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Enabling retention: processes and strategies for improving student retention in university-based enabling programs

Final Report 2013

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List of acronyms used

ACU	Australian Catholic University
ALTC	Australian Learning and Teaching Council Ltd
ATAR	Australian Tertiary Admission Rank
ATSI	Aboriginal and Torres Strait Islander
CQU	CQUniversity (Central Queensland University)
DETYA	Department of Education, Training and Youth Affairs
ECU	Edith Cowan University
HECS	Higher Education Contribution Scheme
HESA	Higher Education Statistics Agency
HEPPP	Higher Education Participation and Partnerships Program
LSES	Low socio-economic status
NCVER	National Centre for Vocational Education Research
OECD	Organisation for Economic Cooperation and Development
OF	Open Foundation
OLT	Australian Government Office for Learning and Teaching
PEC	Pathways Enabling Course
SES	Socio-economic status
TPP	Tertiary Preparation Program
UNE	University of New England
UniSA	University of South Australia
UoN	The University of Newcastle
UPC	University Preparation Course
UQ	The University of Queensland
USC	University of the Sunshine Coast
USQ	University of Southern Queensland
UTAS	University of Tasmania
VET	Vocational Education and Training

Executive summary

1. Background

University-based enabling programs provide an important pathway to tertiary study for large numbers of non-traditional students (especially those in government-targeted equity groups). Such programs tend to have rates of student attrition which are high relative to those of undergraduate degree programs, a matter of continuing concern to all those responsible for their supervision and delivery.

This project was funded by the Australian Teaching and Learning Council Ltd and, latterly, the Australian Government Office for Learning and Teaching, to investigate the nature and causes of student attrition in enabling programs and, in particular, to determine any similarities and differences in these processes in undergraduate programs, and to recommend measures to enhance student retention. The project was undertaken by academics from five Australian universities prominent in the delivery of enabling programs: The University of Newcastle (lead institution), the University of Southern Queensland, the University of South Australia, the University of New England and Edith Cowan University. These programs represent a cross-section of Australian university-based enabling programs.

The project comprised two major components: an empirical study of student attrition in the participating institutions' enabling programs and a combined dissemination/consultation process centred on a series of regional workshops.

2. Outcomes

Key findings of the project are:

First, that the demographic factors figuring prominently in discussion of student attrition in undergraduate programs (including low socio-economic status, age, gender and status as first in family to attend university) do not have a significant impact on the likelihood of persistence of students in these programs (with some minor exceptions at a minority of institutions). (Section 3.3.)

Second, that students who are engaged in their program by Week 2 persist at a higher rate than overall rates of attrition suggest, rates which range from slightly higher than the overall retention rate to a rate of retention of 96% after Week 2 in one program. (Section 3.2.)

Third, due to the very different purpose and nature of enabling programs, and the different patterns of persistence and withdrawal displayed by students in them, the standard measures of retention and attrition suited to undergraduate programs do not provide useful insight into effective attrition in enabling programs and, furthermore, it is not possible simply to transfer learning concerning student retention from undergraduate to enabling programs. In particular, it should be noted that some attrition from an enabling program is actually desirable, as the enabling program is playing the role of a 'filter' prior to an undergraduate program. (Sections 1.3.4, 3.1.)

Fourth, enabling programs are a very successful pathway for non-traditional students into higher education, enabling around half of their students the opportunity to access undergraduate study. This success is largely due to their characteristic "open door" strategy, a strategy which also underlies a substantial component of enabling student attrition. Much enabling student attrition is thus complementary to the attraction of high numbers of students who would not otherwise have been enabled to go to university. This is not only good economics but also serves the goals of equity and social justice, delivering wider benefits to society as a whole. (Sections 1.2.2, 1.3.4.)

Fifth, that the in-program issues which figure most prominently in predicting student attrition are: the student's experience of time pressures, a complex phenomenon with a multiplicity of underlying causes; life events impacting negatively on the capacity of students to cope (especially for the mature age students who provide the bulk of students in these programs); a low rate of awareness and use of student support services; and low student engagement with the program and fellow students. (Section 3.3.)

Community of practice: A further outcome of the project, arising out of the continuing series of regional workshops, is an emerging national community of practice on student retention in enabling programs. The project team will continue to encourage and facilitate this development both through sharing of retention enhancement strategies and other information on the project website (www.enablingretention.org.au) and continuing workshops and visits to colleagues in other institutions to further disseminate results and share experience on retention. Results and recommendations of the project, as well as useful links, a database of retention enhancement strategies and other relevant information will be provided on the project website to serve the needs of colleagues in the field.

3. Key recommendations

The project Recommendations are located in Chapter 5 (5.2). Key recommendations are:

R1.1 That procedures be developed for identifying non-participating students, contacting them and assisting in re-engagement *or* a positive exit process *or* (as a last resort) administratively cancelling their enrolment.

R2.1 That enabling programs investigate pre-enrolment processes to find the optimal mix of information and experiences to best prepare students for what it means to study at university, especially with reference to the kind of time commitment involved.

R2.2 That enabling programs, where appropriate, increase provision of counselling services, with special reference to meeting the challenge of provision in an external program and for students attending lectures in the evening.

R2.3 That enabling programs investigate and develop processes to facilitate student access to existing counselling services.

R3.2 That funding should be sought to investigate the particular challenges of teaching and learning for enabling students and to develop a range of appropriate enabling pedagogies.

R4.3 That enabling programs investigate the manifestations of "time pressure" on their students and develop flexible curriculum and course design responses to mitigate this source of attrition.

R4.4 That the five participating institutions facilitate the development of appropriate benchmarking of student retention in their programs with the aim of extending it to other enabling programs as appropriate.

R4.5 That Australian enabling programs undertake to develop a Community of Practice in addressing student attrition, including a collaborative process of sharing and mutual discussion of retention enhancement strategies.

R4.6 That Australian enabling programs devote resources, including seeking dedicated funding, to develop a more rigorous understanding of best practice in student retention in enabling programs.

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Chapter 1. Enabling programs and student attrition

John O'Rourke, Tasman Bedford, Barry Hodges[1]

1.1 The project and participating programs

This report presents the outcomes of CG10-1697: "Enabling retention: Processes and strategies for improving student retention in University-based Enabling Programs", originally funded for two years in the 2010 Competitive Grants Program of the Australian Learning and Teaching Council and then by the Australian Government Office of Learning and Teaching. The project began in November 2010 and was completed in May 2013.

The project aims are to:

1. Investigate the nature and patterns of student attrition across the programs of the five participating institutions – and consult with other Australian enabling programs - to compare attrition patterns from each and identify systemic similarities and differences from patterns of student attrition in undergraduate degree programs;

2. Develop a suite of appropriately targeted evidence-based intervention strategies to improve student retention rates in university-based enabling programs on the basis of the information obtained from our investigation;

3. Develop guidelines of best practice to accompany the suite of strategies;

4. Effectively disseminate the strategies and guidelines for their use nationally and internationally.

The project has the potential to significantly change the effectiveness in terms of both student outcomes and costs of delivery of an important pathway for disadvantaged student entry into higher education.

Table 1.1
Participating institutions: Basic characteristics

University	Attendance		Delivery Mode		Location	
	Full-time	Part-time	On-campus	Off-campus	Capital	Regional
UoN	✓	✓	✓	✓		✓
USQ	✓	✓	✓	✓		✓
UniSA	✓		✓		✓	
UNE		✓		✓		✓
ECU	✓	✓	✓		✓	

The project team includes representatives from five enabling programs across Australia

[1] Authors of the individual chapters are listed with the primary contributor first followed by others in alphabetical order. All members of the project team contributed review and editorial comments to all chapters to varying degrees.

concerned about the level of student attrition in their programs: The University of Newcastle (UoN; lead institution), the University of Southern Queensland (USQ), the University of South Australia (UniSA), the University of New England (UNE) and Edith Cowan University (ECU). These programs represent a cross-section of Australian university-based enabling programs, containing within them programs delivered internally and externally, full-time and part-time, aimed at mature age students as well as younger students, age-specific and not, and which are located in both metropolitan and regional areas. (See Table 1.1.) All run programs that are well resourced and have existed for several years. This diversity allows for comparison across similar modes and situations as well as observation of differences. (See Appendix B for a detailed listing of program characteristics.)

1.2 The nature and importance of university-based enabling programs

1.2.1 Enabling programs and their role

It is important in appreciating the context of this current research that differences between existing enabling programs are clearly articulated. In this study, there is a particular focus on enabling programs based in universities which do not charge tuition fees, with their funding coming from the Australian Government and their focus being on the equity goal of widening access to higher education to students from non-traditional backgrounds, especially those from low SES backgrounds.

The notion that Australian universities are not simply for the benefit of the rich and should be accessible to all was established many years ago (Barff, 1902). The extent to which this goal has been achieved in the ensuing years has always been a source of conjecture (Anderson, Boven, Fensham & Powell, 1980). Studies such as Dow, Jones and Osman (1972) revealed from the late 60s to early 70s that the background of university entrants was somewhat static and that while trends were evident it was the "fundamental lack of change which makes the overwhelming impression" (Anderson et al. 1980, p. 50). Since this time there has been consistent commitment to systemic approaches to providing alternative pathways to university within the sector, particularly for those from disadvantaged backgrounds (Ramsay, 2004). The blueprint for these enabling pathways into today's universities was the Commonwealth Tertiary Education Commission's Higher Education Equity Program and the Aboriginal Participation Initiative. This document and those that followed (Dawkins, 1987 & 1988) sought to establish a statement of national equity objectives and a template for funding of these proposals.

In 1990, the Department of Employment, Education and Training (DEET) and the National Board of Employment, Education and Training (NBEET) issued the *Fair Chance for All statement* (DEET, 1990), which focussed on equity objectives, strategies and targets in Australian universities (Ramsay, Turner, Sumner & Barrett, 1996). The statement clearly outlined the responsibilities of higher education institutions and identified six groups as disadvantaged in regard to access to university:

- people from socio-economically disadvantaged backgrounds
- Aboriginal and Torres Strait Islander people

- women (particularly in non-traditional areas of study)
- people from non-English speaking backgrounds
- people with a disability and
- people from rural and isolated areas.

Programs that targeted these groups of potential students were given impetus by the Equity and General Performance Indicators in Higher Education (2004), which provided system wide definitions of these equity groups and allowed universities to make direct comparisons against their own and national targets (Ramsay et al., 1996). Additionally, at this time, financial incentives were offered to universities to develop target group strategies for their inclusion (Layer, 2002).

Reports such as Clark and Ramsay (1990) identified that despite targeted efforts, students who entered the university sector with marginal entrance scores (on the basis of government initiatives) were unlikely to graduate unless they were provided with "significant assistance" (p. 51). In response higher education institutions explored programs such as the University of Newcastle's Open Foundation (OF) program (established as a pilot program in 1974; Collins & Penglase, 1991) in which mature-aged individuals prepared to pay an admissions fee were accepted (without any entry requirements) into the program, selecting two units run by suitably qualified and appropriately empathetic academics interested in mature age matriculation.

While these courses proved popular and increased access to university for specific groups, the financial considerations limited their uptake on a larger scale and resulted in universities not meeting their targets. The Australian Higher Education Support Act (2003) provided universities with access to funding for the *Fair Chance for All* target groups and post 2005 this funding was targeted towards a much broader group of potential students via bridging courses. Despite a clear agenda for change by a series of Australian Governments, James (2007, p. 2) reported that those from low SES backgrounds and rural and remote communities remained "significantly under-represented" in Australian higher education and figures had remained static for over 15 years.

The release of the Bradley Review of Higher Education, 2008 (Bradley, Noonan, Nugent & Scales, 2008) confirmed James's overview of participation rates, and identified that while Australia had been at the forefront of equity programs in the 1990s, it now lagged behind other OECD countries in the new decade in regard to inclusion of equity groups (Ryan, 2011). In response, the Commonwealth Government sought to "redress" this perceived neglect by the release of new guidelines for the Higher Education Participation Partnerships Program (HEPPP). The HEPPP seeks to "encourage and assist providers to meet the Commonwealth Government's ambition that, by 2020, 20 per cent of domestic undergraduate students must be from low SES backgrounds" (HESA 2013 - Other Grant Guidelines, 1.40.1). The new funding program was focussed not only on enhancing participation rates of targeted equity groups in bridging courses, but enhancing retention and completion rates as well (Ryan, 2011). As James (2007) points out additional funding has increased the numbers of students from equity groups, but successful completions and retention to higher degrees remains an ongoing issue.

The recent changes in funding and in relation to capping on subsidised placements in universities have resulted in rapid growth in enrolments into bridging type courses. The term "enabling program" has been used to describe these courses that generically fit under the umbrella of bridging or university preparation courses (DETYA 2000a). The Department of Industry, Innovation, Science, Research and Tertiary Education (2012, p. 26) defines an enabling course as, "a course of instruction provided to a person for the purpose of enabling the person to undertake a course leading to a higher education award. It does not include a course:

- leading to a higher education award
- accredited as leading to a vocational education and training (VET) award
- or that the Minister determines is not an enabling course".

The Australian government uses the descriptor enabling "courses". Other descriptors include bridging courses, university preparation courses, foundation courses, and pathway courses. The terminology generally used by practitioners and writers in this area is "enabling programs" (Clarke, Bull, Neil, Turner & Birney, 2000, p.2). In the main, their purpose is to allow a second chance for tertiary education for students who, for a variety of reasons, have not followed the more traditional pathway from secondary schooling directly into higher education. Thus a greater number of people and from a wider range of demographics have been able to gain access to higher education (James, 2007, p. 1.)[2]

The differences in enabling-like programs centre especially around the type of institution in which they are based (usually a university or institution in the VET sector), the existence and/or scale of tuition fees (ranging at the time of writing from no fees [including all programs involved in this study] up to $27,000)[3] and the existence and/or level of academic and related entry requirements (ranging again from none to significant, e.g. demonstration of commitment to study; see Table 1.2). In addition to these salient differences, such programs can differ in a wide range of organisational and pedagogical factors, such as the existence and/or level of separate skills-based components, the extent to which some of these or other program components are compulsory and the length of time allowed for program completion.

Layer (2002) compared the UK experience of targeted funding towards enabling participation into universities, suggesting Australia's more structured approach contrasted sharply with their attempts to enhance inclusive pedagogy. This was reliant on committed academics with a clear focus on changes necessary to widen participation; but rather than broadening the commitment to the goal, it developed for some time as an area for those with special interests (Layer, 2002).

In comparison, Australian enabling programs with identifiable student targets began to

[2] It is indicative of the relative youthfulness of the field of social inclusion in education that the terminology is so varied: what is here called "widening access" is elsewhere called "widening participation" in the UK, for example.

[3] Macquarie university Foundation Program (Standard Program) http://www.foundationstudies.mq.edu.au/foundation.html. (retrieved April 2, 2013)

develop specific programs with embedded supports. While Australian enabling programs still struggle with student retention and course completion, the structures exist to develop strategies to increase success. The provision for reporting students against supplementary enabling programs is used less frequently than the bridging program provision. This is surprising given the degree of activity in academic learning supports undertaken in universities and their perceived importance as strategies for improving student performance.

Table 1.2
All institutions: Entry model

Institution	Academic entry criteria?	Non-academic entry criteria?	Tuition fees?
ECU	Yes: Indicative TER/ATARs; English language competency	Age: 16+; Aus Citizen/Resident	None
UNE	No	Age: 17+; Aus citizen/Resident	None
UoN	No	Age: (a) 17-20; (b) 20+; Aus Citizen/Resident	None
UniSA	No (except one strand)	Age: (a) 18-20; (b) 20+; Aus Citizen/Resident	None
USQ	No	Age: 18+; Aus Citizen/Resident	None

Clarke et al. (2000) in an extensive examination of enabling programs and related courses in Australian higher education settings, found that predominately these programs "provide or support alternative pathways for non-traditional students" (p. 59). These programs were intended to "address the outcomes of disadvantage" (Clarke et al. 2000, p. 59) and "topping-up" skills and knowledge necessary within higher education. These "tops-ups" typically include the development of skills such as critical thinking, academic writing, researching, referencing, paraphrasing and literacy skills. Along with these more typical programs that have increasingly been presented as HECS free, come a group of bridging programs used as specific pathways into courses via targeting of skills such as calculus, physics, chemistry etc. These are often presented as fee paying and have become increasingly popular as an alternative pathway for international students and those in "near miss" ATAR situations.

While recent funding increases and subsequent growth in placements have resulted in an upsurge in numbers enrolling in enabling programs (James, 2007), there are a variety of reasons that students seek alternative pathways into university. First and foremost it appears that for many, choosing an enabling program represents a re-emergence of individuals into a system that has previously rejected them (Munns, Nanlohy & Thomas, 2000). Munns and McFadden (1997) describe their experience as a form of "cultural fracture", where they feel they could still conceivably (with the right program and support) "make it" educationally. Their sense of rejection may be due to several factors, including inability to connect with the school curriculum or the social structures that exist there, socio-economic circumstances, poor health, and lack of encouragement at the school and home level.

While these traditional reasons are still relevant, additional factors such geographical remoteness (Ellis, Cooper & Sawyer, 2001) and lack of opportunity (Willans & Seary 2007) remain issues. Additionally, as recommended in the Behrendt Report (Behrendt, Larkin, Griew & Kelly, 2012) the university cap should be increased for Aboriginal and Torres Strait Islander students, due to a "poor translation" of vocational courses to higher education courses (Ross, 2012, p. 25).

Finally, worth noting is that secondary students appear to be becoming somewhat strategic and selecting enabling programs as a legitimate pathway for higher education. As described by Ross and Gray (2005, p. 112) many students are now "navigating their transition" beyond secondary education and "making assessments of risk and need, and of creating opportunity structures for themselves". All of these factors have created an emerging sector of higher education that is increasingly being lauded (Ross, 2012).

1.2.2 The success of enabling programs

University-based enabling programs have proven to be a successful pathway into higher education. From the early offerings of the University of Newcastle Open Foundation Program (OFP) in 1974 until the recent post-Bradley dramatic expansion of programs, such programs have been generally successful at both enabling access to higher education for a large number of students from non-traditional backgrounds and also at preparing them appropriately for performance at a higher level.

However, what constitutes success within the framework of enabling programs has been a source of conjecture throughout their history in this country (Clarke et al. 2000). For example, completing the enabling course is one measure of success, but given this is simply a pathway to a degree course, not being suitably prepared for further success and eventual graduation from a bachelor degree complicates these perceptions. McInnis, Hartley, Polesel & Teese (2000), in a study of non-completion in VET and Higher Education at the University of Melbourne, point out that non-completion of a program does not necessarily equate with failure. It is essential to distinguish between "positive" and "negative" attrition. Non-completing students may be "transferred", "lapsed" or "temporarily discontinued". Non-completion may signify the achievement of desired goals, either in the sense that skills have been gained, employment outcomes realised or articulation to other studies successfully negotiated. The significance of completion "depends on the view of the stakeholders" (McInnis et al. 2000). It should also be noted that many students in university-based enabling programs begin the program, discover that it is too much for them (for a variety of reasons), drop out but then return to study in the program in the next year or later years.[4]

It should be noted that a major purpose of enabling programs is to allow individuals who may have a desire to undertake university study to discover not only if they are capable of studying at that level but also if that is actually what they want to do. The enabling program should not only classify students by their capacity to achieve passing grades, but also give them the opportunity to learn more about their desires. A student who is not sure of his/her ambition to undertake undergraduate study will incur significantly greater costs – both

[4] University statistics do not count students dropping out and returning in the following year as "attrition" while those returning in later years do count as having dropped out of the relevant year.

personal and institutional – discovering that they were mistaken in this ambition half-way through a degree program than half-way through an enabling program.

Withdrawal from the enabling program, if it is for the right reasons, may not only be as positive a result for some students as course completion (especially so for enabling programs) but also for the higher education sector generally as the costs of attrition at this level are so much less for both the student and the institution. It is a poor (and perhaps unsuccessful) educational experience that does not lead to a re-negotiation of personal preferences and this is particularly so for an enabling program. An implicit aim for enabling programs may be to encourage students who are often not part of an achievement-oriented cultural background to develop both a desire and a capacity to achieve on several levels. This in itself presents challenges for this group who may often have to move away from family, friends and culture in pursuit of further goals (Willans & Seary, 2007).

In a study by Cantwell and Mulhearne (1997) of **mature-aged women** returning to formal study, it was noted that not all achieved successful academic outcomes, but all experienced significant personal growth in "identity and insight". Further, Willans and Seary (2011) point out that while this transformational learning can often come at a high cost for mature students, "the process of enduring the struggle, and successfully overcoming the obstacles that have previously blocked the learner's progress, results not only in academic progress and the development of resiliency, but also in personal transformation for those who persist" (p. 138). In an insightful analogy they liken this experience to the novice paintball player, who unfamiliar with the rules, is hit from all angles.

Other challenges exist as a result of the nature of many students in enabling programs, providing universities with obstacles that may not exist in the same numbers amongst students following a traditional pathway. This alone can present the necessity for more targeted support (and hence greater financial outlay). Subsequently, cost effectiveness per student is often compromised and if used as a measure of success can work against open entry admissions programs (such as all participating programs other than ECU) and result in "more restrictive student selection" such as evidenced at several universities throughout Australia (see Appendix A).

Finally, in simplistic terms success should clearly be based on the outcomes of individual enabling programs. From a bigger picture view this would be to provide successful pathways for non-traditional students into undergraduate degrees and for these students to be equipped with the skills that allow successful completion of these courses. From an individualistic and equity viewpoint previously disempowered students who decide that completion of the course is not their desired outcome, but who start to examine other education or employment opportunities, may indicate a level of success. This divergence between specific concrete outcomes to broader societal notions has impacted on the definition of success for enabling programs and without a specific and agreed upon criterion for both viewpoints, will continue to do so.

In summary, as pointed out within the DETYA guidelines (2000a) on establishing student loads in enabling programs, these programs are:

> "provided for particular types of disadvantaged students who need preparation prior to commencing a formal award course—it is offered to students to enable them subsequently, *if they so choose,* to commence an award course in a student place that is funded either partially or fully by the Commonwealth" (DETYA 2000a, our italics).

As such, success as per this definition may be enabling further participation (and hence successful completion of the program), but whether the student chooses to embark in a bachelor degree or is indeed successful in it, rests with the individual student. Pendergast (2000) argues, in the context of undergraduate degree programs, future research should focus on what "success" means, and how it can be measured. The need is even more urgent in the explicitly change-oriented enabling program context (Bennett et al. 2012).

Taking the preceding into account there are several lenses that elucidate program success. For example, Archer, Cantwell and Bourke (1999) in an extensive qualitative study of students in the University of Newcastle OF Program, revealed that **mature age students** from enabling programs demonstrated more confidence in approaching their studies than younger students following the traditional via school pathway. Archer et al (1999) make the point that these individuals did not just drift into their studies but rather gave much considered thought before entering their courses.

