as other institutional elements also influence completion and graduation. The institution's capacity, strategic direction and learning and teaching approaches also influence the provision of quality educational experiences to the students.

Summary for research question 2:

In what ways does the mixed-mode programme delivery impact upon the quality of learning and teaching?

This section discussed the broad concept of quality learning and teaching as identified by both tutors and students. Significant similarities between the two groups were found in some areas as well as contention in others. There was an overall trend highlighting the need for all interlinking processes and systems to be more connected and focused in supporting quality learning and teaching.

Figure 8.1 attempts to present a holistic view of the discussion of this section. It encapsulates the integration of all the elements and dimensions of a quality learning and teaching experience from a student-centred perspective and serves as an effective pedagogic framework to guide the advancement of a holistic quality learning experience.

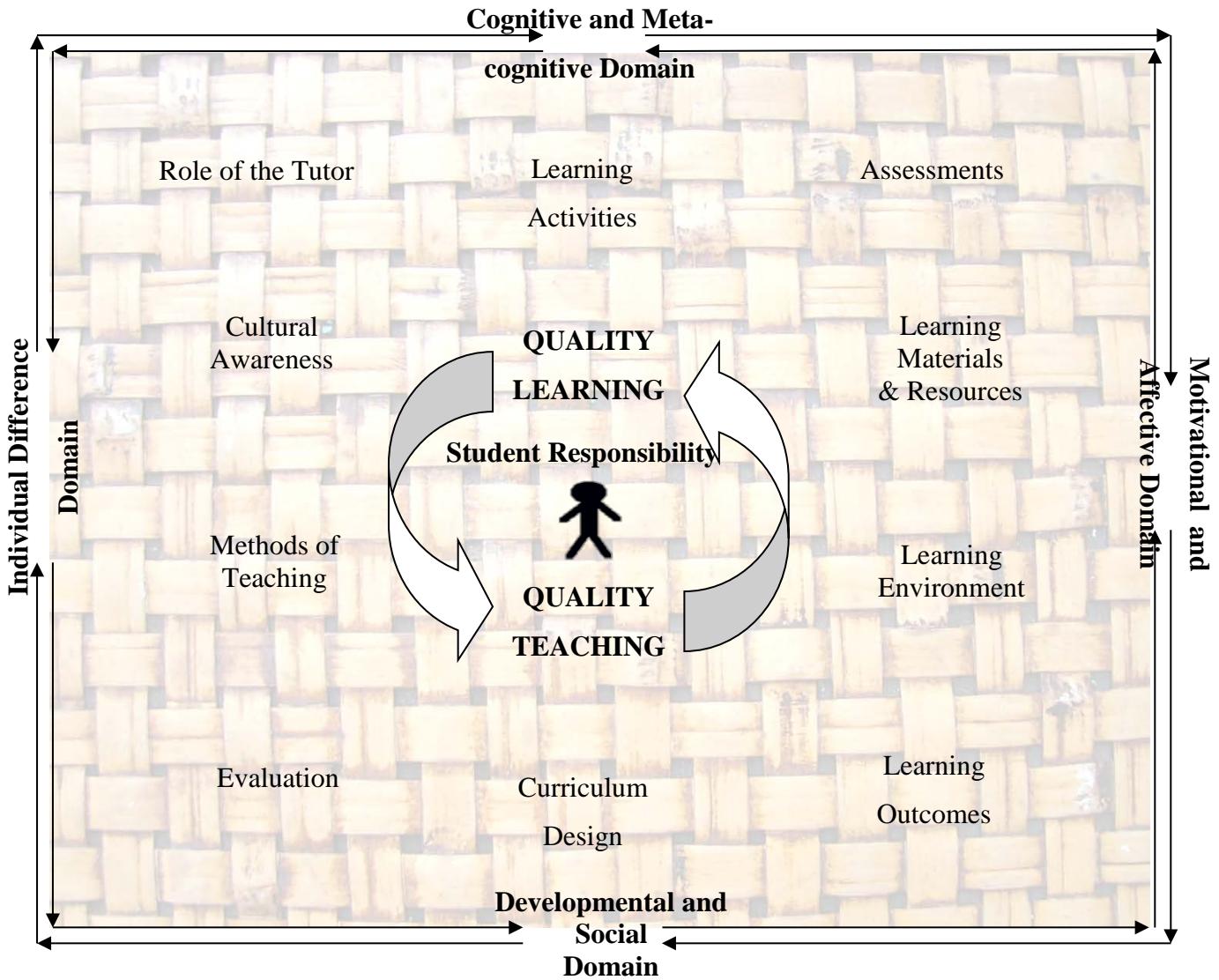


Figure 8.1 The Raranga (weaving) of the learning and teaching processes

The schematic presentation in Figure 8.1, the *raranga* (weaving) of the learning and teaching processes depicts how the IFSCL dimensions and APA Learner-centred domains are intertwined as in the *harakeke* (flax) for quality education. The *raranga* (weaving) made from *harakeke* (flax) has a purpose and significance in the culture, history and spirituality in Māori society. There are certain customs and traditions that must be adhered to when doing *raranga*. *Harakeke* was “used to make shelter, cloaks, baskets, floor mats, sails for canoes, traps for catching birds and ropes for fishing” (Auckland Museum Te Papa Whakahiku, 1997, p. 4) The *raranga* as pictured in Figure 8.1 symbolises the interlocking of the different processes and approaches with the aim to deliver student-centric, quality education to the

learners. It is the weaving together of the various dimensions and principles that presents an integrative concept of quality, student-centric educational experience. The figure consists of the APA Learner-Centred Domains (Cognitive and Meta-cognitive, Motivational and Affective, Developmental and Social, and Individual Difference Domains) that frame the *harakeke*. These domains are inclusive of the development of all aspects of students' well-being in order to grow and develop holistically. The various dimensions of the IFSCL depict the weaving together of *harakeke* which are intertwined to produce a student-centric, quality learning and quality teaching experience to the students. The *harakeke* also symbolises the importance of addressing the diversity of the background of the students with the use of a range of dynamic, cross-cultural teaching approaches. The differences as well as similarities in their worldviews must be incorporated in the pedagogical practices in order to enrich and enliven the interaction in the class. The learning and teaching approaches must be culturally responsive by adapting to the ways of learning of the multi-cultural students. In this study, respect and recognition to the approaches based on Māori framework and indigenous paradigm as discussed by the participants was considered as a defining factor in the provision of quality, student-centric experience.

Learning is a shared and collective responsibility of those who have a stake in student learning. Each stakeholder has complementary roles and responsibilities in enhancing students' educational experience. All the key players in the provision of a quality learning and teaching experience must allow for opportunities for students to take ownership and responsibility of their learning. The student in the middle indicates that all the elements are centred on the learner, and at the same time highlights the student's shared responsibility in their learning. The provision of optimum educational experiences demands much more from tutors and students. The learning environment and teaching approaches must facilitate this.

The students must accept that they have a responsibility and a role to play in their learning.

Students must also take advantage of other opportunities over and above the learning and teaching classroom activities. These activities are designed to support and enhance their holistic learning experience in a non-academic way such as extra-curricular activities, cultural activities, campus life and use of facilities (library, clubs, and student support services). The successful achievement of students' learning goals through quality educational experiences is therefore a shared and collective responsibility of the key players in learning and teaching.

Chapter summary

This chapter discussed in-depth the findings from the research questions, with connections made to the review of literature and the implications for practice. Learning theories rooted in Constructivism, Adult Learning, conceptions of quality learning and teaching and Māori pedagogies revealed strong associations with the principles of student-centred learning. The Integrated Framework for Student-Centred Learning (IFSCL) with the APA Learner-Centred Domains were utilised jointly as a consolidated model to examine the quality of learning and teaching in mixed-mode programmes. This study also elicited from the participants their definition of quality learning and teaching, what the indicators were, and what the participants believed were strategies to continually improve. How well the quality of education is able to meet the expectations of the participants is pivotal to those who both deliver and receive it.

Student-centred learning approach focuses on the student and their learning processes rather than the mere transmission of knowledge via the content of the programme. The teaching approaches and all other ancillary support services must foster and facilitate such

growth and development. The integration of the IFSCL with the APA Learner-Centred Domains provided a holistic structure that embodied the principles of a quality student-centred learning approach. With the inclusion of the ‘Cultural Awareness’ dimension, the framework encompassed all aspects of learning and teaching with the student as the centre of all the activities. Being culturally responsive in the learning and teaching strategies is critical in the enhancement of the quality of learning in a multi-cultural classroom. However, as evidenced from the implications of the findings, the success of its implementation was dependent on context, as well as the role played by the organisation, tutor and students themselves.

The conception of quality in learning and teaching was simultaneously multi-faceted and unified in terms of the desired outcome for the students. There were recurring themes in the findings and a general consensus amongst participants that although there was a high regard for the quality of learning and teaching that they experienced, there was a need for continual improvement. The findings validated the provision of quality learning and teaching as closely nested within a number of interlocking contextual elements and players. Ensuring that students receive high quality learning and teaching experiences is paramount and this was considered to be an intricate and complex process of weaving the responsibilities of all stakeholders through a student-centred learning approach. Not all the findings can be generalised to mainstream education or even to other indigenous learning environments; however, they elucidated and highlighted some specific gaps and issues at *Te Wānanga o Aotearoa*.

