BRIDGING

AND

FOUNDATION EDUCATION

AT UNITEC

A Report to the Academic Board

[S]tudents are more likely to persist when they find themselves in settings that hold high expectations for their learning, provide needed academic and social support, and actively involve them with other students and faculty in learning. The key concept is that of educational community and the capacity of institutions to establish educational communities that involve all students as equal members. (Tinto, 2002b)

June 2006

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EXECUTIVE SUMMARY

The initiative to review foundation education at Unitec grew out of discussion around issues arising from the first annual Success and Retention Report (Barrow, 2004) (see Appendix 1) and the English Language Entry Requirements Working Party (ELWP) Report, together with the report from Project Cherub, to Academic Board (September 2004) (see sections 3.2.1 and 3.2.2 in this report). The concerns identified by these reports pointed to a need for the institute to address issues related to the growing number of underprepared students entering tertiary education. At the same time, there was a growing awareness that international trends in the area of bridging and foundation education are towards a very different model to the one currently employed at Unitec.

The Review of Foundation Education Working Party was established by the Academic Board in May 2005 with the following terms of reference

- *To review current philosophies of foundation/bridging education both at Unitec and internationally;*
- *To review current models of foundation/bridging education both at Unitec and internationally;*
- *To identify the features of successful foundation/bridging programmes at Unitec;*
- *To recommend to Academic Board core components and features for all foundation/bridging programmes at Unitec; and*
- *To consider and provide advice on such other matters relating to foundation education at Unitec as the working party sees fit.*

A working party was set up, comprising members of academic staff, Student Affairs, Te Tari Awhina, and the Library. Chaired by Rae Trewartha, the party reported to Mark Barrow, the Dean of Teaching and Learning. This group provided some valuable initial input and helped to develop the direction for this report.[1]

This report, compiled after literature research, and interviews and discussions with key staff at Unitec, was distributed for consultation, in draft form, to the Vice-President (Academic), the Division Deans, Heads of School, Associate Heads of School, Programme Directors, Heads of Centre and other interested staff. The writers would like to acknowledge the contributions received and the discussion generated as a result of this consultation; we have incorporated many of your suggestions into this final version of the report.

In surveying current bridging/foundation education at Unitec, this report concludes that, in the main, Unitec programmes and courses are not meeting student needs in this area and invokes international practice in proposing a number of recommendations to remedy this situation. These recommendations, based on redeveloping bridging programmes, developing foundation programmes to staircase students into degree programmes and developing a course in each undergraduate degree programme to support first-year students, also incorporate changes to the

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[1] The members of the working party were: Ailsa Deverick, Andrew Withell, Brendan Hoare, Chelsea Blickem, Diana Nicholson, Fran Skilton, Frances Dower, Jan Zane, Jeffrey Hollett, Kay Fenton, Mark Smith and Sheridan Alexander. This report has been compiled by Rae Trewartha and Mark Barrow.

role of the School of Foundation Studies. It is argued here that the key determinant in developing these initiatives should be the need to provide students with bridging/foundation education that supports them to develop the contextualised discipline knowledge and academic literacies they need in order to transition to the next level of study as independent, critical learners – as students who know "how to learn" (White, 1994, p. 7).

It is acknowledged that for some programmes implementation of the recommendations in this report will present significant challenges. However, in 2005, as a result of consultations that took place with programmes to compile the data for the ELWP Report, Academic Board endorsed a policy on developing academic literacies. That data highlighted significant concerns from Programme Directors that the recommendations in this report also address. International research into bridging and foundation programmes, including foundation courses for first-year students, advocates strongly for the strategies recommended here, emphasising the positive benefits to students, teachers and institutions alike, which arise from building more interactive student/student, staff/student and student/institution relationships. In acknowledging that there will be issues in implementing some of the recommendations, the report provides for a reasonably generous timeframe for implementation.

This report makes the following recommendations:

1. **That Academic Board approves the following definitions for bridging and foundation education:**
   - **Bridging education - certificate programmes with courses at levels one, two, three and/or four designed for students who need considerable preparation to pathway to either a diploma or degree programme.**
   - **Foundation education - incorporates programmes that provide a one- or two-semester staircase to specified degree programmes, and courses designed to provide contextualised holistic support to students in their first-year at Unitec, while introducing them to the skills and concepts basic to successful tertiary study.**

2. **That all bridging programmes be redeveloped to meet bridging pedagogy criteria and then be reapproved prior to offering in 2008.**

3. **That schools work with the Undergraduate and VET Division Deans to develop integrated, crossdisciplinary foundation programmes, aimed at establishing disciplinary confidence together with academic skills and understanding.**

4. **That in each undergraduate degree programme (and other programmes by negotiation) an elective foundation course be designed, aimed at developing the knowledge and academic abilities recognised as necessary for first-year students to succeed in tertiary study.**

5. **That foundation courses be credit-bearing and integrated to provide contextualised, holistic support, specific to the first-year programme in which they are situated, and that the Dean of Undergraduate Studies work with each programme to amend structures etc so that by 2008/9 all**

undergraduate Unitec degree programmes include such a course and the required pre-requisites for entry to the course.

6. That the School of Foundation Studies be renamed the School of Bridging and Foundation Education (SBFE).

7. That the School of Bridging and Foundation Education continue to be responsible for the CertFound and Special Needs programmes in the school, as SFS is at present, but that it also be responsible, with appropriate additional resources, in partnership with disciplines and student support services,
   - for developing, co-ordinating and providing or co-providing all foundation programmes and courses and
   - for developing, redeveloping and providing or co-providing all bridging programmes.

8. That a senior academic, housed in SBFE, be appointed as the coordinator for the re/development of bridging and foundation courses. It is envisaged that in 2007 this position would be a full-time appointment and that in 2008 it would continue as full time with a 0.5 administrator's position attached.

9. That staff working in programmes that have a course/s co-provided with SFBE be required to undertake professional development aimed at exploring the use of successful bridging/foundation pedagogical strategies and developing the skills needed to teach underprepared students.

1.0   INTRODUCTION

The aim of this review was to investigate and report on the state of current bridging/foundation education at Unitec and to identify and recommend new models for Unitec based on international trends and practice. At present Unitec has a number of certificate programmes that bridge to diploma or degree programmes. However, very few of these programmes are based on the pedagogical principles that are now internationally recognised as pre-requisite to student retention and persistence. Neither are there any courses or programmes at Unitec that would be designated 'foundation' programmes or courses in the international arena. There are, however, a number of initiatives underway that are taking international practice into account as schools develop or redevelop programmes with a foundation focus. This report examines the current situation at Unitec and recommends a number of strategies to improve bridging and foundation education at Unitec.

Adopting these strategies will, it is suggested here, lead not only to enhanced student success and retention – and as a consequence greater satisfaction for teaching staff – but also to Unitec staking a unique position in the marketplace as an institution that not only graduates students with competency in a particular discipline, but as an institution that also challenges and supports them, from day one, to develop the academic skills they need, as our Charter states, "…to engage in critical thinking, and to exercise independent judgement" (Unitec New Zealand, 2003).

Currently, disciplines at Unitec do not , generally, involve first-year students in addressing the issue of how "…to engage in critical thinking, and … exercise independent judgement" or, in other words, what it means to learn and study in a tertiary education setting. Rather, courses at the first-year level are aimed at introducing students to a particular discipline. While this is a necessary function of courses at this level, there are many students who enter Unitec lacking the cultural capital to undertake successful tertiary study. Finding themselves in a culture they do not know how to negotiate, such students struggle to establish a footing in the academic community of the institution, resulting in higher than necessary drop-out rates or students failing to develop the academic literacies they need to make the transition to higher-level learning.