Ramsay (2004) explored the academic outcomes of a successful entry program **for mature age students**: UniSA-PAL (Pathways for Adult Learners). This was conducted at specific adult-entry secondary sites and moderated by UniSA staff. The access program was similar to the existing Diploma in University Studies, a HECS liable program offered to disadvantaged adults without traditional university entry requirements. The program was made up mostly of woman (80%), with no ATSI students at the time of review. The final 2003 retention rates for the combined UniSA PAL schools were 83 percent of actual commencers and 75 percent of those who initially enrolled. This was in stark contrast to students both in the Diploma in University Studies with an average retention rate of 50 percent between 1996 and 2002, and even more so with the average national 2002 retention rates of courses funded by the Enabling Program, which were 42 percent. At that time the average retention rate for federally funded enabling programs was 39% of students. Without fully unpacking Ramsay's thoughts on this "outstanding success" it was clear that the clarity of goals (gathered through interviews) that the UniSA PAL students brought to their situation was a vital component towards the high retention levels. Further, these students believed that course success was possible and this success would be replicated into the necessary skills for further success within higher education.

Statistical data provides us with a more pragmatic lens to determine the success of enabling programs and in recent times a plethora of evidence has been collected to highlight both the quality and the necessity to continue, strategise and expand such programs. An early study by Ramsay, Tranter, Sumner and Barrett (1996) while not explicitly examining enabling programs at the University of South Australia explored the university's flexible admission policies in terms of specific equity groups from 1992-1994. They concluded that success rates fluctuated in terms of the "proportion of total assessed student load undertaken in a year (p. 36)", and over the duration of the study saw a decline in

performance of those admitted on the basis of their final secondary year or other special entries. **Aboriginal and Torres Strait Islander (ATSI)** students had lower success rates than those of any other equity group and students in external learning situations were also much lower than university averages. However, in a positive outcome those students from **lower SES and rural/isolated communities** achieved success rates similar to the university average. Finally, those from **non-English speaking backgrounds** had comparatively poor success rates, but their attrition rates were low and they appeared less likely to withdraw than the average commencing undergraduate student.

The University of Newcastle (UoN) being the longest established and largest enabling program in Australia has provided consistent data on the performance of students over a number of years. Table 1.3 highlights that the rate of progression of students from the OFP from 2001-06 averaged 40% with an increasing trend. While paling in comparison to the success of Ramsay's data from the UniSA PAL program, these are consistent with retention results in comparable enabling programs throughout Australia (Clarke et al. 2000, p. 291).

Moreover, once **OF and Newstep students** enter undergraduate programs they are retained at a similar rate to all other students at the university (with Newstep entrants being retained at a slightly lower rate) (UoN 2010). OFP students also tend to perform at roughly the same rate as all students, as measured by GPA averages, while Newstep entrants are again slightly lower. This confirms earlier data from Cantwell, et al (2001, p. 229) although there they suggested that the higher proportion of **older female students** in the OF entrant cohort was largely responsible for raising the OF performance level (Cantwell, et al, 2001, p. 227-8).

There is evidence that entrants to UoN via OFP are over-represented in the ranks of university medallists. Then Deputy Vice-Chancellor (Academic) Professor Kevin McConkey stated in 2010 that entering the UoN from the OFP "was a better predictor of gaining a University Medal than entering with an ATAR of 95+".[5] Edith Cowan University (ECU) (which has relatively restrictive academic admission criteria compared to the other programs in this study) has provided the university with a constant stream of prospective undergraduate students (see Table 1.4). [6]In Semester 1, 2012, approximately 40% of UPC students went on to pursue a degree at ECU (in Semester Two) and are still enrolled in a degree at ECU.

While evidence exists that enabling programs are successful as a transitional pathway for non-traditional students, overwhelming data highlights that these students need thorough preparation if they are to persist within higher education settings. For example, Rose-Adams (2012), in the comprehensive "back on course" study completed in the U.K. (involving over 36,000 "early leavers" from higher education courses), sought to establish the reasons for early exit and construct a profile of these students. The research findings pointed towards students from non-traditional backgrounds being more likely to leave early from their courses for a variety of reasons including financial difficulties, life events and a mismatch between what they imagined university would be like and what it delivers.

[5] 2010 Admissions Briefing. He stated that he intended to get this information updated but no later information is as yet available.

[6] There is no collected data on the successful conversion rates of these students, and while anecdotal evidence is positive, clear statistical evidence was not available at the time this report was being completed.

Table 1.3
UoN: OF progression to UoN undergraduate 2006-11 (Kavanagh & Stockdale, 2007; UoN internal data, 2013)[7]

Year	Enrolments (HECS census date)	Number progressing to UoN undergraduate	% of enrolments progressing
2001	1360	--	
2002	1708	571	33.5%
2003	1867	622	33.3%
2004	1691	682	40.33%
2005	1551	794	51.2%
2006	1642	738	45.0%
2007	1586	727	45.8%
2008	1457	610	41.9%
2009	1726	687	39.8%
2010	2204	783	35.5%
2011	2033	812	40.0%

Table 1.4
ECU: UPC progression to undergraduate 2006-12 (Source: internal data, 2013)

Year	Enrolments	Enrolled in Bachelors	Made Census in Bachelors	Enrolled in next period
2006	379	82.3%	78.6%	75.2%
2007	418	83.7%	80.6%	77.3%
2008	558	83.2%	81.0%	77.8%
2009	544	79.2%	73.2%	73.2%
2010	477	77.1%	72.5%	72.1%
2011	455	82.0%	77.8%	77.4%
2012	576	81.9%	79.3%	80.2%

These findings reinforced the necessity to prepare these students more thoroughly. A further indicator of the value of providing supportive pathways for non-traditional students comes from Kuh et al. (2007) who suggest that while student background is a factor in terms of retention, "what students do during college counts more for what they learn and whether they will persist in college than who they are or even where they go to college" (p. 8).

When asked on the application form "How did you hear about the program?" approximately 80% of OFP applicants report hearing about the program via word-of-mouth. This is a clear signal of program success "as it is only people who are satisfied with their experience of a *[sic]* program who will recommend it to others" (Kavanagh & Stockdale, 2007, p. 3).

In summary, as Tinto (1993) notes, students enter higher education with a range of attributes and characteristics and these are combined with their personal goals and commitments. Throughout their course they go through a series of academic and social experiences which result in a reappraisal of their goals and commitments, ultimately

[7] Note that some students also progress to undergraduate degrees at other universities; data is not available.

impacting on decisions to persist or leave their courses. The implications for enabling programs, with their relatively less experienced and more diverse range of entrants, are clear: a wider understanding of "success" than simply retention is required.

1.2.3 University-based enabling programs in Australia

In Australia there are 35 university-based enabling programs (as at February 2013). These programs vary in many ways: 17 are free and 18 charge tuition fees; 21 are open to domestic students only while 10 are open to both domestic and international students; some are age-specific while 23 are not (although all are targeted at those who are at least 17 years old); some are run directly by a university while others are offered via a university college or similar. (See Table 1.5; for the full listing, see Appendix A.)

Additionally, these programs differ in terms of academic entry requirements, mode of delivery, course offerings per year, expected time of completion and pathway that completion of the course provides (with several specific pathway courses being established in recent times e.g., UPC Education Assistant course, at Edith Cowan University, designed as a pathway into the Bachelor of Education).

Recent changes to Australian government policy in the period following the Bradley Review have led to an explosion in university interest in enabling programs.

Table 1.5
Australian university-based enabling programs: Summary (Jamieson, UNSW, 2012; revised Hodges 2013)

	21 +	20 or less	Open to all ages	Domestic students only	International and domestic	Free	Tuition fees	Run by the uni	Run by a university college	Run with external partners
Programs (35)	8	3	23	22	10	17	18	22	8	2
Percentage of total (rounded)	23%	8.5%	67.5%	63%	28.5%	48.5%	51.5%	63%	23%	6%

Clarke et al. (2000) identified several technical college programs that were enabling-program-like and had the clear intention of providing a pathway towards higher education, such as the Certificate IV in Adult Tertiary Preparation program offered in Queensland, successful completion of which provides an ATAR equivalent for their students. Many of these programs exist in regional centres and are often administered within secondary school environments (with the ongoing support of the technical college). Finally, there are several university and technical college enabling courses constructed specifically for indigenous students.

Given the diversity and complexity of enabling and enabling-like programs it is not surprising that issues arise when attempting to find common ground on issues such as reporting, retention rates, and what constitutes student success. Clarke et al. (2000) in their extensive exploration of enabling programs throughout Australia interviewed staff and identified that they had strong feelings about perceived success or failure of their courses. Typically these

feelings revolved around the transition to higher education, and whether this act itself was the intended goal for students, or whether thorough preparation and the opportunity to make future choices was their *raison d'etre*.

In fact, Clarke et al. (2000) identified this as a dilemma for program staff, and while we live in more pragmatic times today, Devlin (1997, p. 5 cited in Clarke et al. 2000) summed up the feelings of many with this passionate rally from a bridging program educator: "There should be no compulsion or pressure on individuals, nor "social engineering" to arrive at arbitrary targets imposed by central planners" (p. 4).

Further, in an extensive overview of the area by John Clarke and others (Clarke et al. (2000), practitioners reflected the clear dilemma that still exists today; do quantitative statistics serve such programs well? Do statistics focussed on targets fully measure the impact these programs have on this diverse cohort? Several educators also identified the problem with attrition reporting and considered the official transfer rates to be very different from those experienced within individual programs (Clarke et al., 2000, p. 97). It is assumed from these comments that individuals upon completion of their enabling programs, took time to reassess their choices, and were later observed to have taken opportunities, but not necessarily within university reporting timeframes.

Finally, sensitivities towards fees appear to be an ongoing issue within the enabling education sector. Financial considerations are often identified as catalysts for failure to persist in enabling programs, with Ramsay et al. (1996) identifying nearly two decades ago that combining study with ongoing work was often a catalyst for withdrawal. With growing evidence that today's higher education students are working more than at any other time (McInnis & Hartley, 2002; ABS, 2013), it appears any mechanism that could possibly alleviate this stress would facilitate the pathway for students already under pressure from an academic skill base seriously challenged by course content.

On the other hand, Gorard, Adnett, May, Slack, Smith and Thomas (2007) argue that increased financial aid has not significantly increased the participation of low-SES and other disadvantaged groups either. Further, the widespread advent of HECS-free enabling programs has not seen a reduction in attrition rates (which have been consistent for some time). With no financial penalty at stake, for some students there appears to be little reason to "buy in", and certainly no necessity to officially pull out. This in turn impacts on the perceived success of such courses and their ability to plan effectively.

1.3 Student attrition in university-based enabling programs

1.3.1 Defining "attrition"

Definitions of attrition can vary widely. The following have been used in the current study, and, given the tendency for enabling students to leave the program without formal withdrawal, may reflect student behaviour within these programs more insightfully than official university figures (which measure commencements from the HECS census date):

Commencements: Number of students enrolled in Week 1.

Persisting students: Number of students who sat at least one final examination or equivalent final assessment.

"Raw" attrition rate: (Commencements *minus* persisting students) *divided by* Commencements).

"Effective" attrition rate: (Number completing Initial Questionnaire [with identification] *minus* persisting students) *divided by* (Number completing Initial Questionnaire [with identification]).

"Official" attrition rate: (Number of students enrolled at HECS census date *minus* [number of students successfully completing + number of students re-enrolling the following year]) *divided by* (Number of students enrolled at HECS census date).[8]

Non-persistence is not always a negative experience for the student: there is such a thing as "positive attrition". McInnis et al. (2000), in a study of non-completion in VET and Higher Education at the University of Melbourne, point out that non-completion of a program does not necessarily equate with failure. It is essential to distinguish between "positive" and "negative" attrition. Non-completing students may be "transferred", "lapsed" or "temporarily discontinued". Non-completion may signify the achievement of desired goals, either in the sense that skills have been gained, employment outcomes realised or articulation to other studies successfully negotiated. The significance of completion "depends on the view of the stakeholders" (McInnis, 2000); for some students non-persistence can reflect that they have developed certain skills that make them more employable or create other opportunities (McInnis et al., 2000, p. 9).

Polesel, Davies and Teese (2004, p. 18) also point out that non-completion is not always aligned to negative outcome for the students, although it cannot be automatically assumed that it is positive. For students with "a history of interrupted schooling and with few other qualifications", the experience of formal recognition of a qualification for entering the workforce is "actually intense". Even completion of an enabling course may be indicative of commitment and a work ethic from an employer point of view. It should also be noted that many students in university-based enabling programs begin the program, discover that it is too much for them (for a variety of reasons), drop out but then return to study in the program either in the next year or in later years.

1.3.2 Student attrition: Why does it matter?

Attrition within higher education is a global phenomenon and research into this area is receiving increased attention (Cao & Gabb, 2006). In real terms student attrition results in significant individual costs to students in terms of fees, opportunity and emotional costs, and to higher education institutions the costs include missing out on ongoing funding and the non-realisation of recruitment and tuition costs (Cao & Gabb, 2006). Increasingly, attrition rates are being used as performance indicators for the allocation of funds and research grants (Learning and Teaching Performance fund) and this too is becoming a major

[8] The UoN definition is being used here (University of Newcastle 2011.)

driver towards the development of university strategy and policy related to this area (DEEWR, 2011).

Education at a Glance 2007: OECD Indicators compared survival rates in 2004. These survival rates reflect those who enter a course and then graduate from the original course they commenced in. Against an OECD average of 71.0%, the figure for Australia was 67.3%. Australian survival rates fell somewhere in the middle of OECD countries, with the U.S.A. having the lowest survival rate. Hauptman (2008) explains this phenomenon by describing the U.S.A. as being the first country to explore the "massification" of higher education, and so despite these concerning results continues to encourage "more and more" people to try higher education and not be too concerned with completion. Indeed, Hauptman suggests only 10-20% of those who enrol in Community College courses intend to complete these courses.

In general terms there is a range of perceptions of attrition within universities (Ramsay et al. 1996), but increasingly universities are becoming focussed on the pragmatics of this process, along with the human and societal cost. Lenning, Beal and Sauer (1980) point out that some highly prestigious universities see attrition rates as an inevitable consequence of academic competition and a form of quality assurance to maintain their reputation. In this context attrition at least from the university context can be seen in a rather different light.

Ramsay et al. (1996, p. 8) suggest that the overwhelming issue of attrition is the perceived negative costs associated with it. These effects are initially thought to impact on self-esteem and self-confidence, but longer term its effect may be to result in societal waste when these individuals do not fully realise their potential post higher education study. From an institutional point of view, resources devoted to the education of students who leave and do not return are not recouped and could be devoted to others, and further, these attrition rates point towards relevancy of courses, poor teaching practice and inadequate support services.

Finally, Price, Hart and Cole (1991) point to the difficulties that attrition causes in terms of planning, budgeting and associated funding opportunities. For those students in enabling courses, attrition has the potential to further reinforce feelings of past failure and possible further alienation from formal education with the attendant personal and social costs. Further, as Cleary and Nicholls (1998) point out often non-completers come from "at-risk" student groups, and from an equity and social inclusion point of view, this is a continued denial of further higher education opportunities.

1.3.3 Rates of student attrition in enabling programs

In the case of the longest-running of these programs, the **UoN OFP**, the attrition rate has been remarkably stable over time at around 50%. The founder of the program, writing in the thirteenth year of its operation, highlighted this consistent trend: "Every year, very consistently, something close to half of the people who commence the Open Foundation Course complete it" (Smith 1987, p. 17). Data on official attrition rates for OF (2007-12) reinforce this tendency for attrition to be in the region of 50% (Table 1.6) with the more recent figures suggesting some improvement in the rate. (Note that the part-time OF includes approximately 20% external students.)

Table 1.6
UoN: Official attrition rates Open Foundation and Newstep 2007-12 (Source: UoN 2012)

	2007	2008	2009	2010	2011	2012	Average
Part-time OF	58%	56%	48%	53%	42%	51%	49%
Intensive OF	46%	43%	40%	42%	35%	44%	40%

To give a "snapshot" of the situation with other participating programs, figures for 2011 from the mixed mode **Open Access College at USQ** reveal an attrition rate of 64.2% for the external students and of 50.9% for internal, that is, 55.0% overall. In the **UNE external program** the attrition rate is 57% (Muldoon 2011, p. 5). A figure in the region of 50% thus seems typical of "open entry model" programs such as those above (see Table 1.6), with a higher figure normally seen for external than internal students. The contrast with the 2012 rate for the restricted entry model **ECU University Preparation Course (UPC)** is instructive, where the attrition rate is far lower (Table 1.7).

Table 1.7
ECU: UPC attrition rates 2012 (Source: Program data)

UPC	Mode	Enrolled Week 1	Officially Discontinued	Completed	"Raw" attrition rate	Official attrition rate
Sem 1	Mixed	669	174	482	28%	16%
Sem 2	Mixed	360	20	148	43%	15%
Total		1029	194	630	35%	15.5%

Noticeable for ECU is the high attrition rate in Semester 2 where 30% of the cohort was made up of external students (the mode of delivery with the highest drop-out rates). Approximately 72% successfully passed the UPC in Semester 1, 2012 or were still enrolled and completing the course.

ECU, like most other Western Australian enabling programs has a high level of entry requirements (including submission of portfolios, referees, clear-English literacy levels); it also has, we would argue as a result, lower attrition rates compared to other enabling courses which do not have academic admission requirements. In fact, the attrition rates within the ECU program are comparable to those found at the outer limits of university undergraduate programs, particularly if the *effective* attrition rate is considered.

Whether models such as ECU's UPC meet the equity and social inclusion charter of the Federal Government is an interesting discussion, but it appears that tightening the admission process can result in positive retention outcomes. However, increasing the restrictions on entry comes at a cost. If the charter for university enabling programs is to widen access and create social inclusion opportunities, the non-restricted entry pathway provides such direction. By narrowing the entry pathways, programs such as ECU's UPC in turn restrict the opportunity to widen access. Whether all enabling programs need to (or are prepared to) accept the trade-off for lower attrition rates is difficult to gauge at present.

Meanwhile, all programs need to focus on retention strategies to enhance their current student groups, as supporting those who are deemed "retainable" will in turn impact on the success rate of all students.

1.3.4 Enabling and undergraduate programs

Many universities offering enabling programs tend to review them in a similar way to that of their undergraduate degree programs, and this is particularly true of concern about relative levels of student retention. Just how comparable are they, in fact? There are considerable differences not only in the level of the programs, but also in the purpose and, consequently, the structure and nature of enabling and undergraduate programs. These differences (as discussed earlier) mean that it is not possible to simply compare the retention and attrition rates in each kind of program. The two kinds of programs are quite different in nature and differ in a number of ways, the most significant of which are:

- their *purpose* and the associated nature of the entry process
- the nature of the pre-enrolment *filtering* involved and
- the level of *costs* involved in taking the program.

All of these have clear, but currently unquantified, effects on student retention both in themselves and via the consequent nature of the resulting student cohort, including in the level of student commitment. Most of these differences arise from one fundamental fact: the programs have quite different purposes and, as a result, entirely different *entry models* governing student entry to the program. The most important of these differences are the entry model employed, the existence or not of a "price point" at which the student must withdraw from the program or become liable for financial costs, and the degree of commitment to the overall program involved on entry.

Tables 1.8 and 1.9 provide a summary of the significant structural differences between enabling programs such as the UoN OF (as an example of an open entry model enabling program) and undergraduate programs, differences which are likely to impact on student retention rates.

Table 1.8
Enabling and undergraduate programs: Relevant structural features

Feature	Open Foundation	Undergraduate program
Purpose	a. To take students from Year 10 level to university entry level; b. Enable access to undergraduate for those without qualifications	a. To take students at university entry level to Bachelor qualification level; b. Allow access to higher degree programs
Entry portal	Open: Encouragement of students who might not think of themselves as capable of university study to try it	Closed: Gate-keeping to restrict entry to those of a suitable academic level
Academic entry requirements	Nil	ATAR at relevant level
Preparation for entry	Any or none (barring having an existing university degree)	HSC or equivalent educational experience
Sorting function	Those (a) not capable of, or (b) not yet ready for, or (c) no longer interested in university study	Those not able to meet relevant year level academic standards

Variation in academic starting level	Very high	Relatively small
Tuition fees	Nil	High to very high
Non-financial investment	Low	High
Commitment required	1 semester FT equivalent	6 semesters FT equivalent
Financial commitment point	Nil	Well defined (HECS census date)

Table 1.9
Enabling and undergraduate programs: Student characteristics

Feature	Open Foundation	Undergraduate program
Educational experience	Limited Not positive	Relatively great Relatively positive
Educational attainment	Low to very low	Fair to good
Level of commitment	Full range: Low to very high	High enough to be prepared to commit to HECS debt
Diversity of skills, etc.	Any or none (barring having an existing university degree)	HSC or equivalent educational experience

1.3.4.1 Program features

The following descriptions unpack enabling programs, using the **UoN Open Foundation (OF)** program and the **ECU University Preparation Course (UPC)** in Perth as exemplars, and explore factors that impact on the retention of students within this area of higher education:

a. Purpose: The OF is an enabling program, with the overall purpose of increasing the level of representation in higher education of students from groups traditionally under-represented. It includes students from low SES backgrounds, those with disabilities or encountering other forms of educational disadvantage. Likewise, the ECU UPC is a program that targets school leavers, recent school leavers under 20 years of age and mature age applicants. It is both perceived as an opportunity for second chance students and a legitimate pathway from schools into ECU's undergraduate programs. Unlike the OF it has specific entry requirements depending on whether students are current school leavers, recent school leavers or non-school leavers. These entry requirements include meeting secondary graduation requirements of the Western Australian Certificate of Education (have studied a minimum of four ECU approved subjects/courses in year 12), meeting UPC English Competency requirements, or successfully completing a Certificate IV as part of their 12 years of schooling.

It is widely recognised that a major barrier to raising the level of participation of such groups is the culturally-based lack of aspiration to go to university (James, 2007). Hence, for UoN's OF to achieve this objective it is important to market the program to potential students as a chance to *try out* what university might be like and, at the same time, to see if they have the capacity to undertake university study. As such, it is important that entry to the program is

as free as possible of elements that may be, or may be perceived to be, barriers to such students. It is no accident that the advertising slogan for Open Foundation, appearing prominently on the university website around application time, is "change your life". More formally, the OF program is aimed at mature age people (over 20) and implements this overall purpose via a number of more specific aims:

a. Allows students to try out a form of university study to see if it is what they actually want to do
b. Tests student readiness for university study in terms of academic knowledge and skills, confidence and study habits
c. Allows students to negotiate their readiness both with themselves and the institution
d. Provides formal access to university study for those ready for it via the gaining of an ATAR-equivalent.

In contrast, the ECU UPC course, while targeting a similar cohort, makes it clear that "our UPCs are not open for everyone" (ECU future student prospectus, 2013). The implication is less about sampling higher education and more about providing a pathway. Nonetheless, the emphasis of both courses is to prepare students by teaching them the required skills for academic success, with a further goal that these students in turn become independent learners.