The findings for this study were derived from the various realities experienced by tutors and students, who provided pragmatic information in regards to their conceptions of

quality learning and teaching, and how and what it looks like in practice for them. There were factors in the conceptions of quality which can be attributed to the role of the institution as well as to the tutors' attributes. In addition, students' own perceptions of quality learning and teaching were also wide-ranging. The tutors, institution, students and government were all considered to be the catalysts for achieving quality learning experiences. For the tutor, along with their professional and personal attributes, quality was mainly about how well they facilitated and supported the students in their learning goals. For the students, it was about how well they learnt and developed beyond the academic aspect. It has also been highlighted in the discussion that a quality educational experience connotes responsibility for the students to take active control and management of their own learning. This includes their attitude, commitment and motivation to learning, which shape and influence their development. Likewise, the institution has grave responsibility to offer quality learning and teaching through the provision of relevance in the curriculum, comprehensive student support services, functional learning and teaching resources, modern facilities, and responsiveness in addressing student and tutor feedback. For the government, it is about how well they support the institution and the students in their pursuit of quality education, whether in terms of funding, policy directions or economic opportunities for students who graduate.

From the analysis of the responses, it is prudent to conclude that the participants were generally positive about the learning and teaching practices experienced in the mixed-mode programmes despite some evidence of lack of student-centeredness in a number of dimensions. Presenting the suggestions for improvement as propositions, highlights the paradigm shift required in stakeholders to achieve quality learning and teaching.

Chapter 8 will provide an overview of this study, conclusion and recommendations for further studies based upon the major themes identified in this study.

CHAPTER 8

Conclusion and Recommendations

Introduction

This study investigated the application of student-centred learning principles in programmes delivered via mixed-mode and their impact on the quality of teaching and learning through the perceptions of tutors and students. It also explored the conceptions of quality education held by tutors and students. Research suggests that perceptions of quality teaching as viewed by the tutors have an impact on their teaching practices. Similarly, conceptions held by students will also influence the learning process and outcomes. It was argued that in order for quality education to occur, the emphasis should be on student learning rather than on the teaching, a fundamental tenet of student-centred learning. Suggestions and recommendations as to how the quality of the educational experience of the students could be improved were also examined.

This chapter presents a summary of the findings for both the quantitative and qualitative phases of the study. It includes the implications and propositions for a better alignment of the current teaching and learning practices with a student-centred learning approach and improved quality educational experience at *Te Wānanga o Aotearoa*. Recommendations for further studies in student-centred learning and quality improvements are also presented below.

Summary of findings for the quantitative phase

The quantitative survey data collected from tutors (n=18) and students (n=194) examined their perceptions regarding the alignment of the learning and teaching practices with a student-centred learning approach through the following research questions:

Research question 1:

How are the current learning and teaching practices utilised on mixed-mode delivery consistent with the principles of a student-centred learning approach?

Subsidiary questions:

- a) *To what extent do the current learning and teaching practices in a mixed-mode delivery align with the principles of a student-centred learning approach?*
- b) *How do tutors' perceptions of the current learning and teaching practices compare with those of students?*

The findings of the survey showed that the current learning and teaching practices were generally aligned to a student-centred learning approach. The Integrated Framework for Student-Centred Learning (IFSCL) provided a theoretical and pragmatic structure for collecting and analysing the data. It also included elements required for the provision of quality student-centred educational experiences for students. The following are the dimensions of the IFSCL:

- a) Role of the Tutor in the Classroom;
- b) Cultural Awareness;

- c) Learning Environment;
- d) Learning Activities;
- e) Learning Resources;
- f) Assessments;
- g) Teaching Methods and Strategies;
- h) Learning Outcomes;
- i) Evaluation; and
- j) Curriculum Design

Each of the dimensions contained items related to educational principles which are considered to be pivotal in attaining successful outcomes for the students. The framework is an exhaustive list of the different components of learning and teaching underpinned by the principles of a student-centred approach and Constructivism. When used as a tool to guide the tutors in their teaching, the framework is a great foundation for enhancing the quality of the pedagogical experience of the students.

Each dimension scored highly although there were individual items in a number of dimensions which rated poorly. There was a similar trend in rating by both the tutors and students, indicating strong agreement in their perceptions of the teaching and learning practices. However, while findings showed a generally positive alignment with student-centred learning, there were also some weak aspects in which student-centred learning was not evident.

The two highest scoring dimensions were the ‘Role of the Tutor in the Classroom’ and ‘Cultural Awareness’. The tutor’s role in the classroom was perceived to be the most

influential factor in ensuring that students achieved successful outcomes in their learning as well as the most critical in the provision of quality student-centred educational experience. More important than the delivery mechanisms of the programmes, are effective teaching approaches that tutors employ in the learning processes to enable students to achieve their learning goals. This includes not only their expertise in the subject being taught or their personal attributes, but also the depth and quality of the tutor-student relationships built in the classroom. Maintaining positive tutor-student relationships and interaction between students emerged strongly in this study. Tutors fully embraced the concept of ‘duty of care’ towards their students by fostering a warm and respectful learning environment. While this is also a feature of mainstream education, both groups of participants discussed that their experience at TWoA was more profound and more personal. Tutors vary in their personal attributes; however, their ability to cater to the cognitive as well as affective, social and cultural aspects of learning was clearly valued by the participants in this study.

In relation to ‘Cultural Awareness’, the findings indicated that the recognition of culture had a pervasive impact on student learning by the adaptive response to the differences in cultural identity and ways of learning. This study found that tutors who were culturally proficient employed holistic teaching strategies that recognised and respected the cultural identity and values of the students. Recognising the differences as well as similarities in culture was a teaching resource in developing deeper understanding by incorporating multiple perspectives in the learning environment. Being an indigenous Māori institution, the learning environment at TWoA is imbued with the observance and practice of *Tikanga Māori* and *Kaupapa Māori*. Both Māori and non-Māori students reported feeling nurtured in a *whanau/familial atmosphere* that gave them a sense of belonging, and enabled deeper connections and positive relationships with one another and with the tutor. Māori teaching

concepts such as *Ako*, *Te Whara Tapa Wha*, *Whakawhanaungatanga* and *tuakana-teina* enhanced the quality of the educational experience of the students. Similarly, participation in Māori practices like *pōwhiri*, *karakia*, and learning in a *marae* facilitated holistic student development. These culturally appropriate and relevant teaching and learning approaches are based on indigenous framework and *Mātauranga Māori*.

Non-Māori students learned to embrace and respect Māori perspectives as well as the differences and the similarities with their own culture. For the Māori learners, TWoA was an extension of their *whānau*, offering a secure and comfortable environment, not one that was competitive or instilled a sense of failure if they did not succeed at the first attempt. The students were supported to realise their potential. For the tutors, theirs was not just a job but more about influencing and moulding students for success.

The dimensions of the IFSCL which were perceived to be least aligned to student-centred learning approach by both groups were ‘Learning Outcomes’, ‘Evaluation’ and ‘Curriculum Design’. While attracting a generally positive response rate, both groups felt that there were items in these dimensions which were not completely met and needed to be addressed.

On the ‘Learning Outcome’ dimension, the clear finding was that there was no learning contract between the tutor and the student, nor was there provision to negotiate the learning outcomes. The learning contract is intended to outline how and in what ways the students will be able to meet the learning outcomes based on their own abilities. In fact most students were baffled by the term. Similarly, students have never attempted to negotiate their learning with their tutors, apart from discussing extensions or deadlines for the submission of

assessments. Students believed that their ‘tutor knows best’, and were therefore ready to accept what was offered to them. Likewise, most of the tutors did not offer to negotiate a learning contract, which to them would have been time consuming to undertake with individual students. The value of learning contracts allows students to be involved in their learning, thus becoming more motivated and empowered to monitor their progress against their learning goals. Both tutors and students need to be convinced that formalised learning contracts are for the benefit of student success and additionally the extent to which the curriculum will support individual learning contracts needs to be investigated in further research.

The findings on the ‘Evaluation’ dimension revealed the lack of formative evaluations and the paucity of feedback on the results of the formal, institution-wide evaluations. The students were dissatisfied with the lack of formative feedback from tutors. Students valued on-going quality feedback regarding their performance in meeting the requirements of the course. Such timely feedback is critical in ensuring that students achieve their learning outcomes. Likewise, the quality of feedback; how it was obtained, and how it was provided was also important to the students. If feedback is provided constructively, and identifies both strengths and weaknesses, then students are able to act accordingly to achieve their learning outcomes. Regarding institution-wide evaluations, students wanted to know the results of the evaluation as well as the plan of action to be taken. Because of the weak feedback loop, the students questioned the merit of conducting such evaluations which they perceived as merely a ‘tick the box’ approach for the institution to demonstrate compliance with government requirements. To dispel the perceptions of superficiality, both tutors and the institution need to ensure that feedback to the students is managed more effectively.

With regards to ‘Curriculum Design’, the findings indicated little or no engagement with the students in the development of the curriculum. Collaboration with students when developing the curriculum was scarcely practiced and neither were student background and capabilities taken into consideration. When viewed together with the finding on ‘Learning Outcomes’, it is evident that students have little control over their learning when there appears to be no opportunity to negotiate what they can learn or how they can meet the learning outcomes. These were the significant areas where the learning and teaching practice diverted most from a student-centred approach. If students are to be empowered to confidently take full responsibility and contribute effectively to their learning then changes must be made to the current learning and teaching practices. These are discussed as ‘propositions’ further in this chapter and include items from other dimensions for a better fit with a student-centred learning approach.

The remaining dimensions ‘Learning Environment’, ‘Learning Activities’, ‘Learning Resources’, ‘Assessments’ and ‘Teaching Methods and Strategies’, showed a closer alignment with a student-centred learning approach. However within the dimensions, the low rating of some items indicated areas in need of improvement to accommodate a better fit with a student-centred learning approach. These are discussed as propositions further in this chapter.