It could be argued, as White (1994, p. 7) does, that the primary educational imperative for first-year students should be that they are not simply "receptors of facts" but that they complete the first year knowing "*how to learn*" (emphasis added). In quoting Katz et al. (1988) on Perry's work on intellectual development (1968), White (p. 7) notes that:

> At the heart of Perry's work and that of other observers of student intellectual development is a powerful yet simple observation: students gain intellectual sophistication when they must confront and assess competing and equally well argued perspectives on an issue or solutions to a problem.

Building on this, White (p. 8) discusses the development of first-year foundation courses at Portland State University, which aim "… to assist students in making the transition from the 'authority bound phase' to becoming increasingly sophisticated learners and thereby enhance their ability to engage successfully in their academic

programmes." While each of these first-year foundation courses is contextualised and adapted to meet the needs of the particular discipline in which it is situated, it is expected that all students will complete their course with "a core of knowledge and academic abilities" that will allow them to "… frame questions, gather information, engage in analysis, and communicate conclusions applying written, numeric, and graphic forms of communication" (White, p. 27).

This report proposes the development and/or redevelopment of bridging and foundation programmes and courses based on a pedagogical model aimed at enabling students who graduate from this level of education to develop the attributes needed to meet White's expectations. Our Charter states:

> At Unitec students learn to reason, adapt, innovate, communicate and grow so they can respond to rapid changes in the workforce and society and can return to study – if the desire or the need is there. (Unitec New Zealand, 2003)

If our Charter is indeed a valid reflection of Unitec's institutional aspirations for its graduates, it is imperative that we acknowledge that many students will never learn these skills unless we inspire and support them to develop the necessary intellectual understandings.

1.1 Unitec's commitment and responsibility to bridging/foundation education

The Charter elaborates further on Unitec's commitment to providing students with the skills they need to succeed in tertiary study, stating that:

> Unitec recognises and celebrates the diverse backgrounds of its students and is committed to providing them with a socially, culturally and spiritually responsive environment. In particular, Unitec seeks to provide excellent academic and pastoral support for, and to interact with, students in whatever ways best suit their learning needs.
>
> As an integrated dual-sector institution, with both national and international frames of reference, Unitec is committed to offering programmes… providing:
> - access for learners from all educational backgrounds and age groups;
> - opportunities for learners to progress from one level of qualification to another …

The Charter also states that:
> Unitec undertakes to provide learners with opportunities to study in and across disciplines and at levels that meet national and regional goals and that contribute to Government tertiary education strategies.

Government strategy is very clearly in favour of tertiary institutions providing for the skill levels of all those students wishing to engage in tertiary study, with Strategy Three of the Tertiary Education Strategy aimed at "improving foundation skills" and envisaging that:

> By 2007, foundation education will encompass a well-integrated system of foundation education provision, so that a range of clearly-identified pathways is available for learners to acquire foundation skills …

Pathways from foundation education into higher levels of tertiary education will be better integrated, and easier to navigate as the parts of the tertiary system work together to facilitate ease of lifelong learning …

Foundation education will have grown into a respected and recognised sector and will be given high priority within institutional and employer policy and practices New Zealand's tertiary education system. (Tertiary Education Commission, 2002)

In a speech to the New Generation Universities Symposium (Cullen, 2006), the Minister of Tertiary Education stated that foundation education currently remains the most important single requirement of the New Zealand economy. Further, pointing to the changing student demographic at universities in New Zealand, he argued that universities need to "reinvent pedagogy" and went on to say: "We need universities to embrace the latest research into how people learn and how best to engage them in a learning community, and we need to reconfigure our teaching programmes accordingly."

Although the government's use of the term "foundation education" covers both 'bridging' and 'foundation' as defined in this report, there is no doubt that there is an expectation that tertiary education will provide opportunities for all entering students to develop the foundation skills they need to succeed. Despite the statements in the Charter, Unitec does not have a central policy to meet this requirement, or clearly defined guidelines as to how programmes should meet the literacy and numeracy needs of students entering degree programmes.

1.2   Bridging versus foundation education
The terms 'bridging' and 'foundation' have become interchangeable and thus often confusing in relation to tertiary education in New Zealand. While some institutions call any programme that provides entry qualifications to a higher-level programme a 'bridging' programme, others reserve this term for courses aimed at people who do not have the qualifications to enter a diploma or degree programme. Some use the descriptor 'foundation' to identify such courses, as, in fact, does the Tertiary Education Commission, although they extend the term to cover basic numeracy and literacy. However, at many universities overseas, particularly in Australia and North America, foundation programmes are commonly aimed at providing first-year degree students with core study skills and confidence in a discipline. Many institutions, including New Zealand universities, confuse the issue further by reserving the term foundation to refer only to programmes designed to support students from other cultures to reach the standard of English literacy they require to enter tertiary study. In Britain bridging courses are known as 'access' courses and in the United States the term 'developmental' is used.

1.2.1 Proposed Unitec definition of bridging education
This report proposes that, at Unitec, *bridging education* refer to certificate programmes with courses at levels one, two, three and/or four designed for students who need considerable preparation to pathway to either a diploma or degree programme. Incorporating bridging/foundation pedagogy and approaches (refer to section 1.3) into these programmes will not only have implications for the development of new certificate programmes; it will also affect those programmes not

presently meeting these criteria.

1.2.2 Proposed Unitec definition of foundation education
This report proposes that, at Unitec, *foundation education* refer to: a) programmes that provide a one- or two-semester staircase to specified degree programmes, and b) courses designed to provide contextualised holistic support to students in their first-year at Unitec, while introducing them to the skills and concepts basic to successful tertiary study. While proposal a) will not affect all undergraduate degree programmes at Unitec, proposal b) will have implications for all such programmes.

1.3 Features of successful bridging/foundation education
While successful bridging/foundation education relies on identifying the attributes deemed desirable to develop students who know how to learn, and who can succeed as critical thinkers and independent learners at the next level of education, it also requires an understanding of the values, and structures, at both the institutional, and classroom level, needed to facilitate such learning.

A wide-ranging review of the literature identified the following internationally recognised factors as leading to successful bridging/foundation education:

1. Bridging/foundation programmes are valued as integral to the institution by all members of staff and centralised structures and finances are in place to support these programmes in a centralised manner (Boylan, 2002; Boylan, Bliss & Bonham, 1997; Kozeracki, 2002; Kuh, Kinzie, Schuh, Whitt & Associates, 2005; Tinto[2], 1997).
2. Bridging/foundation pedagogy is a feature of these programmes. "They focus on improving the quality of learning – the process – not just content or outcomes" (Tinto, 1997).
3. Diagnostic assessment and academic advising take place for all new students, leading to placement in courses that value their existing knowledge and provide opportunities for students to build on that knowledge and attain their goals (Boylan, 2002; Kozeracki, 2002; Malnarich, Dusenberry, Sloan, Swinton & van Slyck, 2003; Prebble, 2004).
4. The cultural capital students bring with them is "valued and accommodated" and the institution is seen as willing to adapt its practices to affirm students' differing cultural needs (Zepke et al., 2005, p. 14).
5. Courses in programmes are integrated – usually into learning communities (see Appendix 2) – and, where necessary, staff collaborate across disciplines to integrate teaching approaches, content and assessment (Dison & Rule, 1996; Prebble, 2004; Tinto, 1997).
6. The classroom environment is inclusive and affirming. Students and staff are engaged in working together to produce understandings of the complexities of knowledge. Staff teach in ways that match the needs of different learning styles, difference is validated and students are supported academically, socially and emotionally (Dison & Rule, 1996; hooks, 1994; Kuh et al, 2005; Prebble, 2004; Tinto, 1997).
7. Course content is contextualised to mirror and build on the experience of the constituent student population (Malnarich et al, 2003).