These aims are in dramatic contrast to the purpose of an undergraduate degree program which is to equip students, who are relatively confident in their capacity to undertake university study and who are deemed to be of a sufficient standard (in terms of academic knowledge, skills, confidence and appropriate study habits), with the necessary skills for entry into professional employment or higher degree study.

In short, UoN's OF aims to be highly *inclusive* in its approach to student entry, offering an entry portal characterised by the lowest possible risk of cost, in both financial and personal terms. By contrast, an undergraduate program and to a lesser extent ECU's UPC course aim to be somewhat *exclusive* in order to safeguard program standards, and to filter out potential students who have a substantial risk of not being able to cope with program demands.

b. "Open" and "closed" entry: Arising from this difference in purpose is a major difference in terms of the nature of the model governing student entry. The "open" in OF represents its commitment to an *open entry model*: students who are likely not to be confident in their ability to undertake university study, or even sure if it is what they want to do, are encouraged to "have a go" (and at a relatively low cost, find out if it is for them).[9] The invitation, often explicitly, is to try it and find out (even if the student is uncertain they can do it). The underlying assumption is that the student should try the program if they think they *might* be able to do it and if they *might* be interested in tertiary study; the aim is to maximise the attractiveness of the program to potential students who are traditionally uninterested in, and not engaged by, the idea of tertiary education. In order to facilitate this aim OF as a matter of policy eschews any preliminary *filtering* of entering students on the

[9] This is one of the three founding principles of Open Foundation, laid down by Brian Smith in 1974 (Kavanagh & Stockdale, 2007).

basis of currently demonstrated academic ability or of level of commitment. (Hence there are no entry tests or interviews or even diagnostic tests on program entry.[10])

An **undergraduate** program, by contrast, operates on what might be called a *closed* entry model, in which entry is explicitly open only to those who have demonstrated a sufficient academic standard (or some equivalent) and is closed to those who do not meet this standard. The assumption is that the student wants to enter and must demonstrate their capacity to meet the academic requirements of the tertiary institution. In the case of ECU's UPC program students must show a commitment to learning, but whether it is a "near miss" ATAR, not meeting undergraduate course entry English standards or simply as is often the case for mature age students never having had the opportunity or inclination towards formalised higher education, these students are given a second opportunity at higher education. That is, the different purposes of the programs lead to a strong contrast in the pre-enrolment filtering process.

c. Cost structure: Both tuition fees and academic entry requirements have the potential to be seen by possible students as barriers which are likely to play on a lack of confidence or perceived readiness for extending educational access. It costs the student nothing to do an enabling program (other than relatively minor incidental costs such as books, etc.) and, in general, anyone can enrol in it. (Historically, application before the closing date means automatic acceptance into the program.) Similarly, the ECU UPC program as with many other enabling programs has no student fees and ensures that financial considerations are no barrier to this pathway.

A significant point associated with the cost of the program is reflected in the importance of the HECS census date: enrolment numbers are counted by the university, and reported to DEEWR/DIISRTE as of the HECS census date and enrolment/retention is measured from this figure, rather than the number of students enrolled on the first day of semester (which common sense would tend to see as the point at which to count students commencing the program). The reason for that appears to be that this is the point, in an undergraduate or other degree program, that the student bears the *cost* of the tuition fees and, hence, is making a reaffirmation of their commitment to study in that semester. (See Figure 1.1.)

The HECS census date then becomes a significant transition point in the undergraduate student experience. By contrast, there is no such point in the case of the UoN's OF student and others in non-fee paying enabling programs who bear no tuition costs throughout the semester (see Figure 1.1). The corollary of this is that there is no equivalent point at which the commitment to study has to be made beyond the initial "Why not give it a go?" commitment, which may vary from minimal to substantial.

[10] The OF Handbook recommends a literacy and numeracy level of at least Year 10 but this is, as a matter of policy, not monitored on application or enrolment. It is instructive to compare Newstep in these terms, in which there is an early literacy diagnostic test in order to identify students in need of learning development. Being for 17 – 20 year olds who are much closer to the school experience, it is assumed that students will see such a test as less of a barrier to early commitment than the older OF students, most of who are further removed from memories of school with their recent experience having been as independent adults.

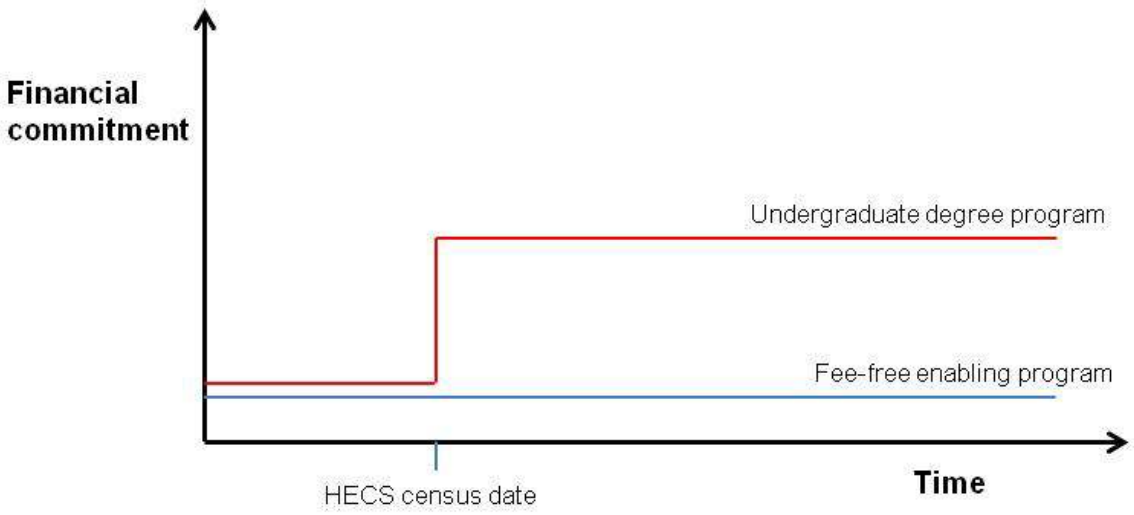

Figure 1.1
Cost Structure of Programs to Students

d. Sorting function: As noted above, enabling and undergraduate programs exhibit quite different pre-enrolment filtering processes. Equally, the in-program sorting function is significantly different. Essentially, the UoN OF and other enabling programs exhibit a two-fold sorting function, one for the university and one aimed primarily at the student. For the university, enabling programs perform the typical sorting function of any award-based educational experience: to certify students who meet the required standard to progress to the next educational level and to reject those who do not. Students who pass enabling courses have demonstrated a suitable standard for university entry over a range of factors including academic study skills, discipline-related knowledge and good study habits.[11]

Importantly, this sorting function when combined with an open entry model such as UoN's OF will necessarily result in a relatively high rate of student attrition and/or failure. Given the diversity of the cohort and their academic background, attrition should be seen as the equivalent of pre-university sorting at secondary school. As such, it is suggested that the relevant attrition benchmark is more likely to be like that of the Year 12 non-completion rate rather than that of a typical undergraduate program.

The OF and other enabling programs have a second sorting function which, from the point of view of the student is just as important: the chance to test the university experience and see if it is for them. This academic experience will provide them with the information to decide if higher education is the direction they wish to pursue or whether they will be served better by the VET sector or by abandoning further educational aspirations altogether and enter or resume activities within the workforce.[12]

[11] It is characteristic of UoN's Open Foundation's open entry model that students who are deemed by the program or themselves to not meet the required standard are encouraged to try it again the next semester (in the case of Part-time Open Foundation) or the next year. It is significant that many students succeed at OF on the second, third or sometimes even more, attempt.

[12] It is important to note that this function carries a concomitant responsibility: to provide the student with clear positive exit pathways so that having had a try at the university is a positive experience, whether that be in progression to university or not.

In an undergraduate program, students will have gone through much, if not most, of this process before entry – typically in the preparation program, be it school, TAFE or even UoN's OF itself.

Taking this into account, a considerable proportion of the attrition rate could reasonably be expected to be due to this sorting function; *how much* is a very important question and requires further examination. At this present moment the limited awareness of this secondary sorting function (and associated attrition) within enabling programs, provides university administrators with little appreciation of whether this is the reason for departure and limits the capacity of the program to offer students a direction to go next. Nonetheless, this difference in sorting function represents a clear difference between enabling and undergraduate programs - with obvious implications for the level of "natural" attrition to be expected in each.

1.3.4.2 Student characteristics

While there are major differences in terms of student outcomes on the basis of program differences, likewise, the nature of the students undertaking the programs has a dramatic impact as well. These generalisations for the current generation of enabling students lack evidential support, but anecdotally, experienced staff acknowledge what a difference student characteristics make.[13]

a. Past educational experience: There is a clear difference in terms of their past educational success between students in an undergraduate program, those in enabling programs with entry criteria and those in open entry programs such as UoN's OF . Entrants to an undergraduate program will have relatively high levels of past educational success, a relatively narrow range of academic skills and/or disciplinary knowledge (subject to pre-requisites) and a reasonable level of confidence in their capacity to cope with tertiary study. Current literature on the "first year experience" points out that as the bar at which the closed entry portal is lowered, the extent to which undergraduate confidence can be assumed is far less true than it was two decades ago (James, Krause & Jennings, 2010), but it is still relatively high simply by virtue of entry criteria.

By contrast, it is typical of OF students (and others following an open entry model) that their past educational experience is less than satisfactory, indeed at times negative. Students in enabling programs tend to be using the program as a "second chance" at education: people who were not particularly involved in the educational process while at school but who have now, for a variety of reasons including unemployment, injury at work, increased maturity or just boredom with their current employment, decided that perhaps university study will open new doors for them. Thus these students tend to be characterised by a lack of confidence in their capacity to cope with demands of a formal educational environment along with a wide range of differing levels of study skills and a range of life skills gained from experiences associated with employment, family situations and general life experiences.

[13] At this point, these characteristics tend to be based on experience and in many cases lacking in evidential support. The current collaborative study CG10-1697 will develop evidence on the nature of the student cohort.

b. Past educational attainment: Simpson (2003, p. 11) notes that the best predictor of success, including retention, in the (open entry model) Open University in the UK is the previous level of education achieved by the student, with those having higher qualifications, not surprisingly, being more likely to succeed. The recent Lomax-Smith Higher Education Base Funding Review points out that there is a high correlation between entry into an undergraduate program via a low ATAR and likelihood of attrition (Lomax-Smith, 2011, p. 76; see Table 8). There is no reason to expect this to be different in the case of an enabling program, although the effect could conceivably be more extreme, given that the level of previous educational achievement is often substantially lower.

c. Level of commitment to study: As discussed above, the open entry model is explicitly designed to attract people who do not presently feel a strong degree of commitment to the idea of tertiary study, so it is only reasonable to expect a far higher proportion of the student body to be initially not engaged to a greater or lesser extent. This is not to deny that some students begin with and maintain very high levels of commitment. The experience is that the level of commitment will cover the full range, from very low to very high.

d. Diversity of student cohort: While we are not introducing the notion of a specific pedagogy of diversity, there is a major difference between enabling programs and undergraduate degree programs in the range of existing knowledge, skills, confidence and study habits exhibited by students in the program due to the differing entry hurdles characteristic of each. Enabling programs' student cohorts often exhibit extreme heterogeneity (and even more so in open entry models) in a variety of characteristics with which they enter the program. This is in contrast to the greater degree of student homogeneity due to the "closed" entry models with benchmark criteria within undergraduate programs (and to a lesser extent - those enabling programs with relatively exclusive entry criteria).[14]

A characteristic of teaching in enabling programs is that lecturers have to be able to engage and challenge the more advanced students while at the same time reiterating content and building confidence to engage the less advanced students. This requires the employment of more inclusive pedagogies and the necessity for reasonable adjustments (as outlined in the Disability Standards of Education [2005]). This pedagogical approach while appropriate in undergraduate programs is still an area that academics in undergraduate programs are slow to embrace (Ryan, 2007).

1.3.5 Benchmarking

There are clear difficulties in benchmarking retention rates within higher education and particularly within enabling programs. This is especially the case in open learning programs, as there is a clear and established link between academic background and rate of attrition (MacMillan, 2005; Simpson, 2003). Woodman (1999) used analysis to determine the success of 3000 open university students by comparing certain factors against final grades.

[14] It is obvious that this is less the case now that it used to be, with the massification of higher education, but any teacher of First Year students will affirm it. There is a further caveat that the mature age students entering UoN's OF will often have a greater base of life skills to apply to their studies and this may be a substantial advantage; it remains the case, however, that developing an inclusive pedagogical practice which will foster the application of these skills to study is a challenge.

Her analysis revealed (in order of effect) that these factors made a considerable difference to academic outcomes: level of course, the intensity of the course (as per credits for units), previous education, age of the student, socio-economic status (SES) and sex. This analysis allowed Woodman to create a formula for retention and a profile of the types of students who would do better. While this approach seems sensible, if the score for the first assignment is factored in as a variable, the retention rate increased by 20%. This leaves higher education institutions focussing on factors that they can control, such as early engagement, quality of teacher education, ongoing support, feedback, and mentoring services (Gabb, Milne, & Cao, 2006), rather than demographic factors that cannot be controlled once the student has been admitted.

Further, Gabb et al. (2006) identify several salient attrition factors about new students within higher education settings that are important indicators of success and may be more prevalent within enabling courses. If students are satisfied with their course choice (i.e., they are in a course they have personally selected and aspired to) or are comfortable with the course fit (i.e., what they hope to get out of their study) they are more likely to persist. Given that enabling courses are merely pathways towards further learning, it is difficult to imagine enabling students appreciating these elements in the same way as an undergraduate university student. Student uncertainty and unclear goals about progressing appear to be major factors in attrition regardless of demographic factors (Krause, Hartley, James, & McInnis, 2005). Additionally, aspects such as language background, SES, parental education and "first in the family" to attend higher education, all impact on attrition rates to varying degrees (Gabb et al. 2006, p. 8-10). Again, students with such characteristics are disproportionately represented in enabling programs compared to most undergraduate courses.

On the weight of evidence one should expect that attrition rates would decrease with the degree of (academically and performatively relevant) restriction on entry; that is, it would be expected that an undergraduate degree program would have a relatively lower rate of attrition, a partially restricted entry enabling program to have a higher rate of attrition and an open entry enabling program to have the highest rate of attrition of all.

Table 1.10
Australian domestic undergraduate programs: Attrition rates by ATAR (DIISRTE 2006-2010)

ATAR	2006	2007	2008	2009	2010
90-100	9.1	8.9	8.4	8.4	9.3
80-89	15.1	14.8	13.4	14.1	15.1
60-79	21.7	22.8	20.9	21.4	23.3
50-59	30.1	32.8	27.8	26.7	28.6
30-49	29.1	25.3	27.8	24.1	29.3
Non-TER	19.7	20.2	19.5	19.7	20.6
Total	18.5	18.9	17.8	18.1	19

The enabling program rates of student attrition may appear high to an eye accustomed to undergraduate rates of attrition but whether these figures are regarded as "high" or not is dependent on the benchmarks against which they are measured. For example, for domestic commencing undergraduate students across all Australian universities, the highest average

rate of attrition in the 2006 study of 486,000 students from 32 universities was 30.3%, while the lowest was 5.3%. The average attrition rate across the 32 participating higher education institutions was 10.5% (Australian Universities International Directors' Forum, 2012). Taken further, and examining attrition rates for all Australian universities by ATAR score (see Table 1.10), the DIISRTE found that those in the bottom TER scores (who are traditionally "second chance" students) spiked as high as 32.8% for those in the 50-59 ATAR range and for those in the 30-49 ATAR range the rate was 29.3% in 2010.

Leaving a higher education program early is typical of the experience for many students both at under-graduate and post-graduate level (Australian Universities International Directors' Forum, 2008). In a study of 485,983 students in 32 Australian universities in 2006 (Australian Universities International Directors' Forum, 2008), 89.5% of students *stayed the course*, either completing the course in 2006 or continuing to 2007. The attrition rate within these universities ranged from 5.6% to 30.3%. The average attrition rate in this study was 10.5%. Attrition rates for undergraduate students were slightly lower than for post-graduate students: 10.4% for UG compared to 11.5% for PG; with female students (9.9%) showing more course commitment than male students (11.2%). Those in the youngest bracket within these universities (17 years) had the highest attrition rate (15.8%).

In reflecting on these definitions it becomes apparent that the "official" definition is not well suited to measuring attrition in enabling programs, particularly in relation to the enrolment nuances discussed earlier. Official retention/attrition rates:

- Ignore the difference in the purpose students may have for enrolling in an enabling course (effectively not taking into account many potential non-starters)
- Only measure successful completions - when in some cases this only tells a partial story in enabling programs
- Neglect the tendency for enabling students to drop out without formal withdrawal (due to limited financial cost consequences).

As highlighted earlier, the definitions used within this current study (focussed on the difference between raw and real attrition) take into account those students who have failed to engage within the course and may have "unofficially" pulled out. This appears to be a more useful measure of attrition, given consistent evidence of non-engaging students within enabling courses.

While the attrition rates are much higher on average for university enabling courses than typical undergraduate degrees (averaging approximately 20% from 2006-2010; Table 1.8), this is not a useful comparison due to the differences in the purpose and nature of enabling and undergraduate programs and the diversity of the student cohort in enabling programs. A more realistic benchmark might be against other tertiary preparation programs, such as those in the Vocational, Education and Training (VET) sector, where the equivalent of the university-based enabling program is typically a Certificate IV in Tertiary Preparation. Wylie (2005) highlights attrition rates in the U.S.A. for pre-university adult education courses at between 60-70% and while completion rates for VET qualifications are rarely published (rather unit completions are presented), Wylie suggests Australian rates are similar to those found in the U.S.A. Recent reliable estimates put the completion rate for Certificate IVs at 38.5%, establishing an attrition rate of 60% or over (NCVER 2012, p. 1) and it should be noted that, unlike many current Australian enabling programs, admission into Certificate IV

courses is governed by academic entry requirements.

The preceding is not to suggest that the problem of attrition within enabling courses is non-existent; rather, it is to establish the point that before there can be a serious look at how to improve retention in enabling programs there is a need to gain an accurate appreciation of what it actually is, by making appropriate comparisons. The purpose, structure and nature of the students in enabling and undergraduate programs are very different and hence, secondly, that benchmarking of student retention and attrition in enabling programs against undergraduate programs is not useful in understanding the nature of that attrition. It may more usefully be measured against rates in VET tertiary preparation programs or, indeed, may be *sui generis*.

1.3.6 Summary

Student attrition is an increasing area of focus for higher education institutions, but for those involved in enabling programs, establishing "real" attrition rates is essential. Understanding "real" from raw attrition rates allows programs to look towards improvement, by focussing on elements that can be affected. Acknowledging that by the very nature of the target cohort within enabling programs, attrition rates will be in many cases considerably higher than in undergraduate programs, prevents administrators from "jumping at shadows".

Enabling programs, even university-based enabling programs, are dramatically different in purpose and nature from undergraduate programs in a number of ways which would be expected to impact on the "natural" rate of student attrition in each type of program. Simpson (2003) discusses the notion of "natural" or upper limits of retention, whereby all institutions should expect to have some level of attrition (any institutions that awards its own qualifications and has zero students dropping out - may have difficulty in persuading students that the qualification is worthwhile). So even at its simplest form attrition occurs as a "by-product" of the need to maintain standards within an institution (Simpson, 2013, p. 11). Even within this form of attrition, it is difficult to determine who falls out because they could not meet the academic standards. For example, falling under a pass mark for a course is relatively clear, but not submitting work and ending up with a grade of zero, may suggest a range of reasons for course failure. This leaves the institution to ponder a series of possible "could have beens" in determining effective responses to this type of attrition.

Once a functioning definition of student attrition is established, the problem of measuring it commences. These issues are well known in the undergraduate literature (Krause, Hartley, James, & McInnis, 2005) but because of the nature of the programs and their students, they tend to be magnified in enabling programs. There are inherent difficulties in measuring actual rates of student attrition in any particular university-based enabling program arising from the difficulties of tracking student engagement. But especially relevant to this project, there are even greater difficulties in attempting to achieve a standardised basis for comparison between programs which can differ in most of their essential features except their focus on widening access: different admission requirements and different program rules governing time allowed for completion, for example, and the inherent differences between internal and external delivery, as well as differences between student cohorts and regional differences. (See also 2.2.3.)

Recommendations:

R1.1 That procedures be developed for identifying non-participating students, contacting them and assisting in re-engagement *or* a positive exit process *or* (as a last resort) administratively cancelling their enrolment.

R1.2 That funding be sought for a study of as many enabling programs as possible to ascertain the rate of non-commencing students.

R1.3 That enabling programs devote resources to identifying and mitigating possible program-related impediments to actual commencement following enrolment.

1.4 Literature review

1.4.1 Introduction

There is a wealth of research information available on the topic of student attrition from university undergraduate programs (see, for example, Cao & Gabb, 2006; Jones, 2008; McInnis et al. 2000; Rose-Adams, 2012; Tinto, 1993; Troxel, 2010; Yorke, 1999). Published reports of research studies on the topic include a variety of recommendations for measures to improve retention in specific contexts as well as generally in undergraduate and similar programs (for example, McInnis et al. 2000; Rose-Adams, 2012).

There is, however, very little published on the topic in relation to enabling pathway programs for entry into higher education generally, and even less in relation to university tertiary preparation pathway programs. Despite the predictably substantial differences between university undergraduate cohorts and university enabling education pathway program student cohorts, the relative abundance of literature on student attrition from the former provides perhaps the conceptually closest body of knowledge that bears relevance to research on the latter. For this reason, this literature review begins with a survey of major work in relation to attrition/retention in undergraduate programs, moves to a review of the available literature regarding enabling education pathway programs, and finally draws out implications for research into attrition in the context of university enabling education pathway programs.

1.4.2 Findings on attrition at undergraduate level

The literature on student withdrawal from university undergraduate programs supports a conclusion that student withdrawal is a complex and often very individualised process involving the interplay of institutional, social and personal factors (Cabrera, Castenada, Nora & Hengstler, 1992; McInnis et al. 2000; Taylor & Bedford, 2004). Research on student withdrawal from undergraduate programs has tended to separate the ostensible reasons for non-completion into institutional factors such as the quality of courses, teaching, and student support provided, on the one hand, and factors arising from the personal circumstances of individual students on the other (see, for example, McInnis et al. 2000; Taylor & Bedford, 2004).

There has been a concomitant tendency for education institutions to regard factors related to students' personal circumstances as being beyond institutional control (Bedford, 2009), and thus as being beyond any institutional responsibility or ability to respond to. However, to regard personal factors and institutional factors as being independent of each other would appear simplistic. For example, in a study of attrition of first-year undergraduates at the University of South Australia (including a high percentage of students from equity groups), Ramsay et al. (1996) concluded that there is rarely any single factor involved in students' decisions to withdraw; withdrawal was frequently influenced by a range of institutional, sociological, and personal factors.