Given the findings of this study, it is very clear that all dimensions need to be well-integrated for quality learning and teaching to occur. The findings for each dimension imply that their application in pedagogical practices was considered to be pivotal in ensuring quality, student-centred educational experience for the students.

Summary of findings for the qualitative phase of the study

Research question 2:

In what ways does the flexible mode of programme delivery impact upon the quality of learning and teaching?

Subsidiary questions:

- a) *What are the perceptions of students and tutors regarding the quality of learning and teaching strategies utilised on these programmes?*
- b) *How do the students and tutors believe the delivery might improve?*

The qualitative data collected from the responses from students (n=18) and tutors (n=10) in the open-ended items in the survey instrument and interviews confirmed the results of the quantitative data. The ‘Role of the Tutor in the Classroom’ and ‘Cultural Awareness’ were the dimensions highly regarded by the participants during the interviews. Similar areas of concern were also extracted from the qualitative findings. The participants’ perceptions of the quality of learning and teaching in the mixed-mode programmes were defined and included a range of mixed opinions. Specifically, there were divided viewpoints regarding the effectiveness of the mixed-mode delivery. The majority of the participants favoured the mixed-mode delivery, which gave them the flexibility to work, study and raise a family at the same time. Others expressed concerns regarding the lack of contact or face-to-face interaction with the tutor and other students. While a number of students perceived the self-directed learning component as an opportunity for growth, self-development and self-management in their learning, others struggled - finding it challenging and eventually losing their motivation. Both groups of participants suggested an increase in the face-to-face component.

Views regarding the quality of learning and teaching

The views on quality learning and teaching were multi-faceted and extensive indicating the complex notion of quality. In broad terms, students' quality concepts generally concerned holistic development through the intertwining of a number of significant factors, while tutors' views of quality tended to relate to their own professional attributes and proficiencies in order to deliver quality teaching.

The major revelation, however, highlighted the benefits of quality learning and teaching extended beyond the immediate classroom experience. The participants reported that ultimately, the competencies and capabilities gained while enrolled in the course must translate into employability and the transportability of the qualification in the global market. There were definitions of quality education as the transformation and development of the individual, but the decisive indicator was the opportunity to apply the competencies, knowledge and skills gained in the employment market. This implies that the provision of quality learning and teaching calls for a complementary interplay of input by all stakeholders; the institution, tutors, students and the government as well as the economic, political and social factors.

Implications and propositions

Although the findings confirmed that student-centred principles were evident in the teaching and learning practices in mixed-mode programmes, there were also weaknesses which did not reflect a student-centred approach. The following are a number of the implications and propositions drawn from the weak aspects of the teaching and learning

practice to enhance student-centeredness as well as incorporating the concepts of quality education as revealed in this study. The implications and propositions apply to the four main stakeholders in tertiary education: the institution, tutors, students and the government.

Propositions for the institution

The findings of this research indicated that the institution:

- Develop a sustained commitment in the strategic direction of the organisation to continually improve the educational experience of students, together with the provision of resources (human, financial, technological and physical resources) that will contribute to the enhancement of quality learning and teaching;
- Be responsive and demonstrate consideration to the students. Ensure that action plans resulting from the results of evaluations are developed, communicated (to all stakeholders) and implemented within the stipulated timeframes;
- Engage tutors and students in all initiatives aimed at enhancing student learning. The students must be provided with opportunities and guidance to effectively participate and be involved in the learning and teaching activities which include curriculum development, negotiation of learning contract, formative assessments and development of action plans from the results of evaluation;
- Support a research culture and the endeavours of academic staff to up-skill with higher level studies. Tutors must be provided with opportunities for professional development to continually improve their standard of teaching. This includes

willingness to integrate the use of ICTs in their teaching practice and delivery; as well as learning new approaches that will further improve quality;

- Ensure that the curricula are relevant to the requirements of the labour market through regular review and engagement with industry leaders. This also applies more broadly to the strategic development of the types and levels of new programmes in order to produce graduates with employment skills, knowledge and high level thinking;
- Promote a culture of quality improvement in all aspects of students' well-being. The institution must develop strategies for the implementation of student-centred learning approach as outlined in the IFSCL; and
- Aim for the continued improvement of facilities, ICTs and other learning tools as well as the development of resources utilised in mixed-mode programmes must be enhanced to provide more opportunities for students to effectively collaborate and engage with the programme and each other. This will supplement and complement the lack of face-to-face interaction in the class.

Propositions for the tutors

The findings of this research indicated that the tutors of *Te Wānanga o Aotearoa*:

- Critically reflect on gaps or areas for improvement in their teaching practice and be well informed with current and new knowledge of their subject areas by

incorporating new approaches and advances in learning technologies to further improve the learning environment;

- Be responsive and receptive to students' individual uniqueness in terms of their learning orientation, characteristics and background. Provide opportunities for culturally diverse students to engage, learn and develop holistically. This includes scaffolding strategies that are culturally proficient in order to transform and develop students' worldviews and consciousness to higher levels;
- Pursue professional growth by engaging in research, learning new strategies and learning models that will motivate and empower them to continually deliver effective teaching by utilising diverse pedagogical approaches.
- Be proactive and consistent in creating two-way feedback, regularly informing students of their progress towards their learning goals. Ensure that institution-wide evaluations are effectively managed and feedback is made explicit to the students.
- Provide a positive learning environment that encourages collaboration, engagement and active participation among students; and
- Support and promote the holistic development of the students in all aspects of their well-being.

Propositions for students

The findings of this research indicated that the students at *Te Wānanga o Aotearoa*:

- Make greater commitment and take ownership of their learning and the responsibilities and expectations placed upon them;
- Engage in opportunities to participate and contribute meaningfully to their education in order to achieve their learning goals;
- Understand and define their aspirations and motivations with clear learning goals, recognise their strengths and weaknesses and be prepared to be self-directed and autonomous in their pursuit of higher learning;
- Be proactive in engaging and providing feedback to their tutor and the institution regarding their learning experience, while also being open-minded and receptive to tutor feedback in improving their performance; and
- Be resourceful in meeting their learning needs and expectations as learners, and utilise all opportunities for learning, the resources provided and the academic support services available in order to advance the quality of their educational experience.

Propositions for the New Zealand government

The findings of this research indicated that the government of New Zealand:

- Develop tertiary education policies and legislation that reflect more liberal, student-centred quality measures in the development of human and social capital,

and invest in accessible education to equip citizens with the knowledge and skills required to be productive and to contribute to the economic well-being of the nation;

- Be committed to supporting the reforms and transformation of education in order to continually meet the demands of the global economy by providing supportive funding mechanisms that acknowledge other ‘softer’ quality measures not readily apparent or quantified. (This will allow institutions to be more innovative in developing curricula and teaching strategies to advance opportunities for holistic and transformative learning);
- Prioritise the economic development of the nation to provide and sustain employment opportunities for graduate students while continuing to address the need for investments in order to create opportunities; and
- Develop strategies and respond to the continuous increase in the demand for employment arising from the growth in numbers of those who complete qualifications.

The above propositions present challenges to adapt and change practices and/or approaches in order to enhance the quality of student-centred education. They also present opportunities for redefining and re-confirming what is essential in the provision of quality education from the viewpoint of the tutors and students. The proposed strategies serve to emphasise that no one stakeholder can improve the quality of the teaching and learning

process independently and that the multi-faceted concept of quality encompasses a wide-range of elements that must consistently exist in a harmonious balance.

Recommendations for further study

This study ascertained student-centred learning strengths and the weaknesses of the pedagogical practices of the programmes delivered via mixed-mode. Propositions were also outlined for the improvement of the quality of the educational experience and alignment of the practices with student-centred learning principles. The scope of the study is limited by the size of the sample and the selection of mixed-mode programmes only. There are a number of other opportunities for on-going research that will help illuminate clearer understanding of a student-centred educational experience.

In this study, the participants were mostly adults enrolled in mixed-mode programmes. By applying the IFSCL to other modes of delivery, at higher levels of study as well as to a wider age range, a more complete picture of student-centred learning will help inform decision makers and stakeholders when planning and implementing effective learning and teaching approaches. Increasing the sample size for both student and tutor participants will enhance the reliability of the outcomes of the study.

The IFSCL framework provides educational considerations in facilitating quality student-centred teaching and learning experience. This framework could be institutionalised as an instructional model to guide the academic staff towards a student-centred teaching practice. Further studies could explore how the elements of the IFSCL could be integrated to improve the quality of the educational experience.

For the findings of the study to be useful to the organisation, the IFSCL framework must be recognised and accepted as a tool in the planning and delivery of mixed-mode programmes. This will require the endorsement of academic management and continuing staff professional development training. In order for the framework to underpin the provision of quality student-centred education, it must be reinforced with robust support systems, resources and processes. A continuous cycle of improvement is needed to review and assess student outcomes in the short term and over time. Likewise, an assessment of tutors' perceptions as to whether the framework has influenced their teaching approaches will also be of value to the organisation in the pursuit of quality student-centred learning. Such studies will serve as mechanisms in evaluating areas that need further improvement.

Conclusion

There were two themes examined in this study – that of student-centeredness and the quality of the learning and teaching practices in mixed-mode programmes. It is hoped that the findings of this study will add to the existing knowledge-base in areas pertaining to improving teaching effectiveness, enhancing student-centeredness and the quality of learning and teaching. More importantly, it emphasised the need for concerted and complementary effort by all stakeholders in the provision of quality student-centric education. The study supports the development of a culture of continuous quality improvement in the areas of effective learning and teaching. It is risky to implement changes for improvement without having an understanding of the multiple views of the students and tutors.