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[2] Vincent Tinto visited New Zealand in 2005 and gave a very well received lecture at Unitec on learning communities and their role in engaging students.

8. Learning tasks are based around collaborative and problem-based learning and "skills-based learning is [integrated] with more challenging discipline-specific course content" to introduce students to the academic language and theories of the disciplines they are intending to move on to (Malnarich et al, 2003).
9. Assessment is integrated across courses. Assessment criteria are specific, frequent feedback is provided and there are early opportunities for success (Boylan, 2002) – well managed and comprehensive formative assessment is a feature of courses and treated as a learning tool; summative assessment is spread throughout the semester.
10. The best staff on the programme teach the bridging/foundation courses; the institution actively recruits staff who are keen to teach in this area and invests in their development (Boylan, 2002; Boylan, Bliss & Bonham, 1997).
11. Student support such as learning support; financial aid and counselling are widely available, are actively promoted and staff are familiar with the services provided (Boylan, 2002; Dison & Rule, 1996; Kozeracki, 2002).

Pedagogically, the strategies recommended here are desirable features of all teaching programmes, at all levels of study. It is thus, not envisaged that bridging/foundation education should be seen as 'fixing' all the 'problems' students present with in their first year, or that teachers on higher-level programmes/courses can relax, believing students do not need this type of support once they move on. In fact, students who experience this mode of teaching, while becoming more capable learners, are also likely to have higher expectations for their future education. Working collaboratively to develop the programmes/courses in bridging/foundation education, will, it is hoped, lead to teaching staff embracing this pedagogical philosophy at all levels.

2.0   REVIEW OF BRIDGING EDUCATION

2.1   The international scene

Internationally, bridging programmes have moved away from deficit models of bridging, which concentrated on skills development, to models based on the pedagogical belief that bridging students need to build " … strategic, institutional and disciplinary confidence" (Dison & Rule, 1996) in courses that are linked to provide integrated and contextual learning " … emphasised by student-student and faculty-student interaction" (Tinto, 1997). There is now a large body of research pointing to the effectiveness of this model within the structure of learning communities (Prebble[3] et al, 2004).

2.2   Current bridging programmes at Unitec

At present, the following certificate programmes at Unitec provide bridging pathways to higher level programmes:

Certificate in Animal Care
Certificate in Animal Management
Certificate in Applied Technology
Certificate in Business (Introductory)
Certificate in Business Administration and Computing (Level 3)
Certificate in Business Administration and Computing (Level 4)
Certificate in Community Skills
Certificate in Design
Certificate in Electrotechnology (Level 2)
Certificate in Employment Skills English
Certificate in English
Certificate in Foundation Studies: Whitinga[4]
Certificate in Information Technology
Certificate in Intensive English
Certificate in Management
Technology Pathway Certificate (Automotive)

Certificates, which are made up of at least 40 credits, and usually more, normally consist of courses between levels 1 and 4. To be eligible for admission to these certificate programmes applicants must, usually, only meet the English language requirements together with either the Unitec general admission or special admission requirements. Certificates at levels 3 and 4, are sometimes needed for entry into

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[3] Prebble et al (2004), in a wide-ranging and comprehensive review of studies related to student outcomes and support for students in tertiary institutions, expressed surprise at how well the Tinto model fitted the New Zealand situation. They also recommend that, "Rather than focus on the individual fitting the institution it [their research] suggests institutions should adapt to better fit the cultures of the students. It is our contention that the weight of evidence from these studies suggests that this emerging view is worthy of further research and action."

[4] The CertFound had, until recently, endorsements to diploma and degree programmes that students pathwayed to at Unitec (Business, Computing, Nursing, Sciences, and Social Practice). Changes to the programme allow for continued co-provision agreements with other schools, with each student's programme now individually designed to meet their assessed entry level and the requirements of the programmes they are bridging to – passes in certain endorsed courses can be required for applications to students' chosen programmes to be considered.

trades, craft and service occupations, may also provide entry to diploma and bachelors programmes eg Certificate in Animal Management, Certificate in Applied Technology.

It is proposed that the programmes listed above be designated as bridging programmes. However, as none fully meet the criteria in section 1.3 [the Certificate in Foundation Studies: Whitinga (CertFound), does so to a large extent but still has some way to go], **it is recommended that these programmes be redeveloped to meet the criteria and then be reapproved prior to offering in 2008.**

2.3   Examples of Unitec programmes currently employing bridging pedagogy

The CertFound has a number of courses that are endorsed as providing the necessary entry qualifications to diploma or degree programmes. Based on the bridging pedagogy model, these courses are integrated to enable the students and staff to work in learning communities.

The first such initiative was developed with the Bachelor of Nursing (BN) and has now been operating in this mode for a number of years. It has proved extremely successful – in 2006 there are 109 ex-CertFound students on the BN programme. Certificate students are taught two courses by staff in the School of Foundation Studies – Introduction to Sociology and Tertiary Studies[5] – and two by staff in Health Sciences – one a Nursing course and the other an introduction to health science. The courses are integrated (apart from the health science course, which could be incorporated with some further work). Therefore, along with the knowledge and skills they need to operate in the tertiary environment, students are engaged in critical inquiry related to the concepts, theories and language of the nursing discipline from day one, simultaneously developing a support network that carries them through the BN programme.

Successful endorsement initiatives have also been developed with other programmes, so that in 2006 there are another 158 ex-CertFound students in degree programmes at Unitec. Interestingly, a significant number do not go directly into further study but enrol a year or more after completing (or sometimes even dropping out of) the CertFound.

The Certificate in Information Technology (CertIT) also operates as a learning community, in that students in this one-semester programme remain in the same group for the five courses they take. Discussion has recently begun around how to more closely integrate these courses. Many learning communities actually operate in a totally integrated way so that staff teach in each other's courses, and time and course boundaries are blurred to fit the needs of students. While this is the ultimate aim for the CertIT, the present focus is on working with staff to introduce integrated classes, along with a version of the CertFound course Tertiary Studies, and on providing opportunities for staff development and discussion about the implications of the resultant changes.

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[5] The staff work together to integrate, content, learning tasks, teaching and assessments – "They focus on improving the quality of learning – the process – not just content or outcomes" (Tinto, 1997).

The School of Applied Technology, the School of Language Studies (SLS) and the School of Foundation Studies (SFS) have worked together to develop another type of bridging programme, Technology Pathway Certificate (Automotive), which will run for the first time in Semester 2 2006 and pathway students to the Certificate in Applied Technology. SLS and SFS will each provide a tutor to run the course "Talking the Walk", a learning community that will work to integrate English language support and academic literacy skills with the four technical automotive courses. The programme information states that: "The learning is centred around social and cultural practices based on life skills". It is hoped that this will be a prototype for similar programmes in Applied Technology.

3.0 REVIEW OF FOUNDATION EDUCATION

Foundation education is a feature of universities worldwide and has developed as a response to the changing demographic of students. As employers up the ante, in terms of the level of skills required for people to enter the workforce, more and more underprepared students are forced to enrol in programmes to gain the necessary qualifications to meet these skill levels. Success, retention and persistence have become a growing issue as underprepared students, becoming disillusioned at their inability to succeed in and/or navigate the world of tertiary education, fail to complete programmes in which they have enrolled.