Influential research by Tinto (1975) emphasised the importance of the role of the institution in promoting an environment for greater student persistence. Tinto's Model of Student Integration (Tinto 1975) postulated that successful academic and social integration of the student into the higher education institution determines persistence behaviour, despite the possible negative influence of personal factors. In several other studies, student engagement was seen as the result of the degree of congruence that developed between the student and the value patterns of the institution (McInnis, 2000), involving academic, social, and institutional variables including academic challenge, active learning, student and staff interactions, enriching educational experiences, and a supportive learning environment (ACER 2008).

Wylie, in a 2005 study of non-traditional students in technical and higher education, highlighted the criticality for student engagement of the first six to eight weeks of a program (Wylie 2005).

Subsequently, findings from an Australian universities study conducted between 2008 to 2010 emphasised the importance both of the quality and extent of interaction between the student and the institution, and (in the first year) of interactive, flexible and supportive learning environments and the need for positive relationships with staff such that students can locate the various kinds of available support (Wilcoxson, Manning, Wynder, Hibbins, Joy, Thomas, Giradi, Leask, Sidoryn, Cotter, Kavanagh, Troedson & Lynch, 2012).

The attrition literature shows a broad and gradual shift away from a perspective that sees withdrawal as primarily attributable to student deficits (Taylor & Bedford, 2004), to one that emphasises sociological factors. More recently, the focus has shifted to the role of educational institutions (Tinto, 1975, 1988, 1993, cited in McInnis et al., 2000), particularly with regard to student engagement (for example, Lawrence, 2005; Rowley, Hartley & Larkin, 2008). Cabrera et al. (1992) emphasised the importance for all students of the interactions between institutional, personal and external factors.

Research by Tinto (1975) and Bean (1980) in the U.S.A. identified the importance of the role of the institution in promoting an environment for greater student persistence, arguing that the higher the levels of integration, the more likely the student is to persist. From his research into students in residential higher education institutions in the U.S.A., Tinto (1975) identified the lack of student engagement with the academic and social aspects of the institution as the major cause of student attrition.

Yorke (1999), in considering the situation of non-residential students, drew attention to the importance of other factors such as the quality of the student's learning experience, initial choice of courses or program, health condition, and distance travelled to attend classes.

Recent literature suggests that student engagement is perhaps the most critical factor that education institutions need to address in order to reduce their undergraduate student attrition rates (for example, Gabb et al., 2006). The issue of student engagement was taken up in a report by the Australian Council for Educational Research (ACER) (2008). "Student engagement" was later defined by ACER as "students' involvement with activities and conditions likely to generate high-quality learning" (ACER, 2013). The report reviewed engagement in terms of a number of academic, social, and institutional scales, including academic challenge, active learning, student and staff interactions, enriching educational experiences, and a supportive learning environment.

Gabb et al. (2006) proposed that the use of "collaborative learning" strategies could reduce student attrition rates by enhancing the quality of students" learning experience and thus increasing their engagement with their studies. Gabb et al. (2006) described collaborative learning as "an approach that seeks to engage students in their own learning" (p. 15).

1.4.3 Student attrition in enabling programs

There is a lack of published resources providing suggestions and recommendations for intervention strategies for improving retention in enabling programs. Most of the work that has been done has not been published (for example, Hartley, et al., 2009). However, within the last decade there have been several publications relevant to the topic, including a number of papers presented at conferences of enabling educators in Australia and New Zealand (for example; Bedford, 2009; Clarke et al. 2000; Whannell & Allen, 2013; Whannell & Whannell, 2012; Whannell, Whannell, & Bedford, 2012; Whannell, Whannell & Chambers, 2011).

Bedford's (2009) study provided some bridging between retention studies with undergraduate students and those with students in higher education enabling pathway programs. The survey instrument that was used was based in part on an instrument developed by Taylor and Bedford (2004) largely from the literature on attrition and retention in undergraduate programs. He found that, for USQ's Tertiary Preparation Program (TPP) students in distance education mode were most strongly influenced to discontinue their studies by personal circumstance factors that were largely beyond the control of the course teaching team or the university (Bedford, 2009, p. 1). His specific findings regarding students' perceptions of influences to discontinue their TPP studies were, in order of magnitude:

- Demands on time
- Advice or opinion from non-family people (friends, other students)
- Inability to remember information
- Feeling of not belonging to the university
- Not knowing what was required to pass the course(s)
- Poor study-management skills (time management, planning and scheduling study, monitoring progress).

Several factors reported by Bedford were apparent from the findings of a study at UoN in 2009, including influences related to study-management, motivation to study and time pressures. This study was a *Promoting Excellence Initiative* (PEI) project with students enrolled in the OF program, funded by a grant from the Australian Learning and Teaching Council. This functioned as a pilot for the project reported herein. It resulted in an internal report (Hartley et al. 2011), and generated a range of recommended measures aimed at improving retention which are still being evaluated, many of which have informed the design of the current project. The relevant findings of the UoN 2009 PEI pilot study were:

- **Low motivation**: Initial low achievement motivation is a major predictor of non-persistence while high levels of perceived personal control are a strong predictor of persistence
- **First in family**: A relatively minor predictor is status as first in family to attend university
- **Engagement**: Students who dropped out showed low levels of engagement with the institution, both socially and academically, and reported low levels of interaction with lecturers and other students
- **Student support services**: Students who dropped out were either unaware of the support services available to them or, if aware, had not made use of them
- **Time pressures**: Exiting students overwhelmingly reported that the time commitment required was much higher than anticipated and that they were unable to cope with it. This factor was overwhelmingly reported as the crucial factor in dropping out (Hartley et al. 2011).

The factor of low socio-economic status (LSES) often identified in the undergraduate literature as being associated with non-persistence (for example, Gabb et al. 2006) was not found to be statistically significant factors in students leaving the UoN's OF program. The factors of age and of gender, which have not generally been reported in studies as being associated with non-persistence of undergraduate students, were not found to be of statistical significance in the UoN 2009 study.

In addition to studying these factors, the UoN 2009 study sought to determine whether differences in the learning approaches of students entering the program would have any measurable effect on persistence or non-persistence.

Another study by Bedford (2011) investigated a wide range of factors associated with approaches to study by beginning TPP students, and implications of the results for the curriculum design and pedagogy of the USQ TPP and similar programs. He found that students self-reported the following very strong tendencies in their initial approach to their TPP studies:

- Predominantly vocational and self-test orientations. These relate to the reasons or motives that students perceive they had for enrolling in the TPP
- Predominant conceptualisations of learning as the use of knowledge to solve practical everyday problems, and the memorisation of information.

On the basis of these findings, Bedford (2011) identified several implications for the curriculum and pedagogy of university preparatory programs, and suggested some strategies to address these implications. Although Bedford (2011) did not examine relationships between the ostensibly very strong tendencies of TPP students in their initial

approach to study in the program and their attrition from the program, there would seem to be a case for research with students in higher education enabling pathway programs on relationships between the student's initial approaches to study, the program curriculum and pedagogy, and the attrition rate.

Some of the findings of Whannell et al. (2012) regarding student motivation are similar to those of the UoN 2009 study and of Bedford's (2009). In the study by Whannell et al. (2012), students who had discontinued their studies in a university preparatory pathway program were interviewed regarding their reasons for enrolling, the major challenges they encountered while studying, enjoyable aspects of their participation in the program, and their reasons for discontinuing their studies. Whannell et al. (2012) reported that the interviewees appeared to be divided into two distinct groups with regard to their ostensible reasons for discontinuation. Interviewees in one of these groups were identified as having self-reported low motivation to engage in study. This supports a finding of the UoN 2009 study, and appears related to Bedford's (2009) finding regarding the negative influence on persistence with study of poor study-management skills particularly those of planning (goal-setting) and monitoring progress with study. The influence of students' study-management skills on students' motivation to study was identified by Bedford (2011), and discussed in detail by Pintrich (1999), Pintrich and Garcia (1991), and Zimmerman (2008).

A second group of interviewees identified by Whannell et al. (2012) were characterised by a self-reported definite positive commitment to study which was not realised because of changes in personal circumstances, perhaps resulting in most cases, in a lack of time to study. Based on these findings, Whannell et al. (2012) suggested a range of student-engagement interventions that may reduce attrition in university enabling pathway programs, be introduced into orientation programs for students enrolled in university tertiary preparation programs, and into the initial teaching weeks of such programs. This took particular regard to the finding that low motivation to study is apparently associated with attrition in university preparatory pathway programs. Whannell et al. (2012) suggested that early student-engagement interventions include a focus on long-term goal setting. This suggestion seems to be consistent with Bedford's (2011) finding that students in a university tertiary preparation program had a very strong vocational motivation for enrolling.

As already noted in this literature review, there appears to be a case for further investigation of possible relationships between attrition in university enabling pathway programs and the goal-setting of students who enrol in such programs.

1.4.4 Implications for research into attrition in enabling pathway programs

Research published on student attrition and retention in university-based enabling pathway programs indicates that the following influences were associated with relatively higher rates of attrition than for students who do not experience these influences. All of these influences have in turn been reported in studies of attrition and retention with undergraduate cohorts:

1. Personal circumstances (time, cost, health, social group pressures)
2. Lack of motivation (related to a lack of a commitment to long-term goals and possibly poor study-management skills)

3. Low level of engagement with the university, academically and/or socially and a reluctance to use the student support services. This may also be related to mismatches between the student's expectations of the university environment and the actual experience

Published research on student attrition and retention in enabling programs appears to have not identified the following negative influences that have been identified by research on student attrition and retention in university undergraduate programs. Regardless, comparison between the two contexts is relatively meaningless because of the limited scope of the studies on enabling pathway programs on the influences listed below here, viz.:

1. Age
2. English language background
3. Prior academic achievement, perhaps including general lack of preparedness to undertake undergraduate studies
4. First in family to study in higher education
5. Geographic/demographic location
6. Mode of study
7. Employment status.

As these influences have had little exploration in published research on student attrition and retention in university-based enabling pathway programs, their apparent effects are not publicly known. For this reason, there is a case for including factors ostensibly related to these influences, together with factors ostensibly related to the three influences identified so far in this research context, in future studies.

1.5 Conclusion

The initial chapter of this report is presented to establish the complexities that exist within enabling programs and the necessity to engage in alternative thinking to address the current issues of retention in this sector. Enabling programs rather than existing as outliers in the portfolio of university offerings, now provide clear direction for a growing cohort of students. The impetus provided by the Bradley Review (2008) has ensured that all universities are now clearly focussed on equity objectives, strategies and targets.

Given that a wide variety of programs exist in Australian universities, it is apparent that university administrators must become clear on approaches that are appropriate for their individual circumstances. But, first, it is important that enabling programs are able to establish that as much as they are becoming emerging players in the higher education scene, their programs and those who utilise their services need to be seen in a different light from the traditional undergraduate and postgraduate students and courses. It is with this alternative lens in mind that this ambitious study looks to develop a clearer understanding of today's enabling students, and how their behaviour impacts on retention rates in five separate university enabling programs.

In the following chapter the rationale for undertaking this current research will be established, along with a breakdown of the methodology. The research based on an earlier pilot study completed by UoN (Hartley et al. 2011), hopes to establish new ways of reporting, measuring and reflecting on student retention.

Chapter 2. Research design and method

Jane Hartley, Barry Hodges, Neville Schofield

2.1 Methods

2.1.1 Rationale and aims of the study

The aim of this project was to develop an evidence-based understanding of the particular nature of student attrition in university-based enabling programs. In order to do this, a study of the students in the enabling programs of collaborating institutions was undertaken in 2011. The further aims of the study were to understand why students leave university-based enabling programs without completing, to identify elements of that attrition which are open to institutional intervention and to investigate strategies, based upon that evidence, to improve the retention rate.

The study aimed to answer the following questions:

- What are the strongest factors leading to non-completion?
- To what extent can these be influenced by the program and especially to what extent can they be identified early enough to apply effective interventions?
- To what extent are there identifiable "trigger points" in students' departures which can be monitored and, perhaps, modified?
- To what extent do the answers to these questions differ from those found in the undergraduate attrition literature and, hence, to what extent might improvement measures be taken over from that literature with a fair expectation of success?

It was posited that there would be differences in both circumstances and behaviour between withdrawing and persisting students. It was also necessary to determine any self-ascribed factors leading to drop-out.

As intimated above, the literature on undergraduate student attrition leads to the expectation that certain factors may stand out as increasing the "at-risk" status of students. These include: low socio-economic status (SES), age, status as first in family to attend university and low levels of engagement with the program, including the perception of poor course fit with student expectations.

In addition to these factors, experience in enabling programs suggests other factors which may be of significance, in particular the wide range of entry skills levels arising from the open entry model, ineffective student approaches to learning, and differing degrees of achievement motivation. All these factors were taken as starting points in the design of questionnaires.

A pilot study had been run two years previously[15] which looked at just one cohort in one institution (UoN part-time Open Foundation at Callaghan campus). Findings from this pilot

[15] In 2009, using funding from the ALTC Promoting Excellence Initiative (Hartley et al., 2011).

study indicated four main factors likely to predict attrition:

a. A perceived lack of time, or poor time management
b. Lack of engagement with the course, the institution, teaching staff and other students
c. Non-use of existing student support services
d. Significant differences between students' learning motives and strategies.

Similar questionnaires were used in the current study, but added to and amended, in order to:

a. Confirm or to discover variations from the findings of the 2009 pilot study, specifically with respect to the effect or lack of effect on student retention of:

- Demographic variables
- Perceived time pressures
- The level of student engagement with the program and fellow students
- Awareness and use of student support services
- Student learning approaches.

b. Investigate whether prominent features of attrition in undergraduate programs are also characteristic of enabling programs, especially with respect to:

- low socio-economic status (LSES)
- Time since last study
- First in family
- Prior personal educational level

In order to answer these questions a longitudinal study was undertaken of student responses to an Initial Questionnaire from as near to program entry as practicable, plus *either* information provided on return of an Exit Survey (non-persisting students) or from responses to a Concluding Questionnaire from as near to program end as practicable (persisting students).

2.1.2 Survey design

The survey instruments for data collection were taken over with adaptations from the three questionnaires employed in the 2009 study. (See Appendix B for copies of the questionnaires.)

Two questionnaires were administered to participating students:

1. An Initial Questionnaire (Week 2 of the program); and either
2. An Exit Survey to students identified as having left the program; or
   A Concluding Questionnaire (second-last week of program) for students remaining in the program.

2.1.2.1 The Initial Questionnaire

The Initial Questionnaire (Q1) was administered to commencing students in the second week of their program. *Internal* students were invited to complete it in one lecture of their core course in that week (in programs lacking core courses, administration was organised so that each student would be invited to complete it in at least one of their courses that week). *External* students were posted and/or emailed the invitation timed to arrive early in Week 2 and were allowed until Week 3 to complete it (to allow for uncertain postal delivery times in remote regions).

The Initial Questionnaire consisted of three sections:

Section A. **General Information**: This section included questions concerning demographics and personal circumstances and socio-economic status as determined by postcode.[16]

Section B. **Your Expectations of the Program**: This section was designed to elicit students' degree of information about amount of work, study skills and time which would be required of them.

Section C. **How do you go about studying?**: This comprised a version of the Study Process Questionnaire (SPQ), adapted from Biggs (1986), designed to discover students' approaches to learning as possible predictors of attrition. This is an established scale, in which low achievement motivation, a surface approach to learning and an absence of deep learning might all be significant predictors.[17]

The Study Process Questionnaire (SPQ) is an instrument which attempts to determine both the motivation and strategies used by students as they go about the task of studying. These motives and strategies together are divided into three distinct approaches, called Surface, Deep, and Achieving.

Students with a **Surface** approach attempt to get through study with as little effort and disruption to life as possible. They also generally resent the time and effort involved in study. This becomes their motivation or motive. They make use of rote learning (rather than understanding), read only those sections of texts specified in the course and avoid anything that would entail extra effort on their part. These become their strategies.

The second approach is known as a **Deep** approach. This is characterised by a desire to learn as much as possible about the subject and any related area, simply for the joy of learning and because of an abiding interest in the subject. This is then the motive. The strategies are characterised by wide reading (sometimes to the detriment of course

[16] Post-code was determined using Australian Bureau of Statistics (ABS) postcode data identifying low SES areas. The increased length and complexity of other survey instruments resulting from the use of such alternative measures that are available were not considered suitable for both ethical and practical reasons. However, determination of SES on the basis of postcodes is a very blunt instrument and the limitations of this measure must be kept in mind while considering the results.

[17] The version of the Initial Questionnaire used in the 2009 pilot study also included a questionnaire by Chan (1994), designed to measure students' causal attribution of their own success or failure. This was dropped from the current study, as it made the questionnaire too long and was not well completed by the students.

requirements), reading over notes and an attempt to fully understand any concepts that are introduced.

The third approach is known as an **Achieving** approach. This student is motivated by doing well in the course and, if possible, achieving higher results than all the other students. This may be so that they can get a better job later and they are likely only to choose courses in which they can achieve high marks. Their strategies include being well organised with their notes, having definite questions in mind and revising work regularly.

Since the Deep and Surface approaches are virtually mutually exclusive, and since it is very rare to find a student who is almost exclusively uni-dimensional in their approach, most students have differing levels of two approaches as their dominant style. In most cases, this means that they are a combination of either Deep or Surface with Achieving. An "approach", then, consists of both Motive and Strategy. It is also likely that motives and strategies do not match up for many students, so that, for instance, they may want to gain a deep understanding of a subject in which they are particularly interested, but they then use surface strategies when they actually go about studying. From a teaching perspective, the combination of deep and achieving is generally considered ideal.

More specifically, the Study Process Questionnaire was used to elicit answers to the following questions:

a. How do our students approach their learning, and how does this compare between students of each institution (and program where relevant)?

b. What are the differences in approaches to learning (if any) between those who persist in their program and those who don't, for each institution?

It was hypothesised that a Surface approach to study (which is often that which students would have learned in school) would be less successful in the relatively unstructured environment of tertiary study and these students would then be more likely to drop out. It was also hypothesised that motives and strategies would not necessarily match, as students could choose their areas of study and interest (typically a Deep motive) but these would not then match their strategies, which were typically those they learned at school.

Finally, it was hypothesised that this was an area where early intervention by the teaching institution to reduce attrition would be possible, as students could be taught good learning strategies as an integral part of the program.

2.1.2.2 The Exit Survey

The Exit Survey (Q2) was sent to those who had dropped out of the program. Surveys were posted to the address given by students on enrolling and a pre-paid self-addressed envelope was included and, in some programs, including those based entirely online (such as UNE), an email was sent with a Survey Monkey link.

Identifying such students was difficult: staff did not keep accurate attendance records in all

cases and this, as well as the often sporadic nature of student attendance (where students might miss three or four weeks but then return), made it problematic to determine the point at which absence was deemed to be discontinuation of the program. (Indeed, some students would not attend or seem to engage with a course for some weeks only to appear at the final examination and some would still achieve a passing grade, at least in those courses which rely heavily on a final examination).

Section A. Personal experience of the program: The first group of items was aimed at determining the individual's experience of the program. Questions covered such areas as time available, financial strain, outside responsibilities, and the demands of the course. Students were also asked to identify their reasons for leaving and the week of leaving.

Section B. Expectations of the program: In the next section, they were asked about their prior expectations of the program and their level of preparation for such study.

Section C. Awareness and use of student support services: The third section looked at their awareness and use of the various support services which exist on campus and how they perceived the quality of service provided.

Section D. Academic experience of the program: The fourth section used the ACER (2008) engagement scale which dealt with the use of support services, relationships with academic staff and other students, and students' own personal approach to the discipline of study. Most of the questions relate to the use of effective learning strategies.

The ACER engagement scale was included because it was ostensibly a valid scale from a reputable source but it was found to have a number of inherent weaknesses. In particular when factor analysed, numerous items failed to load meaningfully. These items were removed and an abbreviated scale was developed for use. (See Section 3.3.2.1).

Section E. General: The final section sought open ended responses about the quality of the program and students' reasons for leaving.

Note that there are limitations to information derived from surveys such as the Exit Survey, relying on self-ascription of motives. Students' responses are not necessarily going to reflect the true situation: a respondent perception of "time pressure", of there being insufficient time to study, for example, might mean not only a lack of available time (such as might occur with a substantial increase of hours of paid employment, perhaps) but also a lack of time management skills or a change in priorities (arising from decreased motivation to study or increased priority given to external factors), as well as potentially being merely a convenient label (rationalisation of a range of other underlying causes) for a range of other factors adding up to disengagement. See, for example, Simpson (2003, p. 28, quoting Woodley and Parlett [1983]) and Gay et al (2006).

2.1.2.3 The Concluding Questionnaire

The Concluding Questionnaire (Q3) was administered during the second last week of semester to all students in attendance in classes (internal courses) or posted or via email

and online survey to students not known to have left the program (external courses).

The format of this final instrument represented an amalgam of both the first and second.

Section A comprised a 30 item adaptation of the Biggs (1986) Study Process Questionnaire and used a four point scale (the same as used in the initial instrument, Q1).

Section B comprised the same questions regarding awareness and use of the various support services as had been used in the Exit Survey, Q2.

Section C was also identical to that in the Exit Survey and comprised the 20 item engagement scale and a measure of relationships with other students and staff, again analysed using the abbreviated engagement scale.

Section D asked for general information about the individual's experiences during the course.

Section E was again an invitation to write various open-ended comments about the course.

As participation was voluntary and attendance of students in enabling programs is often irregular (especially towards the end of the program as students focus more closely on the looming examinations), we were not able to guarantee that all students who completed the Initial Questionnaire also completed either a Concluding Questionnaire or an Exit Survey, and vice-versa. A number of students completed a Concluding Questionnaire or Exit Survey without having completed the Initial Questionnaire. These gaps reduced the comprehensiveness and effectiveness of the data collected but there was a sufficiently large overlap across three institutions to provide a good base of comparative data across the course of the programs.

2.2 Data collection

2.2.1 Usable questionnaires

All Q1 returns where the student supplied their name or student number were given a project ID number; those who did not supply any identifying information were not given a number and were therefore not included in the sample. The reason for this was that the ID number is the only way the student can be tracked through Q2 and Q3, and when analysing the completions data. Without this, there is no possibility of any longitudinal analysis.

Q2 or Q3 questionnaires returned by students who had not returned a Q1 were also not included in the sample, as they had no ID numbers and so were not traceable. For Q2 and Q3, questionnaires with ID were also considered non-usable if they were returned blank, incomplete, filled in twice by the same student, or if the total number returned at that institution was too small for a statistical analysis.

Questionnaires lacking an ID number, while not usable for this report, are stored where they can be used for further analysis at a later date.