The conclusions drawn from the findings reinforce a student-centred approach as an ideal principle of learning. Undoubtedly, the realisation of student-centred principles in their entirety is not easy to achieve. It is a manifold concept comprising of various and complex dimensions of learning and teaching processes focusing on the need of each student as an individual to be developed to their fullest potential. The review of literature has demonstrated that student-centred learning has great promise and useful outcomes, but its implementation has always been difficult. This study indicated that the complex interaction of the different dimensions needs to be cohesive in order to provide quality, student-centred educational experiences to students. It was apparent that not all the items and dimensions can be fully achieved in the actual learning and teaching practice in the classroom.

Although a quality, student-centred educational experience is challenging, the drive to have a paradigm shift must continue. Tutors need to create stimulating and supportive learning experiences for the students to scaffold their self-improvement and development and foster personal transformation. Similarly, students need to be proactive, actively involved and willing to meet the challenge of being responsible in achieving their own learning goals.

The findings of this study have shown that the delivery of programmes through a combination of various modes of delivery was well received by both groups of participants and that they shared consistent and similar perceptions. Although there were concerns regarding the student-centeredness and quality of the mixed-mode programmes, the participants reported that such a mode of delivery was still their preferred option. The tutors reported that they believed they had given their best in supporting the students to achieve their learning goals and that students had benefited, despite some issues that they may have had. It was clear from the findings that despite the concerns, mixed-mode delivery was

perceived to be effective in delivering quality, student-centred learning. This is significant in refuting the notion that mixed-mode delivery lacks quality. The tutors also reflected that regardless of the mode of delivery or teaching strategies, ultimately, students must assume responsibility for their learning. The institution and the tutor promote opportunities and provide a conducive learning environment to foster and contribute to students' growth and development.

In addition, the findings also highlighted the importance of recognising the cultural capital that each student has. This concept is applied by practising culturally relevant pedagogy in the classroom which is considered to be critical in improving the quality of the educational experience of the students, as well as their outcomes. In this study, pedagogical practices based on indigenous epistemologies and *Mātauranga Māori* contextualised the learning allowing the students to build upon their experiences and connect with other ways of knowing. While the participants in this study are not all Māori, they are very accepting of the approaches employed in their learning. Both tutors and students valued the interaction of culture in the classroom, learning from their differences as well as similarities of their distinct culture. A number of the espoused views regarding the quality of learning and teaching were not fully manifested in the experience of the participants. This implies the complexity of the concept and the influence of the wider national, economic, social, political and even cultural factors.

In summary, while the conceptualisations of quality were varied, they nevertheless fell into two broad categories; the learning and teaching approaches and processes as well as the outcomes of learning and teaching. Not all outcomes are readily assessed and measurable as some extend beyond the boundaries of the institution. The provision of quality, student-

centred learning educational experience is not easy to accomplish as it requires the interplay of various players and elements including the institution's strategic direction, the tutor's willingness to try new ideas in their teaching approaches, as well as students' taking responsibility for their learning. Even the government has a role to play in terms of the expectations from the investment in education. All stakeholders must take ownership and share in the aspiration of quality educational outcomes.

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Every reasonable effort has been made to acknowledge the owners of copyright material. I would be pleased to hear from any copyright owner who has been omitted or incorrectly acknowledged.

APPENDICES

APPENDIX A: Ethics Approval from Curtin University

memorandum

To	Dr Kathryn Dixon Education
From	A/Professor Stephan Millett, Executive Officer, Human Research Ethics Committee
Subject	Protocol Approval HR 179/2006
Date	22 March 2007
Copy	Dr Lou Siragusa, Education Chona Kennedy Manager Student Registry Te Wananga O Aotearoa 320 Factory Road, Te Awamutu DDI: 07 872 0429 Graduate Studies Officer, Division of Humanities



Office of Research and Development

Human Research Ethics Committee

TELEPHONE 0286 2784
FACSIMILE 0286 3793
EMAIL hrec@curtin.edu.au

Thank you for your application submitted to the Human Research Ethics Committee (HREC) for the project titled "*Application of student-centred learning principles to mixed-mode delivery: An investigation of theory, practice and impact on the quality of teaching and learning*". Your application has been reviewed by the HREC and is **approved**.

- You are authorised to commence your research as stated in your proposal.
- The approval number for your project is **HR 179/2006**. Please quote this number in any future correspondence.
- Approval of this project is for a period of twelve months **22-03-2007 to 22-03-2008**. To renew this approval a completed Form B (attached) must be submitted before the expiry date **22-03-2008**.
- If you are a Higher Degree by Research student, data collection must not begin before your Application for Candidacy is approved by your Divisional Graduate Studies Committee.
- The following standard statement **must** be included in the information sheet to participants:
This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR 179/2006). If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee, c/- Office of Research and Development, Curtin University of Technology, GPO Box U1987, Perth, 6845 or by telephoning 9266 2784 or by emailing hrec@curtin.edu.au.

Applicants should note the following:

It is the policy of the HREC to conduct random audits on a percentage of approved projects. These audits may be conducted at any time after the project starts. In cases where the HREC considers that there may be a risk of adverse events, or where participants may be especially vulnerable, the HREC may request the chief investigator to provide an outcomes report, including information on follow-up of participants.

The attached FORM B should be completed and returned to the Secretary, HREC, C/- Office of Research & Development:

When the project has finished, or

- If at any time during the twelve months changes/amendments occur, or
- If a serious or unexpected adverse event occurs, or
- 14 days prior to the expiry date if renewal is required.
- An application for renewal may be made with a Form B three years running, after which a new application form (Form A), providing comprehensive details, must be submitted.

Regards,

A/Professor Stephan Millett
Executive Officer
Human Research Ethics Committee

APPENDIX B: Ethics Approval from Te Wānanga o Aotearoa



Te Wānanga o Aotearoa

Chona Kennedy
Te Wananga O Aotearoa
P O Box 151
HAMILTON

15 September 2004

Tena koe Chona,

Re : Application for Ethics approval of Research Proposal

I am pleased to advise that the Ethics Committee has approved your request
Research Proposal titled:

***"Application of student-centred learning principles to mixed mode
delivery : An Investigation of theory, practice and impact on the quality
of teaching and learning".***

We believe this to be a valuable piece of research and would like to wish you
all the best with your research.

Nāku noa,

A handwritten signature in blue ink, appearing to read "V Tawhai".

Nā Valletta Tawhai
Chair of the Ethics Committee

APPENDIX C: Permission Request from the Regional Manager



School of Education

GPO Box U1987, Perth 6845 WA

CRICOS provider code: 00301J

Tēnā koe :

I am currently working on my PhD with Curtin University of Technology, Perth, Australia.

The aim of my research is to investigate the application of student-centred learning principles in programmes delivered through mixed-mode. My research aims to:

- 1) Determine whether the learning and teaching practices in programmes delivered through mixed-mode are consistent with the principles of a student-centred learning approach from the perspectives of the students and tutors;
- 2) Investigate the perceptions of students and tutors about the quality of learning and teaching of such programmes; and
- 3) Elicit from students and tutors how the quality of the learning and teaching experience for the student could be improved.

As part of this research, I will be collecting data from potential participants (students and tutors) regarding their perceptions and experiences of the current learning and teaching in mixed-mode programmes. The programmes selected are: Te Ara Reo programmes, Toi Paemataua, Social Services, Certificate in Small Business Management, Certificate in Waka Ama, Certificate in Māori Ambassador and Leadership, Diploma in Business Enterprise and Bachelor in Iwi Environmental Management.

I would like to request your permission to conduct my research through the administration of a survey instrument in the classrooms in the month of July - August. Answering the survey instrument will take no longer than 20 minutes. There will also be a follow-up interview with those who agree to participate. I am hoping that with your permission and support of this research, I will be able to solicit the cooperation of the tutors and students of the selected programmes.

This research has been approved by both *Te Wānanga O Aotearoa* and Curtin University Ethics Committees. I will ensure that the strictest confidentiality and anonymity is maintained. On receipt of your approval, I will include it as support when seeking permission from the *Kaiako Matua* and *Kaiako*.

I look forward to your positive response, and will be delighted to discuss any aspect of my research with you if you wish to know more.

Naku Noa Na

Chona Kennedy
Researcher

APPENDIX D: Permission Request from the Kaiako Matua (Team Leader)



School of Education
GPO Box U1987, Perth 6845 WA
CRICOS provider code: 00301J

Date:

Tēnā koe:

I am currently doing my PhD at Curtin University of Technology in Perth, Australia. I have Brad's approval to seek your permission to request the co-operation and participation of the kaiako and tauira in my research. I have attached an 'Invitation Letter to Participate' to give you more information about my research. Will it be possible for me to attend one of your classes to administer my survey instrument in the class?

With your approval, I will contact the kaiako and if they agree to participate, I will arrange with them a suitable day/time to administer the survey instrument in the class.

Looking forward to hearing from you.

Naku Noa Na

Chona Kennedy
Researcher

APPENDIX E: Permission Request from the Kaiako (Tutor)



School of Education
GPO Box U1987, Perth 6845 WA
CRICOS provider code: 00301J

Date:

Tena koe:

I am currently doing my PhD with Curtin University of Technology in Perth, Australia. With Brad's permission, I would like to request your (you and your tauira) participation and cooperation in my research. I have attached an 'Invitation Letter to Participate' to give you more information about my study. If you consent, I will contact you again at a later date to arrange the administration of the survey instrument in your class, at your most convenient time. I will administer the survey instrument myself.

Looking forward to hearing from you.

Naku Noa Na

Chona Kennedy
Researcher

APPENDIX F: Letter of Invitation for Interviews



School of Education

GPO Box U1987, Perth 6845 WA

CRICOS provider code: 00301J

Tēnā koe:

Thank you very much for participating in my survey. I am now at the Phase 2 of my research where I will be conducting one-on-one-semi structured interviews with the participants. I would like to invite you to please participate in this undertaking for my research to progress further.