3.1 International practice

The majority of research in the area of foundation education for first-year students comes from the United States where foundation education initiatives are based on a varying range of programmes and courses designed to assist first-year students in their transition to university. Some simply consist of a one-hour per week 'first-year' seminar aimed at introducing students to the complexities of university life and providing a 'home room'-type support class. Others, which may or may not be based around a theme, are organised as integrated learning communities, where a first-year seminar is usually just one of the three or four classes taken. Murdoch University in Perth, along with other Australian universities, has developed similar initiatives.

These programmes and courses are concerned with preparing first-year students for the discipline they are intending to enter. Firstly, by ensuring they have the appropriate level of necessary skills, but secondly, by also supporting them to develop of the academic literacy/concepts/theories pertaining to that discipline. Almost all are credit-bearing. In the United States, in fall 2000, 76% of all degree-granting two- and four-year institutions offered at least one foundational reading, writing, or mathematics course (Parsad and Lewis 2003, cited in National Science Board, 2006).

3.2 At Unitec

Across Unitec, academic staff have similarly identified a problem with the low levels of foundational skills displayed by many students entering degree programmes. The Project Cherub and the ELWP data shows that most Programme Directors believe that a large proportion of the students who enter their programmes are academically underprepared. However, there is little evidence that any are practising the type of pedagogy that has been recognised internationally as meeting the needs of these underprepared students.

3.2.1 Project Cherub

Table 1 below categorises responses from a survey of Programme Directors regarding the degree of English language difficulties faced by their students.

Figure 1

Report of the Project Cherub 'Other Qualifications Group': 1.3 The Nature of English Language Problems

Table One: Language problems recognised by Programme Directors

Language Problem	% Programme Directors who identified this as a problem
Reading	50
Listening	70
Accuracy/grammar	86
Vocabulary	63
Writing	86
Speaking	70

Table Two: Extent of language problems

	A lot	Quite a lot	Some	A few	None
% EAL Students	23	50	20	7	0
% Native Speakers	0	0	56	34	10

Note: The questions that produced these results included mention of both English language and academic literacy problems, with the Programme Directors surveyed noting that both the EAL and native speaker groups had language and/or academic literacy problems.

3.2.2 English Language Entry Requirements Working Party

The recommendations endorsed by Academic Board in the report from the ELWP Working Party, provide a clear mandate to develop alternative pedagogical initiatives to meet the needs of these students (see Figure 2 below).

Figure 2

English Language Entry Requirements Working Party: A Report to the Academic Board September 2004

7.1 Conclusion 1
New policy on Language and Academic Literacies

- That the policy considers diverse academic literacies as an outcome of an increasingly diverse New Zealand (and international) population, and not as a deficit of student capability.
- That the policy acknowledges institutional strategy and support is required to assist staff in assisting students to develop their language and academic literacies.
- That the policy allows for the institutionalisation of strategy and approaches to academic and cultural literacies. Eg. staff and student support, curriculum and assessment development, new programme development.

3.2.3 Mathematics competency

Although there is no research regarding the mathematics levels of students entering Unitec programmes, Heather Pryor carried out research at Unitec in 2001 with the intention of determining tertiary students' ability to interpret statistically-based media

reports. While the first-year degree students in the study performed reasonably well on the text comprehension assessment, overall, they performed poorly on the three other measures of statistical literacy: graph comprehension, critical thinking (using a contextual knowledge base) and statistical thinking (using a statistical knowledge base). As Pryor (2001) points out, this result is of concern since "informed decision making in our information-laden world" (p. 96) requires the ability to "comprehend graphs" (p. 93); "to be able to 'critically examine the reasonableness' (Gal, 2000) of statistically-based media reports" (p. 94) and to "think statistically" (p. 96).

There is also plenty of anecdotal evidence to suggest that mathematical underpreparedness causes problems for a large number of students. Certainly, some students cannot enter programmes because they do not meet the mathematics entry level requirements. Mathematics expertise is associated with the ability to engage in higher order learning skills and research in the US shows that "one key predictor of postsecondary academic success" is high-level-math coursetaking in high school" (Venezia & Kirst, 2003, cited in University of Minnesota, 2005, p. 8).

While mathematics competency is basic to many courses at Unitec, it is not often taught as a subject. In 2004, Andy Begg was employed as a consultant to look at the development of a centre for mathematics and statistics at Unitec. His resulting report made a number of recommendations including:

3.1 That consideration be given to balancing the emphasis on knowing, doing, and thinking in all mathematics and statistics courses.

4.1 That consideration be given to broadening the pedagogical approaches used in all mathematics, statistics … courses.

7.1 That all mathematics, statistics … courses be reviewed with respect to whether their current levels are appropriate ones.

7.2 That pre-requisite requirements be reviewed and enforced. (Begg, 2004)

3.2.4 Information literacy[6]

There has also been no formal research concerning the information literacy levels of students entering Unitec programmes. However, discussion with lecturers suggests that students come with varied abilities and experiences. International research indicates that students from other countries, particularly China, bring with them different attitudes to seeking for, using and citing information (Hughes, 2004). In addition, the high number of older students returning to study and the many students who have not finished their secondary school education further contribute to the range of information literacy levels at Unitec.

Information literacy is vital for students, because, while information is easily accessible, it is the effective and appropriate use that is required for lifelong learning (Breivik, 1989). Embedding information literacy skills into the subject content of academic programmes has been shown to be the most effective way of developing information literate graduates (Bundy, 2004).

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[6] Thanks to Fran Skilton

3.2.5 Elearning[7]

As with mathematics and information literacy, there has been no formal research investigating the elearning literacy of students entering Unitec programmes. Abilities of entering students vary due to the wide range of ages and backgrounds of students, however school-leavers are arriving at Unitec with ever increasing elearning experience and ICT skills. The following scenario illustrates the changing skills of school leavers:

> A junior at the university, Eric wakes up and peers at his PC to see how many instant messages (IMs) arrived while he slept. Several attempts to reach him are visible on the screen, along with various postings to the blog he's been following. After a quick trip to the shower, he pulls up an eclectic mix of news, weather, and sports on the home page he customized using Yahoo. He then logs on to his campus account. A reminder pops up indicating that there will be a sociology quiz today; … he pulls up a wiki to review progress a teammate has made on a project they're doing for their computer science class. He downloads yesterday's chemistry lecture to his laptop;… After classes are over he has to go to the library because he can't find an online resource he needs for a project (Oblinger & Oblinger, 2005).

The emphasis at Unitec is on using elearning tools to support and enhance the face-to-face delivery of courses – i.e. a 'blended' delivery. ELearning tools can be used to develop and enhance communication, reflective and critical thinking capability, enhance access to teaching and learning resources, and provide students with a variety of flexible formative and summative assessment options.

Unitec has a well established Course Management System (BlackBoard), which has a wide uptake throughout the different programmes offered. However, this is just one aspect of elearning. Unitec's elearning strategy aims to up-skill teaching staff and provide ICT resources to create a flexible learning environment that can cater to the changing needs of a wide range of students. Enabling wireless mobile computing and researching the impact of personal learning environments (social software, eportfolios etc…) are important to keep Unitec programmes meeting the needs of the next generation of learners and those who need more flexible course delivery options.

3.3 Proposals for foundation education at Unitec

Following on from the proposed definition of foundation education (see section 1.2.2), this report recommends the introduction of two new developments in foundation education to Unitec.

3.3.1 Foundation programmes

It is recommended that schools work with the Undergraduate and VET Division Deans to develop integrated, crossdisciplinary foundation programmes, aimed at establishing disciplinary confidence together with academic skills and understanding.

Such programmes, based on the learning community model, would normally include

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[7] Thanks to Thom Cochrane

one or two courses (depending on whether they are one- or two-semester programmes) from the degree programme to which the student is staircasing. Students would obtain credits for these courses on progressing to degree study.