Table 2.1
All institutions: Numbers of usable questionnaires returned

	UoN	UniSA	USQ	UNE	ECU
Q1	1932	173	156	107	366
Q2	84[1]	0	0	20	0
Q3	869	0	0	(57)[2]	81

[1] As the number of Exit Surveys received was limited, questionnaires lacking any identifying information were included.
[2] These figures are not available due to issues in the initial data collection. UNE analyses involving Q3 have been made using all questionnaires, with or without student identification.

2.2.2 Questionnaire return rates

Where the Initial and Concluding Questionnaires were administered in classes for on-campus students (UoN), the return rate was very good (approx 95%) and a similar rate was reported anecdotally at ECU. At UNE where it was administered online in an external course which relies on online delivery alone, the return rate was reported to be quite good at approximately 75%; at UniSA and USQ, where course delivery is by a mix of internal and external, with a choice of postal or online delivery, the return rate for the Initial Questionnaires was reported to be good but that for the Concluding Questionnaire was very poor indeed – not large enough to provide a statistically significant sample.

Where questionnaires were administered by post (as, necessarily, for the Exit Survey, Q2), the return rate was almost universally disappointing.

The return rate on the Exit Surveys was very disappointing, especially as the 2009 study had achieved quite respectable returns. The problem of low return rates of questionnaires is not a new one. (See Burns 2000; Simpson 2003, p. 27-8). After disappointing returns in initial rounds of administration of the Exit Survey, some institutions employed measures to attempt to improve the return rate in later rounds.

The University of Newcastle: 2106 students were enrolled in Open Foundation and Newstep programs in Week 1 of the relevant semester; of these, 1091 did not persist in their program. 84 Exit Surveys were received from these students, a return rate of 7.6%. A prize draw (a chance at two $100 gift vouchers at retailer of choice) was offered in the second round of invitations to return an Exit Survey at UoN but this had no noticeable effect.

University of New England: A slightly better return rate was achieved at UNE, perhaps because students have become accustomed to doing everything online in their program. From a total of 487 students commencing in either Semester 1 or 2 of 2011, a total of 293 students did not persist in the program (176 students withdrew formally and a further 117 did not formally withdraw). From these, only 25 Exit Surveys were received (20 from the semester 1 cohort and 5 from semester 2), that is 8.5% of non-persisting students of which 20 were usable.

Other institutions: Unfortunately UniSA, ECU and USQ received no significant number of

completed Exit Surveys. The reasons appear to be different in each case. UniSA undertook a restructure of their enabling program in 2010 (after submission of the grant application for this project) which resulted in neither of the project team being employed in the new program, now run by UniSA College. This created severe coordination difficulties resulting in no Exit Surveys being received and it was not possible to administer the Concluding Questionnaire at all. At ECU, strenuous efforts were made to encourage responses, including an extensive program of telephone follow-up, but no completed Exit Surveys were received. This is probably a further instance of the general reluctance of non-completing enabling students to re-visit the experience by filling in an Exit Survey. But it also is exacerbated by the relatively low number of students involved, with the ECU completion rate being so high. The experience at USQ has been that student surveys do not, in general, receive a strong response and this is especially true of Exit Surveys.

Our experience in this project conforms to the wide-spread anecdotal evidence from those involved in teaching in enabling programs that students in these programs are even more reluctant to return Exit Surveys than are undergraduate students: the feeling seems to be that the sooner the dust is cleared off the boots the better. The poor return rate is exacerbated by the tendency for students in enabling programs to be very mobile and relatively poor at leaving contact details behind them. It is a frustrating business attempting to contact past students using contact details given: students have moved on, the phone number is no longer in use and so on.

2.2.3 Data collection issues

A major challenge during the project was developing protocols to allow comparability across the different institutions due to different protocols and internal cultural expectations. Defining *enrolment*, for example, was complicated by a number of factors, the main one being the number of students who “enrolled” but never turned up at all, for any courses, yet never formally withdrew.

Defining student *completion* of the program was also not as simple as would be expected: the issue was complicated by the different approaches to time limits to complete, which meant that determining a comparable rate of student *persistence* across programs was not simple.

The UoN Open Foundation program, at one end of the spectrum, requires a student to complete the program within one calendar year or to start the program again in a subsequent year.

The UniSA Foundation Studies Program allows a student to continue in the program for as long as is reasonably necessary to complete and gain eligibility for entry to an undergraduate award. However, this is not without scrutiny of performance, and students may be required to attend academic counselling and, in extreme cases, may be precluded from further (re-)enrolment according to the same rules that apply to all students of the University.

Added to this is the persistent challenge of identifying which students have dropped the program as opposed to those who are temporarily inactive, and the difficulties with gaining

precise data on attrition and completion rates is evident. UNE works on a trimester basis; students may take leave of absence but must be finished within 4 years.

Given the very strong tendency, noted across all programs in the study, for students to drop out without going through the process of formal withdrawal (see also Section 1.3.5.1), this created significant problems in determining, for some programs, whether a student was continuing but not yet completed and not active at a particular point in the program, or whether s/he had in fact dropped out altogether. For UniSA, for example, the term "persisting" was applied to those students who had either completed the course or who had opted to continue their enrolment. "Non-persisting" students were those who were non-participating or who had withdrawn. Those for whom status could not be determined were classified as missing data.

Both the Exit Survey and Concluding Questionnaire contained a number of open-ended questions. The sheer volume of responses, along with time and resource constraints, has to date precluded analysis of these open-ended responses; these will be reported on at a later time.

Chapter 3. Major findings

Neville Schofield, Jane Hartley, Barry Hodges

3.1 Retention of actually commencing students

This chapter presents the results of the study of students in the enabling programs of the five participating institutions conducted in 2011 (2012 for ECU).

The first major finding, and one with important implications for enhancing student retention in enabling programs is that once students actually commence an enabling program in any real sense, they are retained at a rate which is generally higher than either "raw" or official attrition figures indicate; in some cases, dramatically higher.

3.1.1 Retention of students completing the Initial Questionnaire

Students who returned an Initial Questionnaire (Q1) with identifying information, that is students whose persistence was able to be individually tracked (call them identifiable Q1-responders),[18] are retained at a rate that is higher than "raw" retention in all participating programs; the size of this difference varies from quite low to very high.

A student returning Q1 is demonstrating that they are an "actual commencer" of the program with at least a minimal degree of engagement, in contrast to "apparent enrolments" (Ramsay 2004; see Section 1.2.2). For internal students, return of Q1 required attendance in at least one class in Week 2 of their program. For external students, completing Q1 by online survey or in their homes and returning it by post, thereby also exhibited at least a level of engagement sufficient to complete an optional program task (again in Week 2). We will call the retention of actual commencers, as opposed to those enrolled in Week 1 of the program, "effective retention".

The demonstration of engagement applies even more clearly to external students in that they are completing the task in isolation from fellow students.[19]

The effect is most dramatically visible in the UoN Intensive Open Foundation program at the Callaghan campus (full-time, semester 2, internal only) in which there was a "raw" attrition rate of 47% but an *effective* attrition rate of an extremely low 4%. That is, while only 53% of students enrolled in Week 1 persisted in the program, approximately 96% of Q1-responders

[18] In all programs, a small number of students returned the Initial Questionnaire but without identifying information (with one exception; see note 4). It was not possible to track the persistence of these students.

[19] At UoN, staff administering the questionnaire to internal students reported an extremely high rate of return by those present: very few students who were present did not fill in and return the questionnaire, which was collected by student volunteers at the end of the time allowed for questionnaire completion and placed in a sealed envelope to be returned to the collection point. Of those present in those classes, it is estimated that well over 90% participated in the questionnaire. Thus retention of those internal students who returned Q1 with identifying information is a very good representation of students attending classes at UoN in Week 2.

with identification persisted. This is a compelling difference. [20]

The increased retention of identifiable Q1-responders is reflected across all UoN enabling programs, albeit to a lesser extent. Newstep, the full year, full time program for 17-20 year olds and the full year, part-time Open Foundation program (OF) show a similar effect but less strongly. The effect is also present in the external Open Foundation by Distance program (full year, part-time), as can be seen from Table 3.1. By contrast, recall that the average official attrition rate (2007-12) for Part-time Open Foundation is 49% and that for the full-time Intensive Open Foundation program is 40%.

Table 3.1
Selected participating programs: "Raw" and "effective" attrition rates (Sources: Internal program data)

Uni.	Program	FT/PT	Mode	Length	Age	Raw attrition*	Effective attrition**	Difference
UoN	OF Callaghan	PT	Internal	Full year	20+	56%	44%	12%
	OF by Distance	PT	External	Full year	20+	63%	45%	18%
	OF CCC	PT	Internal	Full year	20+	49%	32%	17%
	OF Intensive Cal	FT	Internal	Half year	20+	47%	**4%**	**43%**
	OF Intensive CCC	FT	Internal	Half year	20+	40%	**3%**	**37%**
	Newstep Cal	FT	Internal	Full year	17-20	45%	29%	16%
	Newstep CCC	FT	Internal	Full year	17-20	41%	30%	11%
UNE	PEC	Mixed	External	Varies	17+	60%	38%	22%
USQ	TPP Distance	Mixed	External	Varies	18+	75%	62%	13%
	TPP On-campus	Mixed	Internal	Varies	18+	63%	60%	3%
ECU	UPC	Mixed	Mixed	Half year	18+	35%	15%	20%

At other institutions, return of the questionnaire by internal students present in classes was patchier, and in a number of classes at one institution the proportion of returned questionnaires lacking identifying information was quite high.[21] For these institutions, the retention rate of those returning Q1 with identifying information is proportionately less clearly indicative of the retention of students present in classes. For USQ internal students, for example, the effect is insignificant: retention of identified Q1-responders is 40% while the raw retention rate is 37%. Unfortunately, the return of Q1 by internal students was

[20] It is suggestive that the most dramatic example of this effect is in a full-time program, enrolment in which entitles the student to government benefits with limited checks on actual engagement in the program beyond simple enrolment. There is no rigorous evidence for this possibility but anecdotal evidence from staff suggests that it occurs.

[21] The high proportion of unidentified questionnaires across a small number of classes suggests that this resulted from one person administering the questionnaire departing from the scripted introduction to the questionnaire in a way which emphasised anonymity at the level of the questionnaire, rather than before data analysis.

quite patchy and this was even more so for external students (who are a large proportion of the total cohort), so the data is inconclusive in this case.

The UNE PEC is offered externally only and the participation rate for Q1 was quite high at 39.8%. The difference in "raw" versus "effective" attrition rates is comparable: the overall rate of retention of Q1-responders with identification was 62% as opposed to the significantly lower raw rate of 40%. (The official attrition rate, recall, is 57%; Section 1.3.2.)

At ECU, data collection was carried out in 2012 at ECU as personnel changes and technical difficulties prevented its being done in 2011.

In **summary**, it is clear that, at all participating institutions and across all their programs, to a greater or lesser extent, retention of identifiable Q1-responders is higher than overall "raw" retention and, in some cases, much higher. From this it can be concluded that those students most likely to persist in an enabling program are those displaying at least a minimal engagement with the program in the first two weeks.[22] This is also suggesting that a relatively high proportion of students who do not persist in the program have never committed to or engaged with it in any meaningful way.[23]

This is not a new result. An unpublished review of the success and cost-effectiveness of enabling and enabling-like programs in 2000, notes that, once non-participants are removed, retention rates of enabling students are on a par with those of undergraduate programs due to the quite different withdrawal patterns (Clarke et al, 2000, p. 221).

3.1.2 Other indicators of non-commencement

There are other indicators in our study which support this result:

a. Early departure: Exit Survey returns from UoN show that more than one third of respondents reported leaving before Week 2: either before the program began (21%) or in Week 1 (17%). Of these, two thirds, that is 22% of all respondents, left in order to take up a place at a tertiary institution or a job. (See 3.3.3.2 for further detail.)

b. "Phantoms": The news that a significant proportion of enrolling students never appear in any effective way in the program does not come as any surprise to experienced practitioners in enabling programs. At UNE, the 2011 figure for "phantoms" was 26%, while the judgement at UoN is that 10-15% of students who have enrolled never attend or engage with the program at all. Other programs reflect this experience. The phenomenon is sufficiently wide-spread that it develops its own terminology; such students are termed "no-

[22] Simpson notes the case of students at the University of Sheffield Medical School asked to complete a simple pre-program task, to provide a passport photograph: completion of this task turned out to be the single best predictor of retention in the program (2003, p. 20; quoting Wright and Tanner 2002).

[23] It is possible that completion of the Initial Questionnaire in itself improved the chance of retention through an effect similar to what is known as the "Hawthorne effect" (see, for example, Bilton 1981 et al., pp. 453-4). It was not possible to control for this possibility but, if it is occurring, administration of Q1 is not only demonstrating increased retention of actual commencers but also tending to increase the level of student engagement and, hence, retention. This in itself presents an opportunity to improve retention rates.

shows" at UoN and "ghosts" in the UTAS program, for example, while Clarke et al use the terms "non-participating/inactive students" or "non-participants" (Clarke et al, 2000, p. xvii; p. 221).

Developing hard figures on this phenomenon turns out to be very difficult in practice in most programs. It is relatively easy to detect a student's actual *commencement* in a program;[24] detecting the *absence* of any activity in the first few weeks can be much more challenging, however, for a variety of reasons, one of which is the tendency of enabling students to drop out of the program without going through the process of formal withdrawal. Monitoring class attendance, for example, can be difficult, especially in large programs: many lecturers are reluctant to keep detailed attendance information, sometimes because they see it is as alien to the academic experience in general or because they are concerned that the perceived pressure on students to attend could, perversely, become a barrier to engagement in being a reminder of the school experience.[25] There are other practical difficulties as well.

c. Non-submission of assessment tasks: What can be measured relatively precisely is the number of students who enrol but never submit an assessment task. It appears, as can be seen in Table 3.2, that the numbers of students who are enrolling but then never submitting a single assessment task are converging on 17%.

Table 3.2
Selected institutions: Students submitting no assessment tasks (averages)[4]

Year	UoN[1]	USQ[2]	UNE[2]	ECU
2010	19%	11%	--	--
2011	18%	22%	17%	--
2012	--	23%	--	19%[3]
Average	17%	18%	17%	19%

[1] Does not include students who formally withdrew before Week 5, some of whom would have submitted an assignment and some not; most classes had Assignment 1 due Weeks 1-3 but a few were Week 4 (no compulsory courses). (Includes external students.)
[2] Includes all students who formally withdrew before Assignment 1.
[3] Considering internal students only, this figure is 12%.
[4] This table should be read as indicative only. Numbers here are not precisely comparable because of different ways of treating grades of students withdrawing before the HECS census date and administrative difficulties tracking these students.

This means that approximately one sixth of students enrolled at Week 1 in these programs never engage in any serious way. The overall figure will include both those who never actually commence and those who do commence the program in some minimal way but who are uncertain in their level of engagement with the program and who will often leave by the due date of the first assignment; call them "uncertain engagers".

[24] Although this is still by no means straightforward: late enrolment; enrolment in the wrong enabling program at the institution (e.g. wrong age range); incorrect enrolment in other ways, and so on.
[25] Students themselves often regard an attendance sheet passed around in a lecture less than totally seriously. The Open Foundation program was apparently fortunate enough to have been graced by the attendance of Mr Giorgio Armani at one point; Donald Duck and Mickey Mouse also drop in from time to time.

It would be very useful to know the proportions of non-commencers and uncertain engagers more accurately. There is no point in wasting resources on the non-commencers (other than to facilitate their formal withdrawal). Appropriate measures to improve retention for the uncertain engagers will often be very different from those appropriate to students leaving after some significant engagement with the program. However, determining the relative proportions of each group is not a simple task. The closer the due date of the first assessment task is to the beginning of the program the more closely will the number with zero assessment approach the number of actual non-commencers. In the case of UoN, the first assessment task is due Week 2 in Newstep while in OF courses, it is often in Week 2 but rarely later than Week 3. At UNE, students are required to undertake online quizzes from Week 1. So in these programs at least, those never submitting any assessment tasks are leaving in the first two weeks with the others departing (or not engaging) by Week 3.

None of the above is to deny that there may be an (unknown) number of non-commencers who do so because program processes are somehow deterring them in the period between enrolment and program commencement, perhaps in providing too much or too little information or by not maintaining contact with students once they have enrolled and before the program commences.

There are other factors which are relevant here, too: while official attrition rates count students not persisting in the program in a given year who enrol in the program in the following year as part of the program retention, they do not allow for the numbers of students who return in *later* years – a common phenomenon according to anecdotal evidence.

A key point to note here is that the strong and wide-spread tendency for students in enabling programs to cease involvement without ever formally withdrawing, noted in Chapter 1 Section 1.2.3), means that these two groups who have left the program before it begins or very early on are being counted as commencing students in the official university statistics, being enrolled at the HECS census date, and are thus inflating the official measures of student attrition.

Program experience suggests that a substantial amount of the non-commencement and early departure is due to the success of the widening access aim of enabling programs in offering potential students a chance to try out university study to see if it is for them. This results in a far greater diversity of motivations for enrolment than is typically the case for an undergraduate program, motivations which vary in commitment and likelihood of being carried through: enrolees may feel at one point that it is worth a try but then change their mind; they may be taking out insurance against failing to get the result they need in their final year of secondary school; they might be keeping a friend or relative company; they may be unemployed and not sure what else to do; and so on. This contrasts with the bulk of enrolments in undergraduate programs which tend to be a part of a much more clearly developed career strategy.

3.1.3 Conclusion

A number of points should be noted from the above discussion:

1. Participating programs are, in general, successful in retaining a high to very high proportion of actual commencers. This is due to the non-commencement of substantial numbers of students who enrol but then, for a variety of reasons – often very good reasons – do not commence the program at all or engage uncertainly in the early weeks then leave, often in the first two weeks.

The problem is exacerbated by the tendency for enabling program students to leave the program without formal withdrawal.

There is a double challenge present here:

a. Identify non-commencers who know they want to leave and facilitate their positive withdrawal
b. Identify non-commencers who are uncertain and facilitate either positive exit or engagement with the program.

2. The standard measure of student attrition, designed for the conditions of undergraduate enrolment with a determinate "billing point", is inappropriate for enabling programs in that it takes the number of commencing students as the number enrolled at the HECS census date. However, as the above shows, the high rate of students who never commence the program but who fail to go through what often seems to them to be the irrelevant process of formal withdrawal means that this figure on commencements is systemically inflated; the measure is structurally inappropriate to the nature and purpose of enabling programs.

Whatever the merits of participating in a shared measure within an institution, the disadvantages are that not only does the measure under-state the rate of effective retention it also gives a seriously misleading picture of student attrition within enabling programs. This not only fails to measure the actual rates of attrition but, more importantly, also hides an important category for potential remediation.

3.2 Student demographic information

Note that information in this section is derived from the Initial Questionnaire and so reports on demographics of the students who completed that questionnaire. The demographic makeup of the whole student body at each institution may differ from the figures presented here. (For the data tables for this section, see Appendix D.)

3.2.1 The University of Newcastle

Note that these figures are for the whole UoN sample, including both OF and Newstep and internal and external students.

Table 3.3
UoN: Basic demographic information (Students returning Q1)

UoN Initial Questionnaire (N = 1932)		Number	Percentage of sample
Gender	Male	777	40.2%
	Female	1155	59.8%
Ethnicity	ATSI	53	2.9%
	NESB	117	6.1%

Age	< 20	597	30.1%
	20-30	964	49.9%
	31-40	238	12.3%
	41-50	98	5.1%
	> 50	32	1.7%
Low SES		652	33.7%
First in Family		916	47.4%

By way of comparison, the corresponding official university figures for this cohort are taken on enrolments at the HECS census date, after formal student withdrawals before that date.[26] For example, 34% of total enrolments as of the HECS census date were LSES while Q1 data has it as 33% (University of Newcastle 2012), effectively identical, suggesting that the LSES students are not formally withdrawing at any different rate from those not presenting but not formally withdrawing.

a. Parental education: UoN respondents reported their parents to be relatively well educated, with only 35.7% of Semester 1 (S1) respondents and 28.7% of Semester 2 (S2) respondents reporting their parents not to have completed secondary school. Just under a quarter of respondents from both semesters reported their parents as having an undergraduate or post-graduate university qualification[27] and 19.5% reported a VET qualification (Tables D1.3, D2.4).

b. Prior personal education: Results indicated that the UoN population had relatively higher prior levels of education than other groups. Only 21.2% of S1 and 24.7% of S2 respondents indicated that they had not completed secondary school. The full-time S2 cohort were far better educated than S1 with 40.8% of S2 having a vocational qualification as against 23.9% of S1 respondents. (This difference to a large extent reflects the inclusion of the 17-20 year old cohort in S1 in contrast the entirely mature age group in S2.) (Tables D1.4, D2.5.)

c. Time since last study: 13.5% of S1 and 24.4% of S2 respondents reported it having been over 10 years since they last studied with 50.8% (S1) and 3.4% (S2) reporting it as being less than two years. This figure is skewed by the inclusion of the almost one-third of 17–20 year old Newstep students – a program specifically for students who have just left school – in the S1 group. More usefully, almost half (49.2%) of S1 and the vast majority (91.6%) of S2 respondents reported it as being more than two years. (Tables D1.6, D2.7)

d. Paid employment: UoN students had slightly higher rates of paid employment with 69.1% of S1 and 58.2% of S2 respondents reporting being in paid employment. (Tables D1.8,

[26] Note that neither of these figures can be regarded as privileged as both include and exclude some students: (a) the official figure includes all students not actually commencing but not having formally withdrawn before the HECS census date and excludes all students with formal withdrawal before the HECS census date; (b) the Q1 data includes some of those with formal withdrawal before HECS (who will withdraw in the next 2-3 weeks) but excludes those students who had commenced but for one reason or other did not return Q1; for internal students, this includes those not attending class that week (for all reasons including illness, family obligations, etc.) as well as because of non-commencement.

[27] A surprisingly large 24% reported that their parents had a university qualification with 14.6% of those being post-graduate qualifications. This result seems so unlikely that the temptation is to interpret it as a misunderstanding of what a "post-graduate qualification" actually is although it is not possible to be certain.

D2.10.) (Note: the S1 figure is again skewed by the Newstep group.)[28]

3.2.2 University of Southern Queensland

Students from USQ were enrolled in the Tertiary Preparation Program externally or internally across several campuses (n=141), while a separate group of external students were incarcerated (n=15).