The interviews with the kaiako and tauira are to gather comprehensive responses and gain a more in-depth understanding of the emergent themes from the survey responses. The interview questions will explore the perceptions of students and tutors regarding the impact of the current practices on the quality of learning and teaching. The findings from the interviews are intended to answer the second major research question.

During the interviews, you will be asked questions about the themes that emerged from the results of the survey. The meeting will take place at your preferred location and time, most convenient to you. The interview will be between you and me only, not the tauira. The meeting will last approximately 30 minutes or shorter. The interview will be recorded so that I can accurately reflect what was discussed. I will then transcribe the recordings myself.

Your participation will be kept highly confidential and anonymous.

Looking forward to your positive response.

Naku Noa Na

Chona Kennedy
Researcher

APPENDIX G: Consent Form – Participant's copy



School of Education
GPO Box U1987, Perth 6845 WA
CRICOS provider code: 00301J

This Consent Form will be held by the researcher for a maximum of five years and will be destroyed unless otherwise arranged with you.

Title of the Project: Application of student-centred learning principles to mixed-mode delivery: An investigation of theory, practice and impact on the quality of learning and teaching

Principal Investigator: Chona Kennedy

I, _____, give my consent to my participation in the research project: *Application of student-centred learning principles to mixed-mode delivery: An investigation of theory, practice and impact on the quality of learning and teaching.*

In giving my consent, I acknowledge that:

- I have read the information sheet and have had the objectives, procedures and the time involved on the study explained to me.
- I have been given the opportunity to ask questions about my participation in the study and these questions have been answered satisfactorily.

- I understand that my answers will be kept strictly confidential.
- I have the right to withdraw at any time, or to skip any questions that I do not want to answer. I understand that if I withdraw at any time the relevant tapes and transcripts will be destroyed.
- I agree for my interview to be tape-recorded and anonymous quotations will be used to ensure an accurate recording of responses.
- I understand that my participation in the research will involve two phases: The first phase will be to answer a survey instrument. The second phase is to participate in a 20 minute one-on-one interview.
- The recordings and other data collected will be stored in a secured filing system at the house of the researcher. They will only be accessible by the authorised researcher. The recordings will be transcribed and coded by the researcher.
- I understand that participation in this study will not expose me to any form of risk or harm.
- I understand that participation is voluntary and I agree to participate in this study.
- I am signing the form to indicate my understanding and agreement to the above principles.

(Participant's Signature)

(Date)

(Contact Phone No.)

Chona Kennedy

(Researcher's Signature)

(Date)

(Contact Phone No.)

APPENDIX H: Consent Form – Researcher's copy



School of Education
GPO Box U1987, Perth 6845 WA
CRICOS provider code: 00301J

This Consent Form will be held by the researcher for a maximum of five years and will be destroyed unless otherwise arranged with yourself.

Title of the Project: Application of student-centred learning principles to mixed- mode delivery: An investigation of theory, practice and impact on the quality of learning and teaching

Principal Investigator: Chona Kennedy

I, _____, give my consent to my participation in the research project : *Application of student-centred learning principles to mixed-mode delivery: An investigation of theory, practice and impact on the quality of learning and teaching.*

In giving my consent, I acknowledge that:

- I have read the information sheet and have had the objectives, procedures and the time involved on the study explained to me.
- I have been given the opportunity to ask questions about my participation in the study and these questions have been answered satisfactorily.

- I understand that my answers will be kept strictly confidential.
- I have the right to withdraw at any time, or to skip any questions that I do not want to answer. I understand that if I withdraw at anytime the relevant tapes and transcripts will be destroyed.
- I agree for my interview to be tape-recorded and anonymous quotations will be used to ensure an accurate recording of responses.
- I understand that my participation in the research will involve two phases: The first phase will be to answer a survey instrument. The second phase is to participate in a 20 minute one-on-one interview.
- The recordings and other data collected will be stored in a secured filing system at the house of the researcher. They will only be accessible by the authorised researcher. The recordings will be transcribed and coded by the researcher.
- I understand that participation is voluntary and I agree to participate in this study.
- I understand that participation in this study will not expose me to any form of risk or harm.
- I am signing the form to indicate my understanding of and agreement to the above principles.

(Participant's Signature)

(Date)

(Contact Phone No.)

(Researcher's Signature)

(Date)

(Contact Phone No.)

APPENDIX I: Letter of Invitation to Participate



School of Education

GPO Box U1987, Perth 6845 WA

CRICOS provider code: 00301J

Tena koe:

I am Chona Kennedy, a student in the PhD programme in the School of Education at Curtin University, Perth, Western Australia. I am researching the ways in which the principles of student-centred learning may apply to mixed-mode delivery in order to enhance the quality of learning and teaching. I am under the supervision of Dr. Kathryn Dixon and Dr. Lina Pellicione. I am also the Manager of Student Registry Unit at the Head Office of *Te Wānanga o Aotearoa*.

Te Wānanga o Aotearoa (TWOA) has used different teaching methodologies and delivery modes. As a way of removing barriers to access education, for example, cost and location, TWOA provides programmes that include flexible delivery timeframes and well supported mixed-mode education at no cost in most programmes. Mixed-mode delivery is seen not just as another mode of delivery but also as another approach to learning and teaching where the student is placed at the centre of the learning process.

In line with this, my study aims are:

- 1) Determine whether the learning and teaching practices in programmes delivered through mixed-mode are consistent with the principles of a student-centred learning approach from the perspectives of the students and tutors;
- 2) Investigate the perception of students and tutors about the quality of learning and teaching of such programmes; and
- 3) Elicit from students and tutors how the quality of the learning and teaching experience for the student could be improved.

Student-centred learning is considered one of the guiding principles for improving learning and teaching. Its focus is on empowering students, to be at the centre of learning and teaching, by giving them greater autonomy and control of their own learning processes.

For my research, mixed-mode is concerned with the delivery of a full-time programme utilising a combination of different teaching methodologies and learning resources in various media, on-campus and off-campus. It may include a combination of face-to-face instruction as well as the use of technology based audio and visual resources like CD/DVDs, manuals and workbooks.

Your opinion will be very important to this study since you are enrolled in a programme which is delivered through mixed-mode. The results of this study will provide a better

understanding of the current practices used in mixed-mode programmes to ensure they enhance student learning. This research may also lead to formulation of recommendations which will provide important information for *Te Wānanga o Aotearoa* in shaping their strategies for enhancing the learning and teaching practices in mixed-mode programmes.

I would appreciate your participation in this study. You would be required to:

- a) complete a survey instrument regarding the current learning and teaching practices at *Te Wānanga o Aotearoa*; and
- b) participate in one-on-one interview

Answering the survey instrument will take approximately 15 minutes.

Please be assured that all the information gathered from this survey instrument will be totally confidential. In agreeing to complete this survey instrument, the following conditions will apply.

- 1) The strictest confidentiality and anonymity shall be preserved.
- 2) Your name shall not be publicised in the final report nor will there be any cross-references made that can link the results of the survey instruments to yourself.
- 3) Your identity shall only be known to the researcher for cross-checking purposes only.
- 4) Upon completion of the survey instrument, you can either accept or refuse the request for an interview without prejudice or threat of being disadvantaged in any way. You can also withdraw from the interview at any time without prejudice or threat of being disadvantaged in any way.
- 5) You have the right to withdraw your participation from the survey instrument without prejudice or threat of being disadvantaged in any way resulting from my withdrawal to participate.
- 6) There will be no personal risk to you by participating in this survey instrument.
- 7) The data collected from the survey instrument shall remain secure for a minimum of five years and will be destroyed after that.

This study has been approved by the Curtin University Human Research Ethics Committee. If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee, c/o Office of Research and Development, Curtin University of Technology, GPO Box U1987, Perth, 6845 or by telephoning 0061 9266 2784 or by emailing hrec@curtin.edu.au.

If you have any questions about the research project at any time, you may contact me on 0274 465632 or email me at: Chona.Kennedy@twoa.ac.nz.

Thanking you sincerely in advance for your participation in my research project.

Naku noa na

Chona Kennedy
Researcher

APPENDIX J: Information Sheet for Participants



School of Education

GPO Box U1987, Perth 6845 WA

CRICOS provider code: 00301J

Title of the Project

An application of student-centred learning principles to mixed-mode delivery: An investigation of theory, practice and impact on the quality of learning and teaching

What is the research project about?

The primary purpose of this proposed study is twofold. The study aims to:

- a) Determine whether the learning and teaching practices in programmes delivered through mixed-mode are consistent with the principles of a student-centred learning approach from the perspectives of the students and tutors;
- b) Investigate the perceptions of students and tutors about the quality of learning and teaching of such programmes; and
- c) Elicit from students and tutors how the quality of the learning and teaching experience for the student could be improved.

Student-centred learning principle is considered as one of the guiding principles for improving learning and teaching. Its focus is on empowering students, being the centre of learning and teaching, by giving them greater autonomy and control of their own learning process.

Mixed-mode is concerned with the delivery of a full-time programme utilising a combination of different teaching methodologies and learning resources in various media, on-campus and off-campus. It may include a combination of face-to-face instruction as well as the use of technology based audio and visual resources like CD/DVDs, manuals and workbooks.

Your opinion will be very important to this study since you are enrolled in a programme delivered through mixed-mode.

Who is the Researcher?

The researcher is Chona Kennedy, a PhD student from Curtin University of Technology in Perth, Australia. I am under the supervision of Dr Kathryn Dixon and Lina Pellicione. I am also the Manager of Student Registry Unit at *Te Puna Mātauranga* (Head Office) of *Te Wānanga o Aotearoa*.