It is proposed that schools would work with the Division Deans and the School of Bridging and Foundation Education (SFBE) (see section 4.0) (which would co-provide a course in each programme) to develop new programmes, or redevelop existing ones, to meet the foundation education criteria.

Programmes such as this would be aimed at older students who may, for instance, already be in the workforce but are looking for a change of direction and lack the confidence to go directly into a degree programme. Younger students who have achieved reasonably well at school but do not have the necessary NCEA credits to enter a particular discipline may also be candidates for these programmes. It is also possible that such programmes could cater for EAL students by providing integrated language support courses. In other words, these programmes, while designed to develop discipline knowledge and academic literacies, would also focus on meeting the needs of particular student groups. It should be noted that, as with all new programmes, these programmes would go through the normal process to obtain approval to develop etc. It is also possible that foundational programmes may be designed to allow students to progress to one of a number of degree programmes.

3.3.2 Foundation courses
It is recommended that in each undergraduate degree programme (and other programmes by negotiation) an elective foundation course be designed aimed at developing the knowledge and academic abilities recognised as necessary for first-year students to succeed in tertiary study.

It is recommended that foundation courses be credit-bearing and integrated to provide contextualised, holistic support, specific to the first-year programme in which they are situated, and that the Dean of Undergraduate Studies work with each programme to amend structures etc so that by 2008/9 all undergraduate Unitec degree programmes include such a course and the required pre-requisites for entry to the course.

It is proposed that these courses should not be merely catch-up, skills-based-type courses, but that they should be based on pedagogy that leads to the attributes identified above as features of successful bridging/foundation education. Thus, the courses would take their cue from Murdoch University's credit-bearing course, Introduction to University Learning (see Appendix 3), where:

> The theoretical basis of the unit uses the concepts of 'self' and 'culture' to clarify the relationship between the learner and the university's requirements and expectations of students… It is recommended [for] students … who feel they would benefit from additional learning skills support or who are concerned about their academic skills and understanding … .(Murdoch University, 2006)

The Murdoch course is included here as a *possible* model but it is only that. It is recognised that these courses would need to be flexible enough to meet the needs of particular programmes and student groups. For instance, in some disciplines it

may be more applicable to orient the course towards science and/or numeracy. The course for each programme would need to be developed by the lecturers on the programme working with the rest of school and the SFBE (see section 4.0) to identify the attributes students need to advance in the academic environment of their particular discipline. The overriding focus, however, should be student need and the development of contextualised discipline knowledge and academic literacies.

Students entering degree programmes under the general entry criteria would not be required to take such a course (although they may opt to) but those entering under the special or discretionary admission criteria could be directed to do so as a condition of being accepted into a programme. Moreover, students who are identified as having problems in their first semester could also be directed to take this course in their second semester of study.

For a number of programmes at Unitec, the introduction of such a credit-bearing course would not be straightforward. However, some disciplines have indicated they could add the course to the electives available to students in their first-year programmes. Others have proposed that the strategies recommended here could be embedded into existing first-year courses and signalled in changes to learning outcomes. While that would certainly benefit students, the reality is that implementation of these changes requires skilled knowledge and a) many lecturers are not versed in the necessary pedagogical skills; and b) it would be too easy to overlook the changes in favour of covering course content.

3.3.3 Proposed foundation education initiatives at Unitec
At present, there is no foundation education at Unitec that fits the proposed definition. However, the BN programme is considering offering a one-year foundation programme, based on the proposed recommendation in 3.3.1 above, aimed at the large number of older women who have not updated their qualifications since a degree replaced the diploma as the required qualification for registered nurses. These women have usually not studied in the intervening years and can find the experience of tertiary study daunting. A foundation programme such as the one proposed would enable them to develop a supportive community of learners and to ease back into study while developing institutional and disciplinary confidence.

Meanwhile, the Certificate in Design (CertDes) and the Diploma in Design (DipDes) programmes are exploring the combining and rewriting of their programmes so that the certificate will become an exit qualification after students have completed the first year of this two-year programme. While the certificate will, in part (as there is also a work-readiness focus in this programme), fit the definition of a bridging programme, the second year of the diploma will act as a foundation year for the Bachelor of Design (BDes). Along with their other courses, students will undertake study in two courses – one each semester – that they can credit towards the BDes.

The examples above are aimed at providing foundation education for two identifiable cohorts of students, Unitec also, however, accepts students into programmes who struggle to cope, for instance, students who, enter without the necessary cultural capital; students who enter under Special Admission or Discretionary regulations; or students who have English language skills at the bottom of the admissible IELTS level. The proposal in 3.3.2. above aims to address this issue and begin the development of foundational skills for these students.

Recognising that some first-year students in their programme do not easily fit the institutional mould, and thus do not succeed or persist, the Bachelor of Business has agreed to develop a pilot course based on the recommendations in 3.3.2 for implementation in that degree in 2007.

4.0   PROPOSED CHANGE IN ROLE FOR THE SCHOOL OF FOUNDATION

Currently, at Unitec, expertise in bridging/foundation education resides in the SFS. Recommending a broadened role for the school, this report proposes that:

- The School of Foundation Studies' mission and its role in providing, co-providing and co-ordinating programmes and courses in the areas of both bridging and foundation education be strengthened and **the school be renamed the School of Bridging and Foundation Education (SBFE)**.

- **The School of Bridging and Foundation Education continue to be responsible for the CertFound and Special Needs programmes in the school, as SFS is at present, but that it also be responsible, with appropriate additional resources, in partnership with disciplines and student support services,**
  - **for developing, co-ordinating and providing or co-providing all foundation programmes and courses and**
  - **for developing, redeveloping and providing or co-providing all bridging programmes.**

  However, all new courses and programmes developed as a result of the recommendations in this paper will remain in the schools (see Appendix 4). It is proposed that SBFE will collaborate closely with the Division Deans and the Centre for Teaching and Learning Innovation (CTLI) in working with and alongside discipline lecturers in classes.

  It is also envisaged that Te Tari Awhina, Maia, the Library and the other student support services will be closely involved in the development and delivery of such programmes and courses. For students to develop truly independent learning capabilities, they must also be able to recognise the limits of their independence and know when, how and where to get help. Teaching staff need to be encouraged to work with staff from the student support centres to help students develop confidence in using these services.

- **A senior academic, housed in SBFE, be appointed as the coordinator for re/development of bridging and foundation courses. It is envisaged that in 2007 this position would be a full-time appointment and that in 2008 it would continue as full time with a 0.5 administrator's position attached.**

- **Staff working in programmes that have a course/s co-provided with SFBE be required to undertake professional development aimed at exploring the use of successful bridging/foundation pedagogical strategies and developing the skills needed to teach underprepared students.**

5.0 CONCLUSIONS

While Unitec's Charter states that it educates students, "…to engage in critical thinking, and to exercise independent judgement" (Unitec New Zealand, 2003), there is little evidence that teaching students how to do this, or, in other words, "how to learn" (White, 1994, p. 7) is a feature of most bridging or first-year degree programmes at Unitec. Students who enter tertiary study at Unitec frequently lack the cultural capital to deal with the academic environment they find themselves in and can feel isolated and unable to cope, leading to lack of retention and persistence. Data from Project Cherub and the ELWP backs this up, quite clearly indicating that Programme Directors have major concerns regarding the number of students who enter their programmes academically underprepared.