Table 3.4
USQ: Basic demographic information (Students returning Q1)

University of Southern Qld (N = 156)		Number	Percentage of sample
Gender	Male	57	36.5%
	Female	99	63.5%
Ethnicity	ATSI	3	1.9%
	NESB	20	12.8%
Age	< 20	38	24.4%
	20-30	53	34.0%
	31-40	31	19.9%
	41-50	20	12.8%
	> 50	13	8.3%
Low SES		74	96.1%
First in Family		80	51.3%

The high proportion of LSES students is misleading as only 77 respondents provided their postcode, an interesting fact in itself. The official university figure for the TPP is 44.16% (2007-2012, with USQ overall at 27.71%). USQ and UNE had the highest proportion of students over 40 years of age, both at over one fifth.

a. Parental education: USQ respondents reported generally lower levels of parental education, with 37.3% of respondents reporting their parents not having finished secondary school and only 35.2% reaching higher levels than the end of secondary school. (Table D1.3.)

b. Prior personal education: 67.6% of respondents reported having completed secondary school, a lower level of education on entry than other programs. (Table D1.4.)

c. Time since last study: Relatively higher numbers (33.8%) reported that it was more than 10 years since they had last engaged in any form of study, with only about one-third (32.5%) having attended in the last two years. (Table D1.6.)

d. Paid employment: USQ had the lowest proportion of students in paid employment (45.2%). (Table D1.8.)

[28] This means that 41% of the full-time S2 cohort were not in paid employment but this reflects the (anecdotally reported) extent to which a relatively high proportion of the enrolment is by unemployed people and, to a lesser extent, people who choose to give up work for half the year to concentrate on getting into university.

3.2.3 University of South Australia

Those UniSA students who responded to Q1 were enrolled in one of two Foundation Studies programs based on their age: aged 18-20 years (n=48) and aged over 20 years (n=129). Both programs are internal.

Table 3.5
UniSA: Basic demographic information: Students returning Q1

University of South Australia (N = 177)		Number	Percentage of sample
Gender	Male	79	44.6%
	Female	98	55.4%
Ethnicity	ATSI	4	2.3%
	NESB	59	33.3%
Age	< 20	74	42.0%
	20-30	74	42.0%
	31-40	17	9.7%
	41-50	6	3.4%
	> 50	5	2.8%
Low SES		52	45.2%
First in Family		82	46.3%

It is interesting to note here that, while the percentage of Aboriginal or Torres Strait Islanders (ATSI) was only minimally different from the other universities, the number of students registering as being from a non-English-speaking background NESB (33.3%) was so much greater than for any of the others.

a. Parental Education: Only 35.2% of respondents reported that their parents had not finished secondary school, with 15.8% reporting a VET qualification (Table D1.3).[29]

b. Personal Education: Only 21.2% of respondents reported not having completed secondary school (Table D1.4).

c. Time since Last Study: Students tended to have studied much more recently than in other programs, with the majority of students having been away from formal study for fewer than two years (Table D1.6).

d. Paid Employment: There were quite considerably fewer students in the UniSA sample who were in paid employment (49.2%) than there were for the whole group and at UoN (68.7%). (See Table D1.8.)

3.2.4 University of New England

UNE offers one program, the Pathways Enabling Course (PEC) which is an exclusively external program (offered online only).

[29] Similarly to UoN, a surprisingly large 23.1% reported that their parents had a university qualification with 15.2% of those being post-graduate qualifications. Again, it is tempting to ascribe this high percentage to a misunderstanding of what a "post-graduate qualification" is.

Table 3.6
UNE: Basic demographic information: Students returning Q1

University of England (N = 107)		Number	Percentage of sample
Gender	Male	23	21.9%
	Female	82	78.1%
Ethnicity	ATSI	3	2.8%
	NESB	5	4.7%
Age	< 20	12	11.2%
	20-30	36	33.6%
	31-40	35	32.7%
	41-50	16	15.0%
	> 50	8	7.5%
Low SES		n/a[30]	n/a
First in Family		37	34.6%

With over three quarters of the group female, UNE has the highest proportion of female students of all institutions while the level of first in family was substantially lower. As noted above, UNE shares with USQ the highest proportion of students aged over 40.

a. Parental Education: A relatively large proportion of respondents reported that their parents had not completed secondary school (32.7%) but those who had completed secondary school apparently tended to continue their education, with over 40% possessing post-secondary qualifications: VET qualification (22.4%) or university qualification (22.5%) (Table D3.3).

b. Personal Education: While almost one quarter of respondents reported not having completed secondary school (23.4%), over one third already have a VET qualification (38.3%) (Table D3.4).

c. Time since Last Study: A quarter of respondents reported having studied within the last two years (25.5%) but well over one third have been away for more than 10 years (42.5%). (See Table D3.6.)

d. Paid Employment: Two thirds of respondents are in paid employment, at 66.4% (Table D3.8).

3.2.5 Edith Cowan University

ECU has one program, the University Preparation Course, which is offered both internally and externally either full- or part-time.[31]

[30] SES figures are not available for UNE because of corrupted data.
[31] ECU was unable to conduct the study in 2011 and consequently all results are from 2012. There is no indication the population in 2012 was any different from that which would have obtained in 2011 had they been able to conduct the study then. Consequently they are considered alongside the other institutions. Note, however, that ECU is the participating program with some academic entry requirements.

Table 3.7
ECU: Basic demographic information: Students returning Q1

Edit Cowan University (N = 366)		Number	Percentage
Gender	Male	129	35.2%
	Female	237	64.8%
Ethnicity	ATSI	5	1.4%
	NESB	62	17.0%
Age	< 20	186	50.8%
	20-30	134	36.6%
	31-40	24	6.6%
	41-50	15	4.1%
	> 50	7	1.9%
Low SES		55	15.0%
First in Family		162	44.4%

The gender imbalance is marked, although not as high as at UNE. Just over half (50.8%) of those who responded to the question about age were under 20 with the next largest group being those under 30 (36.6%). There were only relatively small numbers of students in the other age groups. Only 67 students responded to the question regarding ethnicity. Of these, five were from Aboriginal or Torres Strait islander background while 62 were NESB. The proportion of those who were the first in their family to study at university (44.4%) was similar to that in the other institutions.

a. **Parental Education**: The parents of approximately half of students had been educated to at least certificate or diploma level, although 7.1% were unsure about the highest level of education attained by either parent (Table D4.3).

b. **Personal Education**: Few students (10.4%) had failed to complete secondary school, while a surprisingly high proportion (35.8%) had completed a vocational certificate or diploma (Table D4.4). (Recall that ECU is the only one of the five participating institutions with a program with prior academic and/or motivational entry requirements.)

c. **Time since Last Study**: Almost 80% of students (79.7%) had undertaken study within the last 5 years, with 59.7% having studied within the last 2 years (Table D4.6).

d. Paid employment: The proportion of those undertaking paid employment while studying (67%) was also similar to that found in the other institutions (Table D4.8).

3.2.6 Summary

Overall, a number of points should be noted regarding the demographic makeup of the participating programs. First, the relatively high levels of low SES students present at each institution (except ECU) and the quite high representation of students who are first in their family to attend a university suggest that the widening access aim of these programs is being achieved. Noteworthy, too, is the lower level of low SES students at ECU (possibly because of the difference in entry requirements, although this is speculative) contrasted

with the similar rate of first in family to other institutions (in this case with the exception of UNE). Secondly, it is clear that the student populations of these programs are quite diverse with respect to the (pedagogically salient) variables of prior educational achievement, time since last study and, for the 20+ programs, age.

3.3 Persistence and non-persistence

Note: The following discussion is concerned with patterns of persistence and non-persistence of students who returned a usable Initial Questionnaire (Q1), as no relevant information is available for those students who did not return this questionnaire or who omitted sufficient information to allow them to be identified and tracked through the program (see 2.2.1) . That is, the retention and attrition referred to here is "effective" retention and attrition. [32]

3.3.1 Persistence and non-persistence by salient variables

3.3.1.1 Which student characteristics matter?

Patterns of persistence and non-persistence were analysed using demographic information from the Initial Questionnaire (Q1) mapped against persistence data for the different programs.[33] Recall from Chapter 2, we are particularly concerned with the effects of low SES, student prior educational achievement, age, time since last study, and status as first in family to attend university. (For data tables for Section 3.3.1, see Appendix E.)

Positive effects on retention: The student's level of prior personal education was found to have a significant positive effect on retention at both UoN and UNE, with the level of parental education also found to have a positive effect at UoN only.

Negative effects on retention: Age was found to be significant at UoN (older students less likely to persist) and longer hours of paid employment had significant negative effects on retention at both UoN and ECU; being first in family to attend university and studying for personal satisfaction (rather than as a pathway to university) were significant negative factors in persistence at UoN but not at other institutions. And being unable to find adequate study space was found to be a significant negative at ECU.

No significant effects were found to arise from low socio-economic status (LSES) at any of the institutions.[34] (LSES does exhibit a *non*-significant difference for likelihood of persistence

[32] See also 3.4.2 for effects on persistence related to student learning approaches.

[33] This data does not allow for simple comparability between institutions, as the programs have such major differences in their program structure and hence finding a baseline figure for student persistence is a major challenge. At UoN, for example, Open Foundation requires completion within one calendar year while Newstep students may carry one course over into the next year; at UniSA, there is no formal limit on the time taken to complete. (See discussion in 2.2.3.) As a result, the comparisons should be treated as broadly indicative only.

[34] SES figures for UNE are not available because of corrupted data but there is no reason to expect the result here to be different. The internal UoN full-time under-20 Newstep program at the Callaghan campus (but not the Ourimbah campus) has a significantly higher rate of non-persistence for LSES students; the reason for this is not clear and warrants further investigation.

in attrition at UoN which accords with results from the 2009 study.)

At USQ and UniSA, no significant differences for any variables (p<.05) were found between those who persisted and those who did not, even when the UniSA mature age (20 +) program was examined separately.

3.3.1.2 Detailed analyses by variable

Student's prior level of education: Overall for all UoN programs, the levels of personal prior education resulted in significant (p<.01) differences in likelihood of persistence with those reporting lower levels of personal prior education being more likely to drop out.[35] A similar relationship between lower levels of personal prior education and likelihood of non-persistence was found for UNE, where prior personal education was the only significant difference in persistence (p<.05) to emerge. Not surprisingly, for these two institutions at least, education begets more education. What is more surprising is that no such relationship appeared to exist for USQ, UniSA or ECU. (All tables are in Appendix E.)

Parental educational achievement:[36] At UoN, the reported level of parental education resulted in a significant (p<.01) difference with, again, those reporting lower levels of parental education being more likely not to persist. No significant differences were found for USQ, UniSA UNE or ECU.

Time since last study: As we have seen, while some students in participating programs have been away from formal study for less than two years, many have been absent from study for more than six years and, often, more than 10. The expectation would be that those who have been away from formal study for a greater time would be likely to drop out at a higher rate. In general, the data does not support this expectation. The exception is, again, UoN, where those who persisted were likely to have been involved more recently in study.[37] No significant differences were found for USQ, UniSA, UNE or ECU.

Age: Overall, again, no significant differences were found with the exception of UoN and ECU. At UoN, a significant difference was observed for student age (p<.01) with older students being significantly more likely to drop out. Neglecting the 17-20 year old Newstep program, older students are more likely not to persist than younger and, in the Distance program, the older distance students are less likely to persist than the older face-to-face students.

First in family: Again, no significant differences were found with the exception of UoN, Those who were the first in their family to undertake university study, were significantly (p<.05) more likely to drop out.

[35] If we look at individual UoN programs, an anomaly emerges in the case of the external program, OF by Distance, with the attrition rate of respondents reporting having completed their secondary education being significantly higher than either of the other categories. The reason for this is not clear and warrants further investigation.

[36] Note that this variable is considered less reliable than others relating to the students themselves, with some rather puzzling anomalies in the data raising the possibility that students are in some cases incorrect in their beliefs about their parents' educational levels.

[37] Again, there are some internal program differences which may warrant further investigation.

Reason for doing the program: At UoN, those who reported that they were undertaking the course for reasons of personal satisfaction were more likely not to persist than those who were explicit that their goal was to access higher education. No significant differences were found in other institutions.

Hours of paid employment: Those who dropped out worked significantly longer hours than those who persisted, at both ECU ($p<.05$) and UoN ($p<.001$). No such effect was observed at UNE, USQ or UniSA.

At ECU non-persisting students were also more likely ($p<.05$) to report that they had inadequate study space. While there is a plausible link between non-persistence and working long hours in paid employment, the link with not having adequate study space is less clear, although it is possible that it is substituting for a range of other hindrances to study (such as living in over-crowded accommodation or lacking some capacity to manage the conditions for study). This warrants further investigation to discover the underlying mechanisms and see if some remediation is possible.

Conclusion: Overall, there is little general impact on student attrition visible in the participating programs from pre-existing student characteristics, with the exception of the student's prior level of educational achievement – hardly surprisingly – at any but two of the institutions, UoN and UNE. This effect is so in accord with common sense expectations and the program experience of practitioners that the surprising thing is rather that the effect is not visible at all institutions.

One important implication of this finding is that a popular avenue of improving student retention reported in the undergraduate literature, pre-program targeting of students displaying demographic features considered to be more likely to be at risk of non-persistence, is not likely to be a particularly effective strategy in the enabling programs of, at least, the participating institutions. (See 4.2.1.)

3.3.2 Program experience: Persisting students

Information on student engagement and awareness and use of student support by persisting students is derived from the Concluding Questionnaire (Q3). Analysis is presented for UoN, UNE and ECU only as insufficient usable surveys were received from USQ and UniSA.

3.3.2.1 Revised student engagement measuring instrument

The ACER student engagement scale (ACER 2008) was included in the Exit Survey and Concluding Questionnaire because it was ostensibly a valid scale from a reputable source, but it was found to have a number of inherent weaknesses, in particular when factor analysed numerous items failed to load meaningfully and were removed. Consequently, an abbreviated form of this scale (12 items) was subjected to a Principal Components (Factor) Analysis (Varimax rotation) and three factors were extracted and recorded in Table 3.8. This was then considered to be a more reliable scale. The abbreviated scale, the basis of Table 3.9, had a Cronbach's alpha score of reliability of 0.747, which was considered satisfactory.

The ACER engagement scale was also used, for comparison, in the Concluding Questionnaire (Q3), given in class to those who were present in the last week of semester. A total of 560 valid responses were received at UoN from this instrument and this set of data was used for the initial analysis, which was then applied to the much smaller data set from the Exit Survey (Q2).

Table 3.8
UoN: Student engagement rotated component matrix[a]

	Component		
	1	2	3
Discusswk	.819	.069	.088
Advice	.767	.158	.152
Emailstaff	.750	.014	-.104
promptfeedbk	.629	.052	-.048
Questions	.600	.111	.165
Discusscareer	.538	.149	.237
Libraryresc	.423	.191	.067
Coopoutside	.084	.886	.062
Coopclass	.116	.866	.095
Electmedium	.330	.355	-.171
Uptodate	.059	.030	-.821
Studyplan	.291	.108	.630

Extraction method: Principal Component Analysis.
Rotation method: Varimax with Kaiser normalization.
a. Rotation converged in 4 iterations.

These factors were interpreted as:
1. Consultative
2. Co-operative
3. Organised.

Table 3.9
UoN: Engagement reliability statistics

Cronbach's Alpha	No. of Items
.747	12

The first factor related to the propensity for students to discuss their work and consult wider sources in their study; in other words the factor measured their desire to consult widely with staff in their academic pursuits. The second factor recognised their desire for co-operation in their studies, particularly with other students, both within and outside class and through electronic media. The final factor tapped into their organisational skills. Consequently these three factors together were considered to be a more accurate measure of engagement than the total ACER (2008) scale.

3.3.2.2 Student engagement: Institutional analyses

a. The University of Newcastle

Effective attrition by program groups: For students who enrolled in semester 1, it was found that the Newstep program had the highest effective retention rate (70.8%), followed by the OF (part-time) program (59.6%), with the OF by Distance program having the lowest retention rate (52.9%).

These results reflect levels of engagement, with Newstep having the highest level of engagement in terms of co-operation, followed by OF (part-time), with the OF by Distance with the lowest level. (See Tables D1.1 – D1.3.)

The five program groups (Distance, Newstep Call & CC, OF Call & CC) were collapsed into three groups (OF by Distance, Newstep and internal OF). Differences in effective attrition between the three groups were then examined. Program 1 was then Distance, Program 2 was Newstep, and Program 3 was OF. (See Table DX.1) Differences between the groups were then examined by means of a one way ANOVA. Post hoc comparisons were made by means of the Least Squares Difference method (see Table D1.2).

A significant ($p<.05$) difference in effective attrition rate was found between the OF by Distance (Program 1) students and the Newstep (Program 2) students, with the Distance students being more likely to drop out. A significant difference ($p<.001$) in attrition was found between the Newstep students and the internal part-time OF (Program 3) students, with the OF students being dramatically more likely to drop out. No significant difference in attrition was found between the external OF by Distance and internal part-time OF students.

The program with the highest retention rate of students returning Q1 with identification by far was Newstep (70.8%) while the lowest retention rate was in the distance program (52.9%), followed by the OF program with 59.6%. (See Table D1.3)

UoN S1 overall engagement: When results from the engagement analysis of the Exit Surveys are compared with the results for persisting students from the Semester 1 intake, one observation is that, for this later sample, scores across all three subscales and the overall engagement scale are substantially higher for the completing students than for the students who exited the program early. However, means for all three subscales still fall below the midpoint (only marginally for two of them), suggesting that even the completing students were still not overly engaged. They were particularly not good at co-operating with their fellow students, either within or outside class or even on-line. (See Table D1.8.)

UoN S1 Engagement by program Groups: The Semester 1 cohort (S1) consisted of five groups: OF by Distance, Newstep (Callaghan and Central Coast campuses) and OF (Callaghan and Central Coast campuses). These were collapsed into three groups with the Callaghan and Central Coast campus groups for each program being combined. Differences in Engagement as measured in Q3 were then analysed by groups. (See Table D1.4.)

There were no significant differences in Consultation or Organisation between the three groups, but significant differences did emerge between the groups in terms of Co-operation. The Newstep group was significantly higher in terms of Co-operation than either the Distance ($p<.05$) or OF ($p<.001$) students. While the mean score for the Distance students

was the only one greater that the mid-point (2.5), the difference between the groups was not significant, largely because of the low numbers of distance students to complete the Concluding Questionnaire. (See Table D1.5.)

UoN S2 engagement: The analysis was then extended to the Semester 2 Intensive OF intake (S2). Very little difference was observed in mean levels of engagement for the Semester 2 Intensive cohort from that of the Semester 1 cohort. This may well be because both groups have generally completed the course. The only real difference was in levels of co-operation with other students, where the Intensive cohort was slightly more positive. (See Tables D1.9 – D1.11.)

Comparison between S1 and S2 groups: The revised measure of engagement was used to examine differences in levels of engagement between persisting students in the full-time Intensive OF and the other three programs: Newstep, part-time OF (both internal) and OF by Distance (part-time, external) because of the dramatic difference in effective attrition between the Intensive OF and other programs.

No significant differences were found between any of the groups for either Consultation or Organisation. However, significant differences were observed between the semester 2 full-time Intensive OF and Newstep groups and the internal part-time OF ($p<.001$) and external OF by Distance ($p<.05$) groups for Co-operation, with both the Intensive and Newstep groups having higher scores for this variable than these other groups. (See Tables D1.6, D1.7.)

There appears to be some correlation between levels of student engagement and levels of attrition between UoN internal programs (although this has not been tested directly and there could be a number of other variables influencing both attrition and engagement). As well, both the external programs in this study (UNE and OF by Distance) had higher levels of effective and "raw"/official attrition (consistent with many external programs) and both emerge in the study as having lower levels of student engagement.

b. University of New England: The UNE students appeared to be more organised than most of the other students from other institutions. However they were less cooperative with their fellow students and were not good at consultation. In other words, their levels of engagement varied. Because of the distance nature of the UNE courses the Cooperation factor had to be modified to remove the "classroom cooperation" variable. (See Table D2.1.)

Indeed, the distance delivery of the whole program may have been responsible for the low levels of consultation and cooperation, while having to arrange life to undertake study without the discipline of lectures may well lead to higher levels of organisation.[38]

c. Edith Cowan University: As with the sample of completing students from UoN, levels of engagement were slightly below the mid-point (i.e. <2.5), with the level of personal

[38] It is not possible to compare these results with those of non-persisting students via the Exit Surveys because of a corrupted data file.

organisation being the lowest. (See Table D3.1.)[39]

The ECU program has the lowest attrition rate by a substantial margin but it also has substantive academic and commitment entry requirements, making any direct comparison in terms of student engagement problematic.

Conclusion: It was clear for the UoN internal sample that persisting students were more engaged than non-persisting students. While it is not possible to relate levels of engagement at UNE with attrition, and the difference in the ECU entry model make a clear comparison here problematic, it appears overall that lower levels of student engagement may relate to the likelihood of non-persistence. While not a surprising finding – this is in line with similar findings in undergraduate programs – it presents a clear opportunity for remediation to improve retention.

3.3.2.3 Awareness and use of student support services

Questions were asked concerning awareness and use by students of the whole range of available support services, but for simplicity the analysis was restricted to those which are more central for students in the programs: the department (or equivalent) administration office ("departmental secretary"), student mentors, program coordinator, learning support, student counsellor and the health services. Table 3.10 summarises these results.

Table 3.10
UoN, UNE, ECU: Awareness and use of student services (persisting students): Selected figures

Service	UoN			UNE			ECU		
	1	2	4	1	2	4	1	2	4
Secretary's office	61.9%	31.1%	5.4%	75%	25%	0%	59.5%	36.7%	2.5%
Student mentors	11.7%	78.8%	5.4%	25.9%	64.8%	9.3%	15.2%	74.7%	7.6%
Program coordinator	6.8%	55.9%	25.1%	11.6%	39.6%	48.8%	11.3%	58.8%	18.8%
Learning support	3.8%	65.3%	22.2%	14.5%	65.5%	20.0%	11.4%	60.8%	21.5%
Student counsellor	4.8%	87.2%	5.4%	25.4%	74.6%	0%	13.9%	84.8%	1.3%
Health service	20.6%	75.0%	2.5%	52.5%	47.5%	0%	29.1%	63.3%	3.8%

1: Not aware of service
2: Aware of but never used
4: Aware of and used as needed.
(To make the picture clearer, category 3: Used more than once has been omitted.)

a. The University of Newcastle: Overall, the results regarding awareness are quite satisfactory, suggesting persisting students, at least, are relatively well aware of the services available to them. The exception is low awareness of the availability of information and advice from the secretary's office, which is an area of potential concern. That approximately one quarter of persisting respondents reported using the services of the program coordinator and learning support "as needed" is very encouraging. However the much lower figure for usage "as needed" for the counsellor, coupled with the high level of awareness

[39] It is not possible to compare this result with those for non-persisting students as no Exit Surveys were received for ECU.

that the service is available, suggests that this service is under-used, reflecting the common experience within enabling programs of the perception of a stigma associated with seeing a counsellor. (See Tables J1.1 – J1.6.)

b. University of New England: Figures here must be treated with caution as such services are provided rather differently than is the case for a program delivered internally. There is nothing that is recognisably the equivalent of the "department secretary's office" or health services, although counselling services are offered via telephone or skype. The standout result for UNE is the "program coordinator" function (unit coordinator of foundation units) who are learning advisors and contact with them is built into course assessment. Learning Support is offered, to a large extent, by means of online resources, so students would be expected to be aware of this support: the rate of one-on-one consultations may be low, but interaction with online support resources appears satisfactory. (See Tables J2.1 – J2.6.)

c. Edith Cowan University: Overall, most students seem to be relatively aware of most services, with the exception again being the secretary's office as a source of program information and advice. (See Tables J3.1 – J3.6.)