Why am I being asked to be in this research project?

I would like to have the opportunity of studying the learning and teaching practices in your programme to determine if they are consistent with the principles of a student-centred learning approach. I would also like to conduct research about your perceptions and experiences on whether the current teaching practices enhance the process of learning and teaching.

What do I need to do to be in the research project?

I wish to request for your participation in the study. The project will be in two phases:

- a) completing a survey instrument about the current learning and teaching practices at *Te Wānanga o Aotearoa*; and
- b) participating in a one-on-one interview.

How much time will the study take?

Answering the survey instrument will take approximately 15 minutes and the interview will last for approximately 20 minutes.

What will happen to the information?

All of the information you provide in all aspects of the study will be strictly confidential. You will not be using your name on the survey instrument. I will be using a numeric code to identify you during the interview process. No one else will have access to information about the participants. The results of the study will be stored in a secured filing system at the researcher's home and will be kept for five years.

Can I withdraw from the study?

Participation in the study is voluntary. You can withdraw from this study without explanation at any time and without any form of penalties.

Will the study benefit me?

I anticipate that the results of the study will provide important information for *Te Wānanga o Aotearoa* and other educational organisations, which will help them in shaping their strategies for learning and teaching. It will also contribute in finding out whether the current teaching practices enhance the learning and teaching process in a mixed-mode programme. The findings of the study will also add to the existing body of knowledge that we currently have about student-centred learning and mixed-mode delivery.

Are there any potential risks involve?

Participation in this study will not expose you to any risks or harm.

What if I require further information?

If you have any questions about the research project at any time, you may contact me on 0274 465632 or email me at: Chona.Kennedy@twoa.ac.nz.

Who can I contact if there are any conflicts?

If there are any conflicts, you can contact my supervisors, Dr Kathryn Dixon and Dr Lina Pellicione from Curtin University of Technology, GPO Box U1987, Perth, 6845 or email them at: K.Dixon@curtin.edu.au.

Who approved this research?

This study has been approved by the Curtin University Human Research Ethics Committee. If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee, c/o Office of Research and Development, Curtin University of Technology, GPO Box U1987, Perth, 6845 or by telephoning 9266 2784 or by emailing hrec@curtin.edu.au.

APPENDIX K: Student's Survey Instrument



School of Education

GPO Box U1987, Perth 6845 WA

CRICOS provider code: 00301J

Application of Student-centred Learning Principles in mixed-mode Delivery

Date:

Kia ora!

Thank you for agreeing to participate in this survey. This survey has been designed as part of the researcher's PhD investigation about the current learning and teaching practices on selected *Te Wānanga o Aotearoa* mixed-mode programmes. This research may lead to recommendations on strategies for improving the quality of learning and teaching practices in mixed-mode programmes for the benefit of *Te Wānanga o Aotearoa* students.

Please be assured that all the information gathered from this survey instrument will be totally confidential. All participants in this study are assured of anonymity and confidentiality throughout the conduct of this research.

Instructions for completing the survey instrument

There are no 'right' or 'wrong' answers. This is not a test; only your opinion is wanted. Throughout the survey instrument you will find a number of questions and statements. Please answer all the questions. On Section B, carefully think about how well the statement describes your experience. Circle the most appropriate number relating to the statement.

For example:

		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
Q1	I am comfortable learning through technology.	1	2	3	4	5

Your opinion may be:

If you think you are very comfortable with learning through technology, you would circle 5. If you think you are very uncomfortable with learning through technology, you would circle 1.

If you are not sure or think the question is not applicable to you, you would circle 3. Or, you can circle 2 or 3 if this seems like a more accurate answer.

In this example, the 4 has been circled indicating that the respondent was reasonably comfortable with learning through technology.

Please answer all of the questions.

SECTION A: PERCEPTIONS OF CURRENT TEACHING PRACTICES

Teaching methods and strategies		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
1.	Appropriate information is provided to me on course content and learning outcomes.	1	2	3	4	5
2.	The teaching methods and strategies used are appropriate to my learning needs.	1	2	3	4	5
3.	I am given the opportunity to collaborate with others in performing my tasks.	1	2	3	4	5
4.	My learning style is assessed to diagnose my learning preferences.	1	2	3	4	5

B. Learning outcomes		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
5.	The learning outcomes are communicated clearly to me so that I will have knowledge on what I learn from the process.	1	2	3	4	5
6.	I am able to negotiate my learning outcomes to the topics suggested according to the curriculum.	1	2	3	4	5
7.	The tutor and I enter into a learning contract based on my own interests and abilities to succeed.	1	2	3	4	5
8.	The achievement of learning outcomes is demonstrated in terms of improvement of learning.	1	2	3	4	5

C. Evaluation		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
9.	Evaluation of my performance is conducted following agreed set of criteria.	1	2	3	4	5
10.	Ongoing evaluations are done either by myself, by peer/s, with the tutor or with a group.	1	2	3	4	5
11.	I conduct self-evaluation based on my own individual learning objectives as agreed on the learning contracts.	1	2	3	4	5
12.	The results of the evaluation are fed back to me.	1	2	3	4	5

D. Learning Resources used		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
13.	The learning resources used are relevant to real-life situations.	1	2	3	4	5
14.	The learning resources used agree with the	1	2	3	4	5

	learning activities in achieving the learning outcomes.				
15.	There is a variety of learning resources used in the programme to support me in my learning process.	1	2	3	4
16.	The learning resources provided enabled me to have a deeper understanding of the topic.	1	2	3	4

E. Role of the tutor		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
17.	The tutor acts as a facilitator/ mentor in the class.	1	2	3	4	5
18.	The tutor allows flexibility in facilitating the programme to help me achieve my learning outcomes.	1	2	3	4	5
19.	The tutor demonstrates genuine interest towards me.	1	2	3	4	5
20.	The tutor respects differences in my characteristics that may impact on my learning.	1	2	3	4	5

F. Learning activities		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
21.	A variety of learning activities are provided to help me achieve the learning outcomes (e.g. group discussion, problem-based/case studies, project, simulations, etc.).	1	2	3	4	5
22.	I am given the opportunity to process the information I learned by doing actual tasks.	1	2	3	4	5
23.	The learning activities suit my diverse learning preferences.	1	2	3	4	5
24.	The learning activities are based around real-life situations, previous experience and interest.	1	2	3	4	5

G. Learning environment		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
25.	The learning environment provided is conducive for my learning.	1	2	3	4	5
26.	The learning environment enables me to learn collaboratively with others.	1	2	3	4	5
27.	The learning environment allows me to take control of my own learning.	1	2	3	4	5
28.	The learning environment provides adequate learning resources.	1	2	3	4	5
J. Curriculum/ Course Design		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
29.	The course design allows the learning outcomes to focus on what I will be able to do, rather than on the content.	1	2	3	4	5

30.	Programme facilitates student choice – (e.g. I can negotiate my learning outcomes.)	1	2	3	4	5
31.	The programme design provides emphasis to my ability and prior knowledge within the context of the programme.	1	2	3	4	5
32.	My views about the programme are actively sought for future planning	1	2	3	4	5

K. Assessments		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
33.	I am assessed based on agreed criteria using a range of different forms of assessment like self, peer or group assessments.	1	2	3	4	5
34.	The assessments tasks are linked to the objectives of the course.	1	2	3	4	5
35.	The assessment includes formative assessments which enable me to act on feedback.	1	2	3	4	5
36.	The assessment of the evidence of my learning is non-threatening.	1	2	3	4	5

L. Cultural awareness		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
37.	The teaching methods utilised in the classroom are culturally sensitive.	1	2	3	4	5
38.	My cultural identity is valued by the tutor.	1	2	3	4	5
39.	Diverse perspectives are integrated in the learning and teaching.	1	2	3	4	5
40.	My tutor employs flexible teaching strategies to accommodate the cultural diversity in the classroom.	1	2	3	4	5

SECTION B: CURRENT TEACHING PRACTICES

This section is intended for the participants to express their views and comments about the current teaching practices on mixed-mode programmes.

1. Have you found the current teaching practices used in this programme useful in enhancing your learning? YES / NO

1b. Please explain your answer to this question.

2. What do you think are the benefits or strengths of the current teaching practices used in this programme?

3. What do you think are the weaknesses of the current teaching practices used in this programme?

4. How could the current teaching practices in this programme be improved to enhance your learning?

SECTION C: Demographic questions: This section aims to gather the general demographic profile of participants engaged in mixed-mode delivery. Please encircle the appropriate answer.

1. Please indicate your gender:

a) Male

b) Female

2. Please indicate the primary delivery mode of your programme

a) Computer Assisted instruction/Online learning

b) *Noho* based programme

c) Wānanga – one day a week

d) One meeting a week (usually 3 hours)

Please indicate your previous qualification/educational experience:

a) No formal qualification

b) School Certificate/Secondary school graduate

c) Other tertiary studies

d) Degree

e) Others Please specify _____

Are there any other comments you wish to make?

Are you willing to participate in a follow-up one-on-one interview? Yes / No

Kia ora ano. Thank you for your time.

APPENDIX L: Tutor's Survey Instrument



School of Education
GPO Box U1987, Perth 6845 WA
CRICOS provider code: 00301J

Application of Student-centred Learning Principles in Mixed-mode Delivery

Date:

Kia ora!

Thank you for agreeing to participate in this survey. This survey has been designed as part of the researcher's PhD investigation about the current learning and teaching practices on selected *Te Wānanga o Aotearoa* mixed-mode programmes. This research may also lead to recommendations on strategies for improving the quality of learning and teaching practices in mixed-mode programmes for the benefit of *Te Wānanga o Aotearoa* students.