The problem tertiary institutions face, as employers demand higher qualifications and the numbers of underprepared students thus rises, is one that has led, internationally, to the development of specific pedagogical initiatives to support both students and staff. In New Zealand, the government's policy statements on foundation education also point to the duty tertiary providers have to deliver education to meet the equity needs of all aspiring tertiary students – to provide pathways into further study that prepare students to not only develop discipline knowledge but also to become lifelong learners. This includes providing contextualised, integrated bridging and foundation programmes/courses – courses that do not just support students who have literacy and numeracy needs, but courses that also inspire them to become critical thinkers and independent learners.

Internationally, and within New Zealand, the terms 'bridging' and 'foundation' are used to define a variety of educational offerings depending on the institution and/or country providing them. It is proposed, however, that, at Unitec, *bridging education* refer to certificate programmes with courses at levels one, two, three and/or four designed for students who need considerable preparation to pathway to either a diploma or degree programme, and that *foundation education* refer to: a) programmes that provide a one- or two-semester staircase to degree programmes, and b) courses designed to provide contextualised holistic support to students in their first-year at Unitec and introduce them to the skills and concepts basic to successful tertiary study.

The design of such courses/programmes should be based on international models, using the 11 features discussed here as integral to successful bridging/foundation education. It is also important, however, that the models developed within Unitec are flexible enough to respond to the needs of particular disciplines and particular groups of students and that the courses/programmes are supported by the institution as central to its educational endeavour. Staff development, focusing on the pedagogical strategies and skills needed to support students in these bridging/foundation courses/programmes, is also fundamental to the implementation of these initiatives.

While Unitec does not have any courses/programmes that fully encompass the 11 features, the CertFound in the School of Foundation Studies bases its certificate programme on these principles and is endeavouring to develop all its offerings to meet this criteria. There are also other areas of the institution working towards this model.

As the institutional repository of expertise in bridging/foundation pedagogy and practice, it is proposed the School of Foundation Studies be renamed the School of Bridging and Foundation Education and be resourced to work with the disciplines, in conjunction with the Division Deans and the various student support services, to re/develop and support bridging/foundation education initiatives throughout the institute.

Appendix 1: Excerpt from: *Success and Retention* (Report to Academic

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Success and Retention: Report to Academic Board
Unitec, November 2005

4.0   Impediments to retaining students and ensuring their success

The Dean of Teaching and Learning met with Heads of School to discuss a list of unsuccessful courses generated for each school (in a number of cases the meeting involved other school staff). The number of unsuccessful courses in schools varied considerably, from none in one school to a list running to several pages in another (where data entry issues were the major – though not only – cause). The aim of these meetings was to discuss issues related to success and retention in the courses identified, to decide what factors might be having an effect and to discuss potential avenues for action.

It was apparent in those discussions (and this is an observation frequently made in the literature) that the causes of students leaving or not succeeding are myriad and that the addressing of these causes is in the hands of the lecturer, course co-ordinator and therefore (also) the head of school. However there were some themes that came through and these are summarised below.

4.1   Foundation Capabilities

English Language Proficiency
There is no doubt that the limited English language proficiency of many students is an impediment to academic success. Many Heads of School raised this factor as the major issue that they confront. While the most obvious group of students to whom this applies is students for whom English is an additional language there was also some acknowledgement that students who are native speakers but have poor English language backgrounds are also an issue.

There are a number of courses where interventions have been made that appear to have had some success in addressing this issue. The Professional Skills Development tutorials offered in two schools (Accountancy, Law and Finance and Management and Entrepreneurship) have had a marked effect. The scheme in ALF has been subject to methodical evaluation that confirms its value. In this school an embedded language-teaching specialist has provided context-specific language support. It is of considerable concern that budget constraints mean that this programme is currently under threat.

In another example, the assignment of a trained language teacher to deliver a School of Communication course to business students has seen a considerable improvement in success figures in the course pointing to the importance of lecturers being able to integrate language teaching skills with subject teaching.

English language development (and the development of academic literacy often associated with it) is arguably the single most important teaching and learning issue that Unitec faces at present. As an institution we rely on international students for

income. These are students, who by their nature manifest these issues most clearly. Beyond that though, our Charter encourages us to open doors to students who haven't traditionally attended tertiary education, we therefore need to deal with these issues as a matter of course. The undertakings of the Charter are backed up HR policies which describe academic staff members as people who "select and apply teaching and/or learning strategies that promote effective teaching and learning consistent with individual student learning needs".

This suggests that all teaching staff need to have a variety of strategies to meet the learning needs of a diverse student body. It might be argued that this is not the case at present. English language working parties that have met this year suggest that many academic staff do not have access to strategies to improve the capability of students beyond the confines of the discipline, and indeed many still contend that this is not their role.

In the area of English language development and academic literacy an Academic Board working party is currently considering strategies and tactics to improve our effectiveness in these areas. This working party will make recommendations to the Board by May of 2005.

Mathematics preparedness

A second common area where students may be under-prepared is in the area of basic mathematical preparation. A recent report from a consultant employed to look at the development of a centre for mathematics and statistics at Unitec has made some suggestions about these issues. However, at this point the only institute service available to students at this level is that provided by Te Tari Awhina. At a more advanced level the Graduate School makes statistical consultancy available to postgraduate students.

Precursors to successful study

Issues with maths and English language manifest themselves in retention and success figures for lower level courses in programmes. Together they illustrate underpreparedness for tertiary study in an English speaking system in areas other than discipline knowledge and learning. The literature suggests the development of such skills is best addressed by "the provision of an additional remedial curriculum"[8].

In a number of areas we anticipate that students will not be able to meet the challenges of the core discipline of an undergraduate programme. For example we provide certificate level education in design and IT that is seen as a preparation for more advanced study in the named areas. Such foundation education (as opposed to bridging education) doesn't necessarily address issues such as English language, mathematics or generic preparation for tertiary study discussed above.

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[8] Barrie, S. (2004). A research-based approach to generic graduate attributes policy. *Higher Education Research and Development, 23* (3), 261-275.

Learning Communities

Introduction

There is now a considerable body of research pointing to the success of the learning communities' pedagogical model in bridging/foundation education. There is also increasing research pointing to the value of learning communities as tools in the process of building campuses that engage students and staff in a mutual process of learning leading to increased student retention and success.

In a research project involving a review of learning communities at an eclectic mix of 20 campuses in the US, chosen for five benchmarks of effective educational practice:

- level of academic challenge;
- active and collaborative learning;
- student interaction with faculty members;
- enriching educational experiences;
- a supportive campus environment; and
- a graduation rate that was higher than predicted (after taking into account relevant student and institutional characteristics),

team members of Project DEEP (Documenting Effective Educational Practice) came to the conclusion that "sharing responsibility for educational quality and student success is woven into the tapestry of educationally effective institutions" and that "after years of discussion about the importance of building cross-campus collaborations to help students achieve, little doubt should remain that collaboration is important" (Kinzie and Kuh, 2004, p. 2).

Structure

Vincent Tinto describes learning communities as:

> … curricular structures that promote academic success by emphasizing student-student and faculty-student interaction and interdisciplinary linkage of courses. Essentially classes are linked around an interdisciplinary theme like poverty. While programs vary in form and content, they represent an intentional restructuring of students' time to foster greater intellectual connections between students, students and faculty and between disciplines. Learning communities help students to make transition from secondary to postsecondary environment. They focus on improving the quality of learning – the process – not just content or outcomes. Linked classes can be required or not required; required linked classes seem to be more successful.(Tinto,1997)

Boylan provides the following a description of the different types of learning communities:

> *Linked courses*:   are learning communities in which students enrol in two or more courses that have content overlap.
>
> *Interest Groups*:   are learning communities in which students are assigned

Cluster-Learning: is a kind of learning community in which a group of students take all of the same classes, one of which is a seminar that helps make connections explicit.