Discussion and conclusion: Overall, levels of awareness of available support services seems to be quite satisfactory for persisting students in the three institutions for which we have information from the Concluding Questionnaire.

Note, however, that while it is relatively easy to interpret the level of awareness of such services, understanding the results concerning student use of these services is far more complicated, depending as it does on not only the level of need on the part of individual students but also the student's perception of that need: a high level of awareness of a service and low level of usage might mean that the service is being under-used but it might equally mean that the students either have, or feel they have, no need for the service. The latter interpretation might be more likely given that these are the persisting students but this is hard to determine.

Given the experience of the non-persisting students (see below), the areas we might expect to be most at risk of being needed but not used are learning support and counselling. We can see that for UoN and ECU and, to a substantially lesser extent, UNE, awareness of the service appears to be quite healthy for learning support, a service which, given the prominence of assessment in the minds of students unused to formal education, might be expected to loom large in their awareness. Consistently with the results for the non-persisting students, however, the level of use of the student counsellor looks to be much more problematic.

The needs in this area are not clear, although there is a possible under-use of the student counsellor. Clearly providing and encouraging accessing of support is going to be generally more challenging in an external program than it is for an internal one but, again, if the need is there it must be addressed.

3.3.3 Why do they leave? Information from Exit Surveys

3.3.3.1 Return rates

Recall from Chapter 2 (2.2.2) that return rates for UoN and UNE were not high and no usable Exit Surveys were received from UniSA, ECU or USQ. (Data tables for this section are found in Appendix G.)

Figure 3.1
UoN: Week of leaving program (N=76)

These low rates of return mean that is not possible to further divide the sample by age, program or gender as the numbers would then become even more problematic, despite the fact that there might be good arguments for hypothesising differences between groups. It also makes it impossible to draw rigorous conclusions from the Exit Surveys but some indications are given which can be valuable especially when they are in line with anecdotal evidence and evidence from other sources, such as data on no-shows and the 2009 UoN study (UoN 2011). (Note that all of the UNE respondents and 14 of the 84 UoN are external students.)

Recall also the limitations of information derived from Exit Surveys (Section 2.1.2.2).

3.3.3.2 Time of leaving the program

a. The University of Newcastle: The point at which students who do not persist in their program leave is very important, both for understanding why they are leaving but also to direct strategic targeting of measures to attempt to improve retention. (76 respondents answered this question.)

From Table 3.11 and Figure 3.1 , it can be seen that 18 (21% of all respondents) left before the program began and 10 (17%) reported leaving in Week 1, a total of one-third of all students returning an Exit Survey leaving before Week 2; that is, they were gone before Q1 was administered. The picture from then on is of a steady rate of departure from Weeks 2

to 7, with a slight peak in Weeks 4 and 6, and then a small peak in the final two weeks of the program.

Table 3.11
UoN: Week of leaving program (N=76)

Week	< 1	1	2	3	4	5	6	7	8	9	10	11	12	13	>13
Number	18	10	5	4	7	4	6	4	2	3	1	1	4	3	4
Percent	24%	13%	6%	5%	9%	5%	8%	5%	3%	4%	1%	1%	5%	4%	5%

b. University of New England: Table 3.12 and Figure 3.2 show that the pattern of reported departures is very different from that of the UoN respondents, with no students reporting having left before the program began, in fact before Week 4. Three-quarters of students left Weeks 4 to 7. (20 students responded to this question.)

Table 3.12
UNE: Week of leaving program (N=20)

Week	< 1	1	2	3	4	5	6	7	8	9	10	11	12	13	>13
Number	0	0	0	0	4	3	5	3	0	1	3	0	0	0	1
Percent	0	0	0	0	20%	15%	25%	15%	0	5%	15%	0	0	0	5%

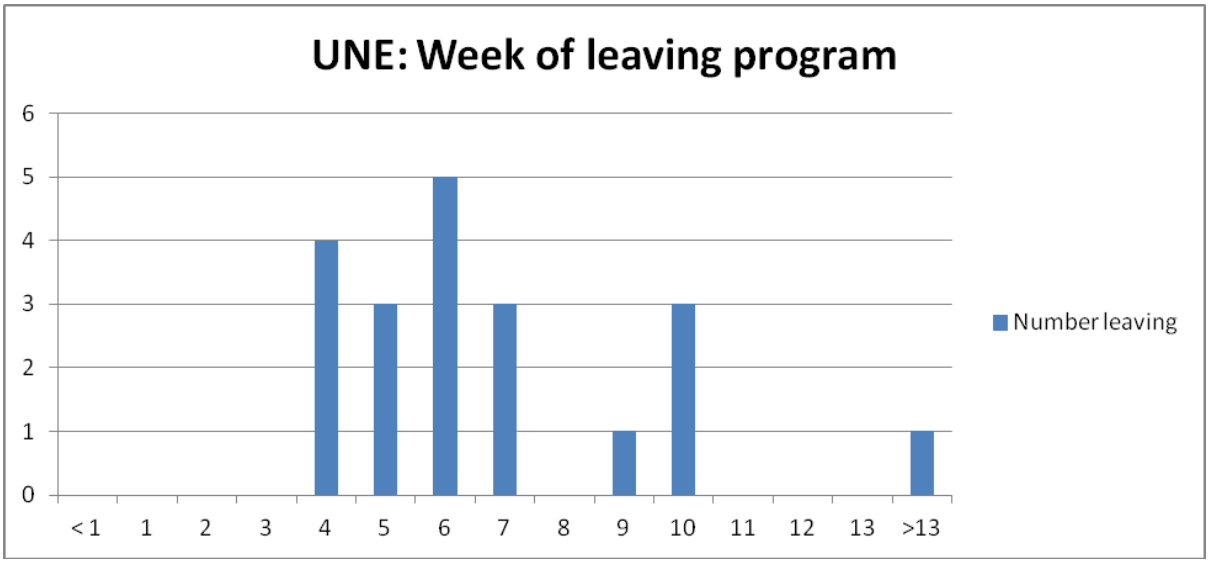

Figure 3.2
UNE: Week of leaving program (N=20)

Two program features seem to underlie this early/mid-semester hump in departures:

a. The first written assignment for the (compulsory) foundation unit was due between weeks 3- 5 (a series of online discussion posts);

b. Students who had not been active in the foundation unit (e.g. had not completed any of the quizzes) were sent a letter just prior to the HECS census date reminding them of the need to log into the unit and submit assignments. The letter warned students that failure to complete all assessment tasks would result in an NI (Fail Incomplete) grade being recorded

which would exclude them from continuing in the course. This letter always resulted in a flurry of assignment submission and withdrawals from the course around Week 4.

This is noteworthy: the UNE letter prompted student decisions regarding program commitment, a commitment that can be amorphous in an external program, in contrast to an internal program where the need to attend classes is present from Week 1.

c. Discussion: The apparent patterns of departure for UNE and UoN are quite different: UoN students, the majority of whom are internal students, are leaving before program commencement or very early in the program, but not necessarily formally withdrawing, while the external UNE students are being prompted about Week 4 to commit to the program, with some then re-engaging and some withdrawing.

The 21% of the returned UoN Exit Surveys completed by students who left before the program began clearly had no experience of the program itself. This is in itself a significant result, supporting the headline finding that the "effective" rate of attrition is substantially lower than the "raw" and official figures suggest. The result must be treated with caution, being limited in generality because of the relatively low return rate, but in conjunction with the retention rate of those students returning Q1, it is highly suggestive.

Note, however, that these students do experience the process between application and program commencement, including the mechanisms that the program uses to notify acceptance and to advise of enrolment procedures. While the Exit Survey responses do not suggest this, it is possible that a review of these processes would be worthwhile.

The success of the UNE letter in prompting students to engage or withdraw is also noteworthy, acting as a decision trigger point, in a similar way to the financial penalty associated with failure to formally withdraw by the HECS census date has for undergraduate students. It prompts action: to commit to the program or to formally withdraw.

3.3.3.3 Personal experience of the program

a. The University of Newcastle

Positive and neutral attrition: While few of the Exit Surveys from students leaving before the program began are complete, it is clear from comments that slightly over one-third left in order to take up a position at a tertiary institution (7% of all respondents) while slightly less than one-third left in order to take up a new job (6% of all respondents). That is, 13% of all respondents must be counted as either positive attrition (achieved their goals) or, at worst, neutral attrition (changed their goals). (See Table 3.1.1 for a summary and relevant data tables in Appendix G for detail.)

Important issues: Very nearly two-thirds (65.6%) of respondents to this question said that the time available for study was insufficient and that this was very (35.9%) or quite important (29.7%) for them (see Table G1.1). This result confirms anecdotal evidence from student counselling interviews that the feeling of time pressure is a common, and disturbing, part of the enabling experience for most students.

Interestingly, despite the widespread experience of greater than anticipated problems finding the time to study, 85% of students believed that the information that they had been given before enrolling was adequate and was not a factor in their withdrawal. (See Table G1.7.) These results together are highly suggestive, indicating that while the information regarding the level of time commitment required is being given to students and even, initially at least, heard by them, what is missing is the practical awareness of what it will mean in their lives and then the capacity, in most cases, to develop an effective solution to conflicting time demands.

Of some importance: Approximately a quarter of students responding to the questions on financial difficulties, physical/emotional issues and family responsibilities considered these factors to be quite/very important for them (Tables G1.2 – G1.4). The majority of students (76.9%) were of the opinion that they had the requisite academic skills for the course and that this was not a factor in their withdrawal, although this is one variable for which the limitations of a self-ascription survey need to be kept firmly in mind. (Table G1.6).[40]

Table 3.13
UoN: Reasons for leaving the program

Variable	1	2	3	4	% 3+4
Time issues	18	4	19	23	65.6%
Financial issues	34	13	6	10	25.3%
Medical/emotional problems	46	1	3	12	24.2%
Family responsibilities	38	7	9	10	29.7%
Inadequate skills	35	13	8	7	23.8%
Inadequate pre-enrolment information	41	13	6	3	14.3%
Prior knowledge	44	6	11	1	19.3%
Distance study issues[41]	34	4	5	5	(71.4%)

For detail of the abbreviated variables refer to the Exit Survey (Appendix C).
The numbers represent:
1: Of no importance at all
2: Of not much importance
3: Quite important
4: Very important.
% 3+4 is percentage of respondents answering Quite or Very important.

Non-persistence "triggers": When asked if there was a particular event that sparked their decision to withdraw, over two-quarters of respondents (78.1%) said that there was.
In response to a series of questions asking about specific events, there was a wide spread of responses across all possibilities with the largest group (36.8%) being "Other," with no further detail supplied. The lesson seems to be that, in line with expectations from both the undergraduate literature and widespread experience, the actual departure of a student from an enabling program is a complex outcome of a number of factors.

[40] Of the 28% of ECU UPC semester 1 2012 students who discontinued, 10% failed to engage within the course in any way (grade: 0) and 8% left as a result of life-events, such as to take up a job opportunity or family or financial issues. (Source: Program data.)
[41] Unfortunately, too many of the internal students also answered the question concerning problems with distance study. However, as 14 of the 84 respondents were external students, if the plausible assumption is made that all of those who reported it to be quite or very important are distance students, then 10 of these 14 respondents (71.4%) found this to be an issue.

The most important specified events were: taking on a new job (15.8%), having hours of work increased (21%) and illness (self or family member; 22.8%). Most significantly, the total of two course events which tend to figure in the folk-lore of enabling programs as triggers for drop-out – the approaching deadline for the first assignment and disappointment at the mark received for the first assignment – was a low 15.8% while all external life-events made up very nearly two-thirds of the total (63.1%). Table 3.14 has a summary, and relevant tables are at Appendix G.)

Table 3.14
UoN: Summary of specified "trigger" events

Specified event	**Number**	**Percentage** (n=57)
New job	8	15.8%
Increased hours at work	12	21.0%
Illness (self/family)	13	22.8%
Inadequate child care	2	3.5%
Panic at submission of Assignment 1	5	8.8%
Disappointment at result of Assignment 1	4	7.0%
Other	21	36.8%

b. University of New England

Important issues: The more important perceived issues for non-persisting UNE students appear to be family responsibilities, having insufficient time available for study and medical and emotional problems. (Table 3.15 has the summary and Appendix G the details).

Family problems and, especially, insufficient time were quite evenly spread from No importance to Very important. This is in contrast to the results from the University of Newcastle, where a majority gave insufficient time as quite or very important.

Table 3.15
UNE: Reasons for leaving the program

Variable	1	2	3	4	% 3+4
Time issues	4	4	5	6	57.9%
Financial issues	12	2	2	2	22.2%
Medical/emotional problems	8	1	4	6	52.7%
Family responsibilities	6	1	6	6	72.2%
Inadequate skills	7	6	4	1	27.8%
Inadequate pre-enrolment information	9	3	3	3	33.4%
Prior knowledge	11	5	0	2	11.1%
Distance study issues	6	5	5	2	38.9%

For detail of the abbreviated variables refer to the Exit Survey (Appendix C).
The numbers represent:
1: Of no importance at all
2: Of not much importance
3: Quite important

4: Very important.
% 3+4 is percentage of respondents answering quite or very important.
(Note that one respondent did not answer all the questions.)

Of the 20 respondents, a majority answered that the following were of no importance at all: money difficulties, medical problems, skills and prior knowledge, official information and distance study. While not fully understanding the demands of distance education was an issue for fewer than half the respondents, well over one-third did see this as a problem.

Non-persistence "triggers": 19 out of the 20 responses cited "a particular event" as their reason for leaving. Of these, the most frequent responses were either increase in hours of work or illness (self or family member) problems. In contrast to UoN, reaction to the first assignment was an issue for a significant number of students, as can be seen from Table 3.16, with details at Appendix G.) Note that some respondents gave more than one event as a particular event triggering their departure, suggesting again the complex nature of the behaviours involved.

The Other responses included largely personal reasons but it is disturbing to note that two of the responses indicated a lack of feedback on assessment work and an inability to contact the lecturer.

Table 3.16
UNE: Summary of specified "trigger" events

Specified event	**Number**	**Percentage** (n=20)
New job	3	15%
Increased hours at work	7	35%
Illness (self/family)	7	35%
Inadequate child care	3	15%
Panic at submission of Assignment 1	5	25%
Disappointment at result of Assignment 1	3	15%
Other	6	30%

Discussion and conclusions: The issues that emerge from Exit Surveys most clearly at both UoN and UNE are the perception of having inadequate time, inability to adjust to external life events (primarily employment and health related) impacting on study, and the demands of family responsibilities (a common theme in the studies of the mature age students who are so prominent in enabling programs). As well, for the external students – all those at UNE and a proportion at UoN – being unprepared for the demands of distance seems to be very important.

The appearance of assignment-related stress in the UNE group but not for UoN suggests that the issues may be arising as a result of the external nature of the UNE program, with the lessened direct interaction with teaching and support staff underlying these issues. The dataset is far too small for this to be a clear result, however.

In **summary**, it seems that, other than for time pressures, the potential program-related

issues targeted in this survey did not figure large in the minds of students when they withdrew from the course. The problems associated with the pressures and the perception of them present a clear opportunity for measures to improve retention.

Related to the experience of time pressures, but also significant in their own right, are the range of life-events that disrupt the capacity to cope with what can be an already stressful new experience. While it is not possible to prevent the occurrence of negative life-events for the students, it is possible to put in place support processes to help them to cope with these events without too great a level of disruption to their studies or, where the events are such as to leave little choice for the student, even with support, to facilitate a strategic withdrawal so that departure from the program itself causes as little further distress as is possible. In conjunction with the results below regarding awareness and use of student support services, this is an area for concern.

3.3.3.4 Expectations and experience of the program

a. The University of Newcastle: Two noteworthy issues for UoN respondents emerged from this section of the survey.

It was disturbing that well over a third of the respondents (40.3%) felt that obtaining help for *personal* difficulties was a problem (Table G1.21), although it was equally encouraging that over two-thirds of respondents said that it was easy or fairly easy to get *academic* help if needed (70.7%) while 29.3 % reported it as difficult or impossible (Table G1.20).

Almost two-thirds (62.9%) of those who responded said that they now felt that they were only somewhat or not at all prepared on entry to the program with only 37.1% feeling they were well or very well prepared (Table G1.24), although almost two-thirds (63.1%) attended orientation with almost all (97.5%) finding it helpful to some extent (Tables G1.76, G1.77).

b. University of New England: The majority of respondents (40%) said they felt fairly well informed about the program content, with another 40% well or very well informed. Access to *academic* help was fairly easy for 40% with another 30% having no problems. For help with *personal* difficulties they were evenly divided between difficult and fairly easy (35%). Access to financial help was no problem for most (50%) nor was access to help with career advice with 60% having no problems. (Tables G2.26 – G2.30.)

On the other hand, the majority (45%) reported feeling only somewhat prepared when they began the program (Table G2.32). Over half (57.9%) reported attending an orientation process but only 50% found it even somewhat helpful (Tables G2.91, G2.92).

Discussion and conclusion: Two issues emerge here as noteworthy: getting help for personal issues, which was particularly evident at UoN and present at UNE, and a feeling of lack of preparedness for the demands of the program.

The perception that it is hard to get help for personal issues is not a great surprise in an external program, with the potential for students to feel isolated in their studies. This is, however, a challenge which an institution offering an external program (as both UNE and

UoN do) has a concomitant responsibility to meet. As only one sixth of the UoN respondents were external students, clearly the issue is present for at least some internal students as well. While what we have here is a perception of a problem, this is an area where the perception is the reality: no matter how much personal support is made available by the program, if students are not fully using the service because they feel that accessing it is a problem then the program may have responded to the challenge of provision of counselling support but has yet to solve the harder challenge of *accessing* of that support.

Respondents from both institutions reported feeling that they had not been fully prepared for the experience of the enabling program on entry. This lack of preparation is not referring to a belief that students lack the necessary skills, as the majority at both institutions do not feel that to be a problem (see 3.3.3.3 above), but is more likely to be referring to the overall experience of dealing with a rich and challenging new environment, in which information given in the pre-program period is not providing sufficient preparation for the realities of tertiary study, even at the level it is experienced in an enabling program.[42] What we may be seeing here is an expression of the lack of successful experience of education of enabling students; the general sense of students being overwhelmed at the beginning of the program has long been a concern to staff. It is hard to see what might be done to mitigate this effect but it should clearly be a priority area for concern and, for a start, further study.

3.3.3.5 Awareness and use of student support services

The following section related to non-persisting students' awareness and use of the various support services available to them, as well as the quality of that service as experienced by them.[43] In terms of the availability of the service, students could respond on a four point categorical scale, ranging from not being aware of the service, aware but never used, used only once and then used as needed. Quality of service was rated as poor, satisfactory or excellent. (For full data tables see Appendix G.)

Table 3.17
UoN, UNE: Non-persisting students: Awareness and use of student services (Selected figures)

Service	UoN			UNE		
	1	2	4	1	2	4
Secretary's office	50.9%	28.3%	18.9%	66.7%	33.3%	0%
Student mentors	26.8%	64.3%	8.9%	n/a	n/a	n/a
Program coordinator	13.0%	50.0%	22.2%	8.3%	25.0%	66.7%
Learning support	19.2%	55.8%	23.1%	43.8%	37.5%	18.8%
Student counsellor	17.0%	75.5%	7.5%	41.2%	52.9%	5.9%
Health service	18.9%	75.5%	5.7%	n/a	n/a	n/a
Distance support	n/a	n/a	n/a	60.0%	20.0%	20.0%

[42] There is a strong feeling at UoN that the information provided in both the pre-enrolment information pack and the Orientation session is, if anything, overly comprehensive, with moves to reduce the information content of the Orientation session over the last three years. It may be that what respondents are expressing here is something that has been an ongoing concern: that they are overloaded with pre-enrolment information to the extent that they are unable to fully process the information they are given. (Anecdotal program information at UoN supports this possibility, with support staff frequently reporting fielding questions about information that is prominently displayed in the pre-enrolment information.)

[43] It would be desirable to compare with figures for persisting students; however, this is only possible for UoN as that is the only program for which both Q2 and Q3 available.

1: Not aware of service
2: Aware of but never used
4: Aware of and used as needed.
To make the picture clearer, Category 3: Used more than once, has been omitted.

a. The University of Newcastle: In comparison with the corresponding results for persisting students from the Concluding Questionnaire (see 3.3.2.3, above), levels of awareness seem to be generally lower among non-persisting students in the case of all services except that of the Secretary's Office (Tables G1.26 – G1.49).[44] It is difficult to interpret the comparative results concerning the number of students aware of but never having used the services: the percentages are quite similar for most services, except Student Mentors and the Student Counsellor.

Only five non-persisting respondents made any use of Student Mentors, although all of these reported using them as needed; almost two thirds were aware of the service and did not use it. (Table G1.30).[45] Similarly, only four of the non-persisting students reported making use of the Student Counsellor, while 75.5% were aware of the service but did not make use of it. (Table G1.42). It is encouraging though that one fifth of respondents (22.2%) reported having used the services of the Program Coordinator as needed (Table G1.32), with most seeing the quality of the advice as satisfactory or excellent (Table G1.33).

The lack of recourse to the Student Counsellor by these non-persisting students is an important area of concern, given the high proportion reporting the impact on their decision to leave the program of the perception of lack of sufficient time and of the effects of disruptive life events on their studies. As students vary in their degree of resilience to such external shocks, it is primarily through the Student Counsellor that the program has a capacity to help with these problems, far more so than via the Program Coordinator.

b. University of New England: As at UoN, most of the UNE students who left the program either were not aware of the services or else were aware but never used them. Only four used Learning Support, although one of these used it only once. (See Tables G2.36 – G2.62.) Most relevant to the UNE students was the question concerning Distance Support, where the results concerning both awareness and usage were a concern: 60% of respondents were not aware of the service and only 20% used it as needed (Table G2.60; note that the number of respondents is low).

Conclusion: The picture that emerges is of under-awareness and under-use of available student support services by these students who did not persist in the programs. It was only possible to compare the results with persisting students in the case of UoN and here it is clear that non-persisting students were, in general, less aware of the services and made less use of them.

[44] Neglecting the case of Health Services where the results for both are very similar. Again, these conclusions must be treated with caution, especially as so many of the Exit Survey respondents left before program commencement or just after and hence had far less time in which to discover the information.
[45] Given that so few students used the Student Mentors, the question regarding the quality of the service is probably only answered accurately by the five students who made use of them, four of whom are probably the four students rating their performance as excellent (Table G1.31).