Please be assured that all the information gathered from this survey instrument will be totally confidential. All participants in this study are assured of anonymity and confidentiality throughout the conduct of this research.

Instructions for Completing the Survey instrument

There are no 'right' or 'wrong' answers. This is not a test; only your opinion is wanted. Throughout the survey instrument you will find a number of questions and statements. Please answer all the questions. On Section B, carefully think about how well the statement describes your experience. Circle the most appropriate number relating to the statement.

For example:

	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
Q1 I am comfortable learning through technology.	1	2	3	(4)	5

Your opinion may be:

If you think you are very comfortable with learning through technology, you would circle 5. If you think you are very uncomfortable with learning through technology, you would circle 1.

If you are not sure or think the question is not applicable to you, you would circle 3. Or, you can circle 2 or 3 if this seems like a more accurate answer.

In this example, the 4 has been circled indicating that the respondent was reasonably comfortable with learning through technology.

Please answer all of the questions.

SECTION A: PERCEPTIONS OF CURRENT TEACHING PRACTICES

A. Teaching methods and strategies		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
1.	I provide appropriate information on course content and learning outcomes to the students.	1	2	3	4	5
2.	The teaching methods and strategies I use are appropriate to the learning needs of students.	1	2	3	4	5
3.	I provide the opportunity to students to collaborate with one another in performing the tasks.	1	2	3	4	5
4.	I assess the learning styles of my students to diagnose their learning preferences.	1	2	3	4	5

B. Learning outcomes		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
5.	The learning outcomes are communicated to my students clearly so that they will have knowledge of what they will learn in the process.	1	2	3	4	5
6.	I provide opportunity to the students to negotiate their learning outcomes of the topics within the curriculum.	1	2	3	4	5
7.	My students and I enter into a learning contract based on my student's own interests and abilities to succeed.	1	2	3	4	5
8.	The achievement of the learning outcomes is demonstrated in terms of students' improvement of learning.	1	2	3	4	5

C. Evaluation		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
9.	My students' performances are evaluated following agreed criteria.	1	2	3	4	5
10.	Ongoing evaluations are done either by the students themselves, or by peer/s, or with the tutor or with a group.	1	2	3	4	5
11.	I provide the opportunity to the students to conduct self-evaluation based on their own individual learning objectives.	1	2	3	4	5
12.	The results of the analysis of evaluation are fed back to my students.	1	2	3	4	5

D. Learning Resources used		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
13.	The learning resources that I use in my teaching are relevant to real life situations.	1	2	3	4	5
14.	The learning resources I use agree with the learning activities in achieving the learning outcomes.	1	2	3	4	5
15.	I use a variety of learning resources in the programme to support students in their learning.	1	2	3	4	5
16.	The learning resources provided enabled my students to have a deeper understanding of the topic.	1	2	3	4	5

E. Role of the tutor		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
17.	I see my role as a facilitator or mentor in the class.	1	2	3	4	5
18.	I am flexible in my delivery to help students meet their learning goals.	1	2	3	4	5
19.	I demonstrate genuine interest to get to know the students better.	1	2	3	4	5
20.	I respect differences in students' characteristics that may impact in their learning.	1	2	3	4	5

F. Learning activities		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
21.	I provide a variety of learning activities to help students achieve the learning outcomes (e.g. group discussion, problem-based/case studies, projects, etc.).	1	2	3	4	5
22.	I provide the opportunity for students to process the information they learn by doing actual tasks.	1	2	3	4	5
23.	The learning activities suit the diverse learning preferences of the students.	1	2	3	4	5
24.	The learning activities organised are based around real-life situation, previous experience and interest.	1	2	3	4	5

G. Learning environment		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
26.	The learning environment I provide is conducive for learning.	1	2	3	4	5
27.	The learning environment enables my students to learn collaboratively with others.	1	2	3	4	5
28.	The learning environment allows my students to take control of their own learning.	1	2	3	4	5
29.	The learning environment provides adequate resources to facilitate the learning	1	2	3	4	5

	process.					
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I. Curriculum/ Course Design		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
30.	The course is designed with a focus on what my students will be able to do, rather than on the content.	1	2	3	4	5
31.	The course structure facilitates student choices – e.g. negotiation of learning outcomes	1	2	3	4	5
32.	The programme design emphasises students' ability to succeed within the context of the programme.	1	2	3	4	5
33.	The views of the students about the programme are actively sought for future planning.	1	2	3	4	5

J. Assessments		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
34.	I assess my students based on agreed criteria within the context of the course.	1	2	3	4	5
35.	The assessments tasks are linked to the objectives of the course.	1	2	3	4	5
36.	The assessment includes formative assessments which enable my students to act on the feedback.	1	2	3	4	5
37.	The assessment of the evidence of my learning performance is non-threatening.	1	2	3	4	5

K. Cultural awareness		Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
38.	I utilise teaching methods that are culturally sensitive.	1	2	3	4	5
39.	I value the cultural identity of my students.	1	2	3	4	5
40.	I integrate diverse approaches in my teaching.	1	2	3	4	5
41.	I employ flexible teaching strategies to accommodate the cultural diversity in the classroom.	1	2	3	4	5

SECTION B: CURRENT TEACHING PRACTICES

This section is intended for you to express your views and comments about your current teaching practices.

1. What are some of the aspects of your current teaching strategies that you feel have the greatest influence in enhancing student learning?
 2. What are the challenges or barriers that you are facing in your current teaching practice?
 3. What do you believe are the strengths of your current teaching practices?
 4. What do you believe are the weaknesses of your current teaching practices?
 5. How could the current teaching practices for this programme be improved to enhance student learning?

SECTION C: Demographic information: This section aims to gather your general demographic profile. Please encircle the appropriate answer.

1. Please indicate your gender:

a) Male

b) Female

2. Please indicate the primary delivery mode of your programme

a) Computer Assisted Instruction

b) *Noho* based programme

c) *Wānanga* – one day a week

d) *Whakaako* - One meeting a week (usually 3 hours)

3. Are there any other comments that you wish to make about this survey?

4. Are you willing to participate in a follow-up one-on-one interview? Yes / No

Kia ora ano. Thank you for your time.

APPENDIX M: Invitation for interview



School of Education

GPO Box U1987, Perth 6845 WA

CRICOS provider code: 00301J

Date:

Tena koe:

I would like to thank you for agreeing to participate in a follow-up interview. This second phase will include semi-structured interviews to examine and further explore your responses to the survey instrument.

Participation in this interview is voluntary. The interview is expected to take about 20 minutes of your time. All information provided will be kept confidential and your identity will remain anonymous. With your agreement, the interview will be audio-taped for the purpose of ensuring the accuracy of the interview data.

This study has been approved by the Curtin University Human Research Ethics Committee. If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee, c/o Office of Research and Development, Curtin University of Technology, GPO Box U1987, Perth, 6845 or by telephoning 9266 2784 or by emailing hrec@curtin.edu.au.

As discussed with you on the phone, our one-on-one interview has been set for:

Date:

Time:

Place:

If you wish to make any changes to this appointment, or if you wish to cancel the interview, please do not hesitate to contact me. I thank you in advance for agreeing to participate in my study.

Yours sincerely,

CHONA KENNEDY
Researcher

APPENDIX N: Interview Questions for Students

Questions regarding the dimensions of the Integrative Framework for Student-centred Learning

Role of the Tutor in the Classroom

1. Can you please describe what an effective tutor is to you?
2. How do you build relationships with the other students and with your tutor?

Cultural Awareness

3. In your opinion, how is your culture recognised in the classroom?
4. How does this impact in your learning?

Learning Environment

5. What do you think are the necessary elements for the learning environment to be conducive to your learning? Are there things that you would like to change?
6. What do you think are the things that *Te Wānanga o Aotearoa* must do in order to improve the learning environment?

Learning Activities

7. What do you think are the elements that must be present in the delivery of the programme to meet the varying needs and abilities of the students in the class?
8. Imagine that I am your tutor for this programme; can you please tell me what your expectations are in this programme for you to complete it successfully?

Learning Resources

9. Can you please make a comment about the appropriateness of the learning resources used in your programme in terms of meeting the learning outcomes?
10. In your opinion, how do the learning resources in this programme support you in achieving your learning goals?

Assessment

11. How are you assessed in your learning? What are some of the assessment methods used in your programme?
12. How do you know if you have been successful in meeting your expectations in this programme? Do you give feedback to your tutors about your learning needs?

Teaching Methods and Strategies

13. Imagine that I am your tutor, what would you expect me to tell you on your first day in class?
14. What do you think are the elements that must be present in the teaching methods and strategies of your tutor to meet the varying needs and abilities of the students in the class?

Learning outcomes

15. How are the learning outcomes and objectives of your course communicated to you?
16. Can you explain how you negotiate opportunities for you to meet their learning outcomes?

Evaluation

17. How are you evaluated in your progress to ensure that you will complete the programme successfully?
18. What are the performance indicators or benchmarks being used to measure the progress of your learning?

Curriculum/ course design

19. As a student of this programme, do you get the opportunity to contribute to the development of the course?
20. In your opinion, does the current design of the course allow flexibility to meet the varying needs of the students?

Questions regarding the quality of learning and teaching

1. Can you please describe how this programme was delivered? Do you think this is the best option for this programme and for the students?
2. How do you deal with some learning needs/issues as a student, if you have any?
3. What does “quality and learning and teaching” mean to you?
4. What do you believe are the important indicators or benchmarks of quality learning and teaching?
5. In your opinion, has the institution implemented strategies and mechanisms on how to improve the quality of learning and teaching?
6. What are the things that you would like to see happen for the continuous quality improvement in this programme?
7. Are there things that you would like to tell me that we haven’t discussed yet?