Coordinated Study: is a kind of learning community which has longer courses, co-taught by two or more instructors. (Boylan, 2002)

Pedagogy

Discussing foundation education in the South African context, Dison and Rule suggest that the following pedagogical beliefs underpin successful learning communities:

To succeed at tertiary level students need strategic, institutional and disciplinary competence:
▪ *Strategic*
…student's ability to read the particular departmental context in which he or she is situated and to make appropriate choices on the basis of this reading – eg which course options to take, how to relate tasks to one's own strengths and weaknesses.
▪ *Institutional*
Competencies students need in order to be able to survive in a tertiary institution – eg computer literacy, how to communicate with staff, how to negotiate extensions, how to access learning support, counselling.
▪ *Disciplinary*
Not just academic skills and knowledge but disciplinary confidence including and understanding of the "nature of learning within the discipline" (Richards and Rogers, 1986) – students who feel they have something of value to contribute, that they can build on their own knowledge and skills and learn from their mistakes, are more likely to succeed than students who feel they are ignorant.

Relationships within the community of learning are a key to developing students' disciplinary confidence. A supportive environment in which students can consult staff and discuss with peers without fear of ridicule, an environment which emphasises the developmental nature of learning, which acknowledges achievement and points out areas and procedures for improvement, which provides structures and focuses on processes that enable students to become academically literate, and which attends both to group and individual needs, can contribute to a student's confidence.
▪ *Assessment*
Assessment should be integrated with the teaching and learning of the discipline, rather than confined to a summative, and often terminal function. (Dison & Rule,1996)

They also provide the framework below to show how they believe disciplinary competence can be achieved (Figure 1):

Figure 1: Achieving Disciplinary Competence

Cognitive competence (Mastery of concepts, canons, critical thinking skills, etc)	**Semiotic competence** (Mastery of disciplinary codes: linguistic, visual, auditory)
affective factors → Disciplinary Competence ← affective factors	
Strategic competence (Ability to make informed choices within departmental setting)	**Institutional competence** (Ability to survive within the institution: computer literacy; information handling skills, communication skills, counselling, finances, etc)

Figure Three. Towards a model of disciplinary competence

(Dison & Rule,1996, p. 90)

Why Learning Communities?

In her 1998 article, "Why Learning Communities? Why Now?", Patricia Cross (a foremost and highly respected US educator in the field of foundation education) asks the further rhetorical question: "Why is there so much interest in learning communities?". She answers by stating:

> "I think the reasons can be divided into three broad categories: *philosophical* (because learning communities fit into a changing philosophy of knowledge), *research based* (because learning communities fit with what research tells us about learning), and *pragmatic* (because learning communities work). (Cross, 1998, p.5)

In advocating for her view "…that knowledge is actively built by learners as they shape and build mental frameworks to make sense of their environments…" (p. 5), Cross says that "….a community of learners is not only advantageous, it is also necessary, because people construct knowledge by working together, not just cooperatively but inter-dependently" (p.5). In further arguing for the value of learning communities in helping students and teachers to work together in a shared endeavour, where learning occurs as a result of socially constructed knowledge, she employs William Whipple's argument that they "foster(s) active learning over passive learning, cooperation over competition, and community over isolation" (p .5).

New Zealand

Of domestic students starting a qualification in 1998 only an estimated 40 percent had completed after five years. Fifty-one percent of those who started a qualification

in 1998 had left without completing it five years later, and nine percent were still studying towards it five years later (Scott, 2004, p. 3). Of course this does not allow for students who may have successfully completed after changing programmes or re-enrolling in another programme a few years later. By any measure, however, this low success rate has negative implications, both socially and economically.

In their report: "Impact of Student Support Services and Academic Development Programmes on Student Outcomes in Undergraduate Tertiary Study: A Synthesis of the Research" (a project commissioned by the New Zealand Ministry of Education to prepare an overview of the research on teacher/educator and learning environment factors that affect student outcomes in undergraduate tertiary study), Prebble et al (2004)

> …identified a number of institutional actions, services, facilities and behaviours that affect student outcomes by supporting or not supporting their social/emotional and academic needs. They are noted in each of the matrix cells in Figure 4 [Figure 2]. Several of these are not confined to just one cell but feature across both social/emotional need and academic need cells.

Figure 2: Influences on student outcomes

ENVIRONMENTAL STUDENT SUPPORT INFLUENCES ON STUDENT OUTCOMES		
Institutional practices that:	**Support Social/Emotional Needs**	**Support Academic Needs**
Aid integration	Enrolment processes Social networks	Pre-enrolment advice Academic counselling Student/teacher relationships Quality of teaching Academic Success (GPA)
	Orientation/Induction Learning communities	
Provide services	Health & counselling Advisory services Recreational services Campus facilities Placement services	Supplemental instruction
	Peer tutoring Mentoring	
Adapt to accommodate student differences	Absence of discrimination Feeling safe Valuing minorities	Learning preferences
	Cultural capital Fairness	

Prebble et al, 2004, p.53

Of the 15 propositions they developed as a result of their synthesis of the literature,13 are presented as propositions for practice, with ten offering ways of assimilating diverse students into existing institutional cultures and three challenging institutions to change their policies and practices and adapt to the cultural capital brought by their diverse students (Prebble et al, p.53) (Figure 3).

Figure 3: Propositions Resulting from a synthesis of literature

Institutional Integration – social/emotional support and academic support cells

Student outcomes are likely to be enhanced when:

3. *Institutional behaviours, environment and processes are welcoming and efficient.*

4. *The institution provides opportunities for students to establish social networks.*

5. *Academic counselling and pre-enrolment advice are readily available to ensure that students enrol into appropriate programmes and papers.*

6. *Teachers are approachable and accessible inside and outside of class times for academic discussions.*

7. *Students experience good quality teaching and manageable workloads.*

8. *Orientation/induction programmes are provided to facilitate both social and academic integration.*

9. *Students working in academic learning communities have good outcomes.*

Institutional Services – social/emotional support and academic support cells.

Student outcomes are likely to be enhanced when:

10. *A comprehensive range of institutional services and facilities are available.*

11. *Supplemental instruction is provided.*

12. *Peer tutoring and mentoring services are provided.*

Institutional Adaptation – social/emotional support and academic support cells.

Student outcomes are likely to be enhanced when:

13. *The institution ensures there is an absence of discrimination on campus, so students feel valued, fairly treated and safe.*

14. *Institutional processes cater for diversity of learning preferences.*

15. *The institutional culture, social and academic, welcomes diverse cultural capital and adapts to diverse students' needs.*

They then produced a table to show the relationship they suggest could exist between their proposed organisational framework and the 13 propositions (Figure 4).

Figure 4: Relationship between organisational framework and the propositions

Environmental Student Support Influences on Student Outcomes		
Institutional practices that	**Support Social/Emotional Needs**	**Support Academic Needs**
Aid integration	Enrolment processes Social networks *Propositions 3, 4*	Pre-enrolment advice Academic counselling Student/teacher relationships Quality of teaching Academic Success (GPA) *Propositions 5, 6, 7*
	Orientation/Induction Learning communities *Propositions 8, 9*	
Provide services	Health & counselling Advisory services Recreational services Campus facilities Placement services *Proposition 10*	Supplemental instruction *Proposition 11*
	Peer tutoring Mentoring *Proposition 12*	
Adapt to accommodate student differences	Absence of discrimination Feeling safe Valuing minorities *Proposition 13*	Learning preferences *Proposition 14*
	Cultural capital Fairness *Proposition 15*	

Prebble et al, 2004, p.55

While propositions 8 and 9 expressly recommend learning communities as valuable in the induction and orientation process for students, the intent of the remaining propositions also supports the pedagogical philosophy of learning communities as integral to student success and retention.