Awareness and use of student support services tends to be low across most levels of tertiary education. The 2009 pilot study (University of Newcastle, 2011) found that awareness of student support was actually greater among students in the university's enabling programs than it was in undergraduate programs but that exiting students made less use of it than their counterparts in undergraduate programs. The challenge with providing support services and encouraging use of them in an external program is always greater than for internal ones. However, if students are being offered an enabling program by that mode of delivery the responsibility is to meet this challenge.

3.3.3.6 Academic experience of the program: Student engagement

a. The University of Newcastle:

This section of the Questionnaire used the ACER (2008) engagement scale but the discussion here is based on the condensed student engagement scale as it is considered to provide a clearer picture of student engagement (see 3.3.2.1).[46]

The scale shows that those who exited the program did not engage in consultative behaviour, were very definitely not cooperative with their fellow students, and were not particularly well organised. In short, they were not engaged.

Table 3.18 shows descriptive statistics for each of the three factors used in the condensed engagement scale across the sample of 46 students returning Exit Surveys (with identification). The final variable Engagement is simply the sum of the three other variables divided by 3 for comparison purposes. This is considered to be a broad measure of engagement.[47]

Table 3.18
UoN: Exit Surveys student engagement descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Consultative	28	1.00	3.29	2.0459	.55404
Cooperative	31	1.00	3.33	1.7849	.70736
Organised	37	1.00	3.00	2.2568	.59654
Engagement	28	1.05	2.74	2.0113	.44218
Valid N (listwise)	28				

Cooperative activity in and out of class has been taken as an indicator of student engagement levels. In interpreting this result it needs to be remembered that a substantial number of OF students are attending evening classes (between 6 and 9 pm), where the priority tends to be more a matter of getting home to the family after a long day than it is engaging with fellow students (especially as any on-campus facilities for socialising are

[46] This scale is applied to the 49 Exit Surveys with identification to preserve comparability with the Q3 analysis. For detailed results for all 84 Exit Surveys (with and without identification), see Appendix G, Tables G1.51 – G1.70.

[47] It should be remembered that on a four-point scale (which was that used here) the mid-point of the scale is 2.5. That means that anything below 2.5 is below the mid-point and would, in broad terms, represent a negative result which is the case in each of the scales included, with the cooperative scale being as low as 1.78.

virtually non-existent at that time). One-sixth of Q2 respondents are external students. For both of these groups engaging with other students is notoriously difficult. The situation, however, is different for the remainder of the OF students, including the full-time Intensive OF and for Newstep students: while it is safe to conclude that a lack of cooperative activity with fellow students is an issue for UoN non-persisting students, the challenges are rather different for different cohorts.

b. University of New England: Students' engagement in their academic studies was low or very low, never or only sometimes cooperating with other students during or outside class, and never or only sometimes contacting or discussing their work with their teachers. (See Tables G2.65 – G2.84.) .[48]

The generally low levels of engagement of UNE students with the program and with their fellow students are consistent with the low levels of awareness and use of support systems seen above.

Discussion and conclusions: Overall levels of engagement are relatively low for both persisting (see 3.2.2.2) and non-persisting students, although the levels of engagement of non-persisting students are lower, suggesting that this may be associated with a greater likelihood of non-persistence. Thus measures to improve student engagement targeted at different student cohorts can potentially have a positive effect on student persistence.

Although the extra difficulties associated with external program delivery must be taken into account for those programs, again this is part of the responsibility associated with offering a program delivered in that mode and offers a focus for potential remediation.

3.3.3.7 Academic experience of the program: Other aspects

a. The University of Newcastle: Disturbingly, almost three-quarters of respondents (73.5%) reported that they never received prompt feedback on their assignments, or only sometimes (Table G1.66).

Almost half the respondents (46.2%) reported that they felt that other students were unfriendly or unsupportive (Table G1.71) with a slightly more positive result emerging for relationships with academic staff, with only 39.7% reporting they felt that academic staff were unfriendly or unsupportive (Table G1.72). Despite this result, almost three quarters of respondents (73.4%) rated the quality of academic advice received as either good or excellent, with only four students (6.7%) rating it as poor (Table G1.74).

When asked about the overall quality of their educational experience, very nearly two-thirds (66.1%) rated it as either good or excellent although another 33.9% rated it as poor or only fair (Table G1.75). When asked about attendance at an orientation session, 63.1% reported that they had attended (Table G1.76), which is an even better result when it is remembered that one sixth of Exit Survey respondents were external students for whom there was no orientation session specifically available. 46.3% rated it as very helpful with only one

[48] Due to the low numbers involved the revised student engagement scale has not been used.

student reporting it to be not at all helpful (Table G1.77). No students reported that there was no orientation session available, which indicates an excellent level of awareness of the opportunity (Table G1.76).

b. University of New England: Seven respondents (35%) said they never received prompt written or oral feedback on their work and another five (25%) reported receiving this only sometimes (Table G2.80).

Respondents mostly rated their relationship with other students, staff and administration as middling (Tables G2.85 – G2.88) although this is not unreasonable given it is an external program. In spite of this, respondents mostly rated the quality of academic advice they received as fair to good (Table G2.89) and their overall educational experience as good (Table G2.90)[49]

Discussion: The question of prompt feedback is, of course, a difficult one, as it is so much a matter of perception.[50] This is again an area where perception tends to become the relevant reality and the level of dissatisfaction indicates that, at the very least, the message as to when it is reasonable to expect to receive feedback is not being heard. In OF and Newstep, at least, getting students to collect marked assignments (including some students who make it through to the end of the program and are successful), in order to allow them to benefit from feedback on their performance is a continuing challenge. Large numbers of marked assignments remaining uncollected in the office at the end of the program (despite frequent reminders to collect marked work). Whether this is due to a fear of the possible criticism, a sense that it is better not to know bad news, simply because of a lack of experience in the processes of formal study or for some other reason, has never been clear, but it is obvious that it is an issue needing to be addressed.

However, the process of submission of an assessment task and receiving, and learning from, the formative feedback is so important to any educational experience, but particularly to preparatory programs such as these, that solving the problem must become a high priority.

Conclusion

In summary, it could be concluded from this questionnaire that students who dropped out of their programs did so for many and varied reasons, some of which were beyond the control of the institution. However they also reported that they were generally unable to manage their time effectively, that they were not aware of or made little or no use of the support services that were available, that they were not overly engaged in their studies and

[49] Only one respondent of the 20 attended an Orientation session, but did not find it very helpful; seven others said there was no orientation available, which indicates a problem in making the range of orientation activities available known to students, a problem which is, again, understandable in an externally delivered program but is also one in need of attention.

[50] An Open Foundation lecturer reported having received an enquiry emailed from a student late one Sunday afternoon, flagging it for action the next day and then opening her email Monday morning to discover a complaint from the same student regarding the lack of a reply: "prompt" can, indeed, be a matter of perception. Needless to say, in keeping with the great diversity of students in enabling programs, this is not a common occurrence – many students are indeed overly patient in the matter of receiving feedback on their work.

that they generally found their relationships with other students and with staff to be unfriendly and unsupportive. As well, a number of internal program issues emerged, such as the problem of lack of prompt feedback and, at UNE, the unanticipated level of difficulty of studying by distance.

A number of things stand out from the limited number of Exit Surveys we received.

1. There are a number of substantive stand-out reasons for students leaving their programs, including:

- The problem of fitting the whole process of study into available time
- A variety of life events, such as changes in employment, and personal and family health and emotional issues, all of which mature age students are particularly susceptible to
- A lack of engagement with the program, including staff and their fellow students in various ways
- For distance students, the mode of study itself can be a problem.

2. Many students leave their programs for reasons which are beyond the control of the program: life-events such as changes in employment, family responsibilities and so on. Nevertheless, many students suffer similar problems and yet still persist in the program. It is likely that many of the students who leave because of these issues could be helped to remain in the program with appropriate counselling and support. At the very least, if they are exposed to counselling before leaving, the experience of leaving can be seen as a positive, or at least neutral, move – a strategic withdrawal – rather than the negative "giving up" which many students perceive it as. This represents a two-fold challenge: to increase the levels of awareness of support services and to encourage students to take up the available support at substantially greater rates.

3. A substantial amount of attrition from these programs is made up of non-commencers, enrolling but never beginning the program, and uncertain engagers, many of whom leave in the early weeks, especially before Week 2.

4. A substantial amount of the student attrition rate in these programs is either positive or neutral attrition: students leave their programs for reasons which effectively mean that they have achieved the goals they entered with or changed them, rather than for some negative reason. It is important that this is recognised

The limitations of the information received from Exit Surveys must be kept in mind: the numbers were low, returns were received from only two institutions and the information given by students in such surveys cannot simply be seen as reflective of the reality in a simple way (see 2.2.3). Much more, and much deeper, information is needed here, especially to get at specific program-related issues which are perceived by students to be an impediment to their persistence.

Recommendations:

R2.1 That enabling programs investigate pre-enrolment processes to find the optimal mix

of information and experiences to best prepare students for what it means to study at university, especially with reference to the kind of time commitment involved.

R2.2 That enabling programs, where appropriate, increase provision of counselling services, with special reference to meeting the challenge of provision in an external program and for students attending lectures in the evening.

R2.3 That enabling programs investigate and develop processes to facilitate student access to existing counselling services.

3.4 Student approaches to learning: The Study Process Questionnaire

3.4.1 Student approaches to learning by age

The following section presents results for the Study Process Questionnaire from the Initial Questionnaire (administered in all institutions in Week 2 of the program), divided by institution and age groupings. Results are first given for the open entry model programs – UoN, UniSA, USQ and UNE – with those for the restricted entry model ECU following. (See Appendix H for the relevant data tables.)

In each institution it was observed that the youngest group (Group 1) was consistently higher than all other age groups in both surface motivation and strategies, while also being consistently lower in deep motives and generally lower in deep strategies. In other words, their aim is to complete the course with a minimum of effort and involvement. Given that this age group comprises such a large proportion of the sample, then this is of some concern. However, this result is probably not dissimilar from results that might be obtained from an undergraduate sample of the same age, and probably reflects a lack of maturity and a desire to get on with what are deemed by them to be the important aspects of living. (See Tables H1 and H2.)

The University of Newcastle: Another result worthy of comment is that in almost all instances and across the various age groups for the UoN group (Institution 2) motives and strategies were significantly inconsistent. This would suggest that generally, while motives may have been to avoid a surface approach and pursue a deep and achieving approach, the strategies that were nevertheless employed did not match these ideals. One exception to this pattern can be observed with the youngest group where they actually employed more effective achievement oriented strategies than they indicated were part of their motivation. Another exception to this pattern can be found in the oldest group (over 50) where there was a complete accord between their surface motives and strategies and an almost complete accord for their deep motives and strategies. In other words, they carried their motivation through into effective action.

The same pattern of inconsistency between motives and strategies was not apparent across the other institutions. While there was a significant difference between motives and strategies for the measures of a surface approach across the younger two groups, for UniSA and USQ, this discrepancy was not observed for the other paired variables (motives and strategies). This meant that, apart from the two younger groups (three for USQ), motives

and strategies across all the other age groups and for the other approaches were not significantly different.

University of New England: For UNE a slightly different pattern of responses was found. Students were divided by age groups, and differences between approaches to learning were examined. In general terms, as age increased students were found to be more deep and less surface in their overall approach to learning. Little difference was found in the achieving approach. However, the only significant differences were between both the under-20 and 20-30 age groups with those in the over-50 group, with the over-50 group being significantly ($p<.05$) more deep in their approach. (Tables H3 and H4.)

Where differences in motives and strategies were examined for each age-group, the patterns of inconsistency across most of the dimensions that were found for UoN were not repeated to the same extent. However, significant ($p<.05$) differences were found for the 31-40 age group across all three approaches, with motives being consistently higher than the strategies used. Some significant differences were observed across some of the approaches for some of the groups but there was no discernible pattern to these differences.

Edith Cowan University: Similar results emerged for ECU (Table H15). Disparities between deep and surface motives and strategies are significantly different for groups 1-3 (under 20, 21-30, 31-40), indicating that motives for deep and surface are lower than for the strategies that are employed. This is consistent across the other two age groups (41-50, over 50), even though the differences are not generally significant. Differences between the achieving motives and strategies are generally non-significant, although the direction of difference (strategies higher than motives) remains the same.

The youngest group are again lower in deep motives and strategies and higher in surface motives and strategies. There is not a consistent pattern of difference for achieving motives and strategies. (Tables H16 and H17.)

One possible explanation for these different patterns of results from UoN could be that students in the local Newcastle area have not been taught adequate study skills while at school. Given that each of the other four institutions is drawing from different populations, this difference, although potentially alarming, seems plausible.

3.4.2 Differences between persisting and non-persisting students

In the following section, differences in initial approaches to learning (SPQ) exhibited in the Initial Questionnaire between those who persisted and those who did not, are examined. Again, means and standard deviations for each group are shown first (Table H5), followed by the t-test results (Table H6).

In the 2009 pilot study at UoN it was found that the only significant difference between these two groups was in their level of achievement motivation, with the non-persisting students showing lower levels of motivation that those who completed the course (UoN 2011). The conclusion from this was that the students who failed to persist actually lacked a sense of application at the beginning of the course. However, a slightly different (and more

predictable) pattern emerged in this study.

When the overall pattern of deep, surface and achieving approaches to learning was considered it was found that there were no differences between the groups in their deep approach, but that the surface approach demonstrated a clear trend with those who withdrew being more likely to be using a surface approach. It was decided that this warranted further investigation. For the achieving approach there was a significant difference, with those who withdrew reporting lower levels of an achieving approach. This also warranted further investigation.

It should be remembered that the general approaches to learning consist of a combination of motivation and strategies for each of the three dimensions. As is noted above (3.4.1) in virtually all instances motives and strategies did not match, so that while deep and achieving motives may have been relatively high and surface motives may have been relatively low, the strategies that students employed did not match their motivation. Therefore, motives and strategies for each of the three dimensions were again examined for both the students who persisted and those who withdrew. (Tables H7 and H8 show means/SDs and t-test results respectively.)

As reported above, there were no differences observed between the two groups for either their deep motives or strategies. However, the non-persisting students reported higher levels of surface motivation than their counterparts. The strategies reported by both groups were not significantly different. A different pattern emerged for the achieving motives and strategies. The two groups did not vary significantly in their achievement motivation (as was observed in the trial study) but the non-persisting students reported lower levels of effective achievement strategies.

To summarise the results for UoN, those who did not persist were more surface motivated, wanting to get through the course with a minimum of effort, *and* were less effective at applying strategies that would make the work that they did effective. Either of these would seem to predict a low sense of engagement with study but when combined they are a lethal cocktail for effective learning.

There were no significant differences in initial approaches to learning between those students who persisted and those who did not for UNE (see Tables H9 and H10), UniSA (Table H11), USQ (Table H12) or Edith Cowan University (see Tables H13 and H14).

These results for all three of the other open entry participating institutions are somewhat surprising. The lack of significant differences was quite different from that observed for the UoN sample.

A possible explanation for this difference is that the other student populations are somehow different from that in Newcastle, in ways which have not been examined in this study. Certainly, it seems that the other institutions have more homogenous student populations than Newcastle, which appears to attract greater numbers as well as perhaps a much wider cross-section of the community. Or do other States teach their school students differently? These are all questions which require further examination.

3.4.3 SPQ: Differences over program (Q1 – Q3)

It had been originally hypothesised that exposure to the course and its program of study would change students' approaches to learning in what is generally believed to be a positive direction. That is, they would become more deep in their approach and less surface, while possibly also becoming more achieving. However, in the 2009 trial study (UoN 2011) it was found that the opposite had actually taken place: students had become more surface and less deep. Unfortunately this was also in line with previous findings that the longer students were exposed to tertiary education the more surface they became in their approach and less deep (Biggs 1986).

The current study, involving a dramatically larger sample, sought to determine whether this was still the case. It was also considered possible that the difference in the nature of the UoN OF program across the two semesters, with the semester 1 intake being part-time, full year and the semester 2 intake being an intensive half-year full-time course may have had an impact on the approach to learning. Certainly, there was a dramatic difference in effective attrition rates between the two semester groups with the Intensive OF group having an extremely low rate of attrition.

To test this hypothesis, SPQ responses from the Initial Questionnaire (Q1) were compared with those from the Concluding Questionnaire (Q3) for the same scale. Analyses were divided by program.

It was found that the same pattern of responses found in the pilot study was repeated in this study and that whether the students were part-time or full time made no difference. In both groups, students were found to be less deep ($p<.001$), more surface ($p<.001$) and less achieving ($p<.001$). The only area in which there was not a significant difference was found to be in their achieving motives and, again, this result was the same for both programs. In other words, their achieving motives remained the same but their achieving strategies altered so much that their overall achieving approach declined to a significant extent. (Tables H18 and H19 provide the details of these findings.)

The sample from ECU also did not follow the pattern evident in the UoN sample. In particular, motives did not alter significantly between early program (Q1) and late program (Q3). Deep and surface strategies (as opposed to motives) did decline significantly, although achieving strategies did not alter significantly. Consequently, only the deep approach declined significantly. This contrasts with the UoN sample where the surface approach increased significantly and the deep approach declined. This means that although students became less deeply involved in their learning, they did *not* adopt a surface approach and their desire to achieve remained relatively constant. In fact, their surface strategies actually declined. One can only surmise that the different entry criteria in operation at ECU were to some degree responsible for this result (Table H20 and H21).

3.4.4 Discussion and conclusions

The question must then be asked as to why these findings occurred. In short, it means that exposure to the traditional academic assessment system (examination based) encourages surface learning and discourages deep learning. If students are rewarded with good marks

for rote learning and reproducing the views of their lecturers, and conversely discouraged from original thinking promoted through wider reading, then the results found here are perfectly logical. Given Biggs' (1986) finding referred to above, a cynical view would be that, if the aim is to prepare these students for the rigours of academia, then the program has been eminently successful in this respect.

There are inevitably some disciplines in which original thinking and wider reading are actually rewarded. Where this is the case, students have to make a definite choice as to which approach they are going to follow. That choice is based upon their interpretation of what they are being asked to produce and, inevitably, their past experiences.

On one hand it would be unfair to students to attempt to change the focus of the OF program away from an exam-based, surface type of system, since this may have major repercussions for them when they confront the wider tertiary system. On the other hand, this may be to underestimate the ability of students to change their approach to learning within differing contexts. Just as children speak differently and behave differently at school and at home, and even within different classes at school, so can mature students respond to differing course requirements. The choice for an enabling program is to decide whether it wishes to encourage deeper, less surface learning by changing its assessment system, or whether the aim is to acculturate students into the broader tertiary system as it stands.

While these findings throw light on how well and meaningfully students learn, they do not reflect on the issue of attrition. Earlier findings (UoN 2011) concluded that those students who dropped out were significantly lower in their achieving motivation and higher in their surface motives at the outset of their course, than those who persisted. In both sets of findings it becomes clear that tuition in "how to learn" would probably have a beneficial impact on both the attrition rate and the quality of learning. However to have any impact on the quality of learning, changes need to be implemented in how students are assessed.

Recommendations:

R3.1 That enabling programs should undertake further investigation into the effect of learning approaches on attrition and undergraduate performance both within programs and across programs.

R3.2 That funding should be sought to investigate the particular challenges of teaching and learning for enabling students and to develop a range of appropriate enabling pedagogies.

3.5 Conclusion

A number of important features of student retention and attrition in enabling programs have emerged in the study:

1. High retention of actually commencing students

Those present/engaged in Week 2, that is students who actually commence the program, are retained at higher rates than appears from consideration of official attrition rates (based on enrolments at the HECS census date including students who have departed but not formally withdrawn) or of raw attrition rates (based on enrolments in Week 1 and including those students who never actually commence the program).

2. Minimal effects of demographic variables on persistence

Of those students returning the Initial Questionnaire, in the majority of the programs in our study there was no effect of any demographic or socio-economic variable on their likelihood of persistence or non-persistence, with the not surprising exception at some institutions of a positive effect of higher levels of prior educational achievement.

One aim of the study was to discover whether prominent features of student attrition in undergraduate programs are also characteristic of enabling programs, with interest being especially focussed on the factors of Low SES, time since last study, status of the student as being the first in their family to attend university and the prior educational level achieved by the student. The only one of these variables to present a significant effect on the enabling programs in the study is prior educational achievement, as noted above. At least for the programs in the study, the evidence suggests quite a different pattern of departure from that of undergraduate attrition.

3. In-program issues

The limited number of Exit Surveys from two institutions aided by analysis of patterns of persistence of students in the study, also allows us to draw some much less strongly established, but still indicative, conclusions which are consistent with the general experience of those working in enabling programs. The suggestions are that there are a number of issues that negatively impact students' likelihood of persisting:

a. The perception of lack of sufficient time (in the various ways that might mean)
b. A lack of awareness and/or accessing of student support services
c. Lack of engagement with other students and their program
d. Life events impacting negatively on their studies, which in many cases students are unable to cope with (likely to be exacerbated by the low levels of awareness and usage of available student support services)
e. Specific program-related issues, such as issues related to studying externally, and issues with assignments.

Both the limited number and range of Exit Surveys and the experience of program practitioners suggest that the first four of the above issues will appear in some form in virtually all enabling programs, especially in those which employ an open entry model. In addition to these general areas, each program will have specific issues of its own to respond to, especially those related to the program characteristics. For example, external or distance

programs (such as the UNE PEC) have the particular issues of engagement of students outside the face-to-face environment; programs offering evening classes (such as the UoN OF program) will face particular issues of student engagement in the sparser environment of the institution after normal teaching hours; open entry model programs will have issues of student diversity in entry level skills to cope with far more than programs adopting a restricted entry model.

There are important gaps in the information (especially from Exit Surveys) and there will be variations between programs, but there is evidence to support both some strategic targeting of measures to enhance student retention and the need for additional research to further inform the development of such strategies both generally and within individual programs/institutions.

A further aim of the study was to confirm or to discover variations from the findings of the 2009 pilot study at UoN, specifically with respect to the effect or lack of effect on student retention of perceived time pressures, the level of student engagement with the program and fellow students, awareness and use of student support services and learning approaches employed by students. The results above, in general, confirm those findings. (The effects of low initial student motivation were not explicitly investigated in this study but the findings on retention of those engaged by Week 2 support it.)

4. Surface learning approaches

There is some evidence that adopting and maintaining surface learning approaches may increase the likelihood of non-persistence. Non-persisting students at UoN were more surface motivated, wanting to get through the course with a minimum of effort, and were less effective at applying strategies that would make the work that they did effective. This pattern did not appear at the other institutions, however. The implications of this finding for enhancing retention are not at all clear.

5. Differences between enabling and undergraduate programs

In addition to the differences noted above, other important differences between enabling and undergraduate programs have also emerged in the discussion. These include the aims and the overall nature of the programs themselves and the characteristics of the resulting student cohort.

As noted, in Chapter