APPENDIX O: Interview Questions for Tutors

Questions regarding the dimensions of the Integrative Framework for Student-centred Learning

Role of the tutor in the Classroom

1. How do you build relationships with your students?
2. Can you please describe what an effective tutor is to you?

Cultural awareness

3. In what ways do you recognise the cultural identity of your students?
4. In your opinion, how does this impact on their learning?

Learning environment

5. What do you think you should do to ensure that the learning environment for your programme is conducive for learning?
6. What do you think are the things that *Te Wānanga o Aotearoa* must do in order to improve the learning environment?

Learning activities

7. What do you think are the elements that must be present in the delivery of the programme to meet the varying needs and abilities of the students in the class?
8. Imagine that I am your student for this programme; can you please tell me how you will meet my expectations in this programme in order for me to complete it successfully?

Learning Resources used

9. Can you please make a comment about the appropriateness of the learning resources used in your programme in terms of meeting the learning outcomes?
10. In your opinion, how do the learning resources in this programme support you in achieving the learning goals of your students?

Assessment

11. How do you assess your students? What are some of the assessment methods that you use?
12. How do you know if you have been successful in meeting the expectations of your students? How do you know what they want/need?

Teaching methods and strategies

13. Imagine that I am student, what would you expect me to tell you on your first day in class?

14. What do you think are the elements that must be present in your teaching methods and strategies to meet the varying needs and abilities of your students?

Learning outcomes

15. How are the learning outcomes and objectives of your course communicated with the students?
16. Can you explain how you provide opportunities for your students to negotiate their learning outcomes?

Evaluation

17. How do you evaluate the progress of your students to ensure that they will complete the programme successfully?
18. What are the performance indicators or benchmarks that you use to measure the learning progress of your students?

Curriculum Design

19. As a tutor of this programme, do you get the opportunity to contribute to the development of the course?
20. In your opinion, does the current design of the course allow flexibility to meet the varying needs of the students?

Questions regarding the quality of learning and teaching

1. Can you please describe how this programme was delivered? Do you think this is the best option for this programme and for the students?
2. How do you deal with learning needs/issues of the students, if they have any? What kinds of extra support do you provide?
3. What principles govern your teaching?
4. What does “quality learning and teaching” mean to you?
5. What do you believe are the important indicators or benchmarks of quality learning and teaching?
6. What are the things that you would like to see happen for the continuous quality improvement in this programme?
7. What kind of support do you feel will help you improve in your teaching? What kind of professional development training would you need?

APPENDIX P: Summary of Changes Made to the Survey Instrument

The following table summarises the changes made to the survey instrument

1. The dimensions and items were grouped together according to the broad categories or factors of the APA Learner-Centred Principles. This lead to the order of the questions being changed.
2. A number of complex questions were simplified for clarity. For example:

Table 5.4

Summary of Changes Made on the Survey Instrument

Version 1	The learning outcomes are communicated clearly to me so that I will have knowledge on what I need to know, what I will do and learn from the process.
Version 2	The learning outcomes are communicated clearly to me so that I will have knowledge on what I learn from the process.
Version 1	The tutor and I enter into a learning contract within the context of the course based on my own interests, goals, abilities to succeed and how I learn.
Version 2	The tutor and I enter into a learning contract based on my own interests and abilities to succeed.
Version 1	We are given the opportunity to collaborate, share and interact with one another in performing our tasks.
Version 2	I am given the opportunity to collaborate with others in performing my tasks.
Version 1	The learning outcomes of the course shows significant amount of learning that I need to complete.
Version 2	The achievement of learning outcomes is demonstrated in terms of improvement of learning.
Version 1	Learning activities are flexible and suit my diverse needs and preferences.
Version 2	The learning activities suit my diverse learning preferences.
Version 1	The learning environment provided is not competitive, non-threatening, relaxed, and comfortable.
Version 2	The learning environment provided is conducive for my learning.
Version 1	The planning of all aspects of programme involves myself to ensure my perspectives, ideas and needs have been accommodated.
Version 2	My views about the programme are actively sought for future planning.
Version 1:	My assessment tasks include learning journals, diaries and contracts to allow for reflection and evidence of the learning process.
Version 2	The assessment of the evidence of my learning is non-threatening.

3. The framework now includes the ‘Cultural Awareness’ dimension with related items added to the survey instrument as discussed. Although the ‘Cultural Awareness’ dimension was added to the survey instrument, other changes made kept the number of items at 40.

4. Redundant and repetitive items in more than one dimension have been stringently edited, thus leading to a reduction of the dimensions from 12 to 10 inclusive of the newly added dimension, ‘Cultural Awareness’.

For example:

In the initial version under the ‘Teaching Methods and Strategies’ dimension, the item “The tasks provided are applicable to real-life situations and enable practical application of the learning” appear to be similar to the item under ‘Learning Activities’, which states “The learning activities organised are based around real-life situations, students’ previous experience, interest and knowledge”. The item under ‘Teaching Methods and Strategies’ dimension was replaced with another item to eliminate the duplication.

5. In regards to ‘Evaluation’, the two items appeared to be stating similar topics regarding self-evaluation: “Self-evaluation identifies the significance of my learning experience” and “I conduct self-evaluation based on my own individual objectives as agreed in the learning contract”. The first item has been replaced with: “The results of the evaluation are fed back to me”.

6. There were significant changes to the ‘Role of the Tutor in the Classroom’ dimension: the three items were revised and an addition made in order to be consistent with the remaining dimensions that have 4 items each. “The tutor focuses on helping the students by providing flexibility and freedom of choice about what and how to learn to meet my goals” and “The tutor is friendly, supportive, respectful, has genuine interest and full of trust towards students” have been deleted. These items were replaced with: “The tutor allows flexibility in facilitating the programme to help me achieve my learning outcomes”; “The tutor demonstrates genuine interest towards me”; and “The tutor respects differences in my characteristics that may impact on my learning”.

7. The factors ‘Communication’ and ‘Knowing the Students’ have been deleted. Some of the items under ‘Communication’ appeared to be similar and therefore combined with ‘Teaching methods and strategies’, ‘Curriculum Design’ and “Role of the Tutor”.

8. In the same manner, the factors ‘Knowing the student’ and ‘Role and Attitude of the Tutor’ appear to have similarities. Therefore they have been re-written and combined. The dimension ‘Knowing the students’ was deleted.

9. The number of items for each dimension or factor was also made consistent by having four items under each dimension. Previously, some of the factors had three or four items while one had five items.
10. The order of the sections on the survey was also re-arranged. The open-ended questions were moved to Section 2 with the quantitative questions allocated to section 1. It was suggested that this is the preferred order of questions in most research.
11. The demographic questions were also revised:
 - a) ‘Mode of delivery’ replaced ‘the name of the programme’;
 - b) The ‘previous qualification/educational experience’ question was deleted; and.
 - c) The ‘prior activity’ question was also deleted.

The qualitative data collected from the responses for the open-ended questions were analysed which also led to the revision and simplification of the questions. The open-ended questions were reduced from 7 to 5, thus removing the unnecessary and redundant questions. For the tutor’s survey instrument, the following two questions were found to be asking similar information: “What are the challenges or barriers that you are facing in your current teaching practice in mixed-mode delivery?” and “What difficulties do you experience when delivering the programme in mixed-mode?” The researcher decided to delete the first question. Likewise, for the students’ survey instrument, the following two questions appeared to be similar: “What difficulties do you experience with the current teaching practices of this programme?” and “What do you think are the weaknesses of the current teaching practices used in this programme?” The former question was also deleted. The refinement of the instrument improved the level of comprehension by the sample.

GLOSSARY

Some of the Māori words used in this study have been defined and translated as per the online Māori Dictionary. While these words may have different meaning depending on how or where they are used, they have been defined based on the context of this study.

Ähuatanga Māori – Maori tradition
Ako – learning and teaching
Akoranga Māori – Māori learning
Aroha – love, compassion
Harakeke - flax
Kaiako – tutor, teacher
Kapa Haka – Māori cultural performing arts group
Karakia – thanksgiving and blessing
Kaupapa Māori – Maori concepts
Kotahitanga - unity
Manaakitanga – respect and kindness
Māori – the indigenous people of New Zealand
Māoritanga – Māori culture and practices
Marae – Māori meeting area of a village, courtyard
Marau – curriculum document, topic
Marautanga - academic
Mātauranga - knowledge
Mātauranga Māori – Māori knowledge
Mihi – greeting
Ngā Uara – values
Ngā Ture - law
Noho – live-in
Noho Marae – live-in in a marae
Pōwhiri – welcome ceremony
Raranga – weaving
Tainui – Waikato
Tāmaki Makaurau – Auckland
Tangata whenua – people of the land
Tauira - student
Te Ao Māori – Māori worldview
Te Ara Reo Maori – Māori language
Tēina – youngest
Tēnā koe – hello, thank you (formal)
Te Kaupapa Kounga – Quality Management Systems
Te Puna Waihanga – Programme Development Committee
Te Rautiaki Mātauranga – Academic Board

Te taha hinengaro – psychological health
Te taha tinana – physical health
Te taha wairua – spiritual health
Te taha whānau – family health
Te Wānanga o Aotearoa – University of New Zealand
Te Whare Tapa Whā – the strong house
Tuākana - oldest
Tikanga Māori – Māori custom
Waka Ama – outrigger canoe
Whakaako – to teach
Whakataukī – proverbs
Whakapono – to believe
Wānanga – centers of learning
Whānau - family
Whanaungatanga – kinship