Introduction to University Learning: TLC120

TLC120 is a 3-credit general elective unit designed for first year students who desire learning and academic skills development.

TLC120 introduces students to university scholarship in a supportive learning environment. The unit aims to develop students' skills as university learners by integrating their practice of fundamental learning skills with the study of concepts drawn from the Arts and Social Sciences.

The theoretical basis of the unit uses the concepts of 'self' and 'culture' to clarify the relationship between the learner and the university's requirements and expectations of students.

Students who complete TLC120 successfully will have a better understanding of themselves as university learners generally, as well as within their chosen discipline. They will also be equipped with a range of transferable skills that can be used throughout their university studies and beyond.

TLC120 runs from week 4 to week 13 of both first and second semesters.

Materials you need to study in TLC120

You will be provided with a detailed study guide when the unit begins.

You will need to buy the following from the bookshop:

- Marshall, L. (1998) *A learning companion,* 3rd edn. Perth, Murdoch University
- *TLC120/TLC1207: Introduction to University Learning Reader*

Also strongly recommended is:

- Marshall, L & Rowland, F (1998) *A guide to learning independently,* 3rd edn. Melbourne, Addison Wesley Longman.

Coordination and tutoring in TLC120

The unit has one hour of lectures and three hours of tutorials from weeks 4 to 13. Tutorial sizes are kept small to maximise learning potential.

All tutorials are taught by a select group of experienced (and sympathetic) tutors including full and part time Student Learning staff.

Unit outline, reading and assessment

You will be provided with a separate information sheet that gives week-by-week dates for lectures and due dates for assignments.

Week	Lectures (1 hour per week)	Readings	Work due
Module 1: Understanding the university culture			
4	Introduction & Student stories	McInnis & Richard, 'Getting started'; Andresen, 'Five fatal fallacies…"; Vivekananda & Shores, 'Uni is easier'.	
5	University culture	Kolb, 'Learning styles & disciplinary differences' (extracts); Grant, 'Disciplining students'.	
6	Communicating at university	Ballard, & Clanchy, 'Literacy in the university'; Bizzell, 'What happens when basic writers come to college'.	
7	Critical thinking	Warren, 'The critical self'; Brookfield, 'What it means to think critically'; Tannen, 'Rites of demolition'.	**Learning log due (draft submission)**
8	Paradigms, Ideologies & Concepts	Lo Bianco, 'Three poverties'; Newman in Marshall, 'STAR essay: What is a paradigm according to Kuhn'; Craig, Conceptual dictionary (extracts).	**Essay 1 due**
Module 2: Locating yourself as a learner			
9	Concepts of the self I: Medievalism & Modernism	Hobson, 'Concepts of the self'; Rogers, 'To be that self which one truly is'.	
10	Concepts of the self II: PostModernism	Hobson, 'Concepts of the self'; Radio National Transcripts, The Health Report.	
11	The situated self	Samovar & Porter, 'Worldviews'; Trudgen, 'Thirteen years of wanting to know'; Turkle, 'Identity in the age of the internet'.	
12	Assessment in the university culture	Nightingale, 'Introduction', Assessing learning in universities.	**Trial exam Learning log due (complete log)**
13	The changing university culture	Raser, 'Education as healing'; Barnett, 'A supercomplex world'; Radio National Transcripts, 2001, Ockham's Razor, 'Crisis in our universities'.	**Essay 2 due**
Study week & exams (1 week)			
Exams (2 weeks)			

Overview of tutorial topics and resources

Tutorial topics	A Learning Companion	A Guide to Learning Independently	ABC Study Skills tapes	Tutorial worksheets and notes
Getting started (weeks 4, 5 and 6)				
Getting to know each other You and TLC120 Ground rules	Ex 11, pp.89-99	Ch 11, pp.168-177	Ep. 1 & 2	Getting to know you TLC120 & me Ground rules
Support networks Study skills profile	Ex 2, pp.13-16 Ex 4, pp.27-32	Ch 1, pp.1-16 Ch 11, pp.164-168	Ep. 1 & 13	
Learning logs	Ex 1, pp.7-12	Ch 12, p.191 Ch 1, pp.1-16		**See example** Learning Log entries
Time management	Ex 5, pp.33-48 Ex 6, pp.49-54	Ch 2, pp.18-27		Backward planning Effective planning Priorities Time budgeting
Learning skills activities (throughout)				
Notemaking: lectures	Ex 10, pp.81-88	Ch 10, pp.149-160		
Reading	Ex 13, pp.115-120 Ex 17, pp.135-138 Ex 18a, pp.139-152	Ch 9, pp.123-147	Ep. 6	See Learning log entries (reading)
Critical thinking		Ch 3, pp.33-34 Ch 4, pp.53-59	Ep. 3 & 6	
Essays: selecting & analysing topics	Ex 23, pp.251-254 Ex 24, pp.255-264	Ch 6, pp.77-90	Ep. 7	
Essays: planning & research	Ex 21, pp.219-241 Ex 25, pp.265-272	Ch 7, pp.91-102 Ch 8, pp.103-122	Ep. 4 & 7	Understanding essay grading
Essays: writing & editing	Ex 26, pp.273-278 Ex 27, pp.279-290	Ch 13, pp.197-212 Ch 15, pp.231-247	Ep. 7 & 8	Referencing and Plagiarism
Consolidating your learning (weeks 12 and 13)				
Remembering & exams	Ex 7, pp.55-60 Ex 8, pp.61-70	Ch 3, pp.44-45 Ch 5, pp.63-76	Ep. 9	
Evaluating learning	Ex 9, pp.71-78	Ch 16, pp.249-263		

Overview of Assessment Tasks

In this unit you will be expected to complete two essays, a learning log and an examination. You are also expected to attend tutorials and participate in them.

Essay 1	1,000 words	15%	due Friday week 8
Essay 2	1,500 words	25%	due Friday week 13
Learning log		30%	due weeks 7 and 12
Tutorial participation		10%	ongoing
Examination	2 hours	20%	exam period

To pass this unit you must fulfil *all* of the following assessment requirements:

- submit all essays and your learning log and achieve a satisfactory result in the final examination
- attend at least 20 of the 27 hours of tutorials
- attend the equivalent of at least one 2-hour non-teaching week workshop conducted by the Student Learning, Library or Counselling, and
- achieve a satisfactory level when your results from all assignments and the examination are totalled.

Appendix 4: School of Bridging and Foundation Education

Step Up

Preparation for Entry to Police
(Self-funded Short Course)

Special Needs

Certificate in Community &
Employment Skills

Certificate in
Employment Skills

Short Courses

Certificate in Foundation Studies: Whitinga

Level 1

Level 2

Level 3

Academic Study Skills courses in 1st year of degree programmes

Bachelor of Business

Bachelor of Design

Academic Study Skills courses in other certificate programmes

Music

Computing

Design

Tourism

New Programmes

Niche bridging courses to degree programmes

Eg for nurses who were hospital trained and now want to complete a Bachelor of Nursing

Literacy & Numeracy

Learning 4 Living

Funding for staff to develop integrated numeracy and literacy classroom strategies

Funding for workshops to work with certificate programmes to develop integrated literacy

Foundation Learning Pool

Funding for 1.3 staff to work 1:1 with students with enhanced numeracy and literacy needs and to provide staff development to develop classroom strategies

Level 3 Certificates with one course taught by endorsing programme

Nursing

ECE

Social Practice

Tourism

Design

General

Sciences

Business

Computing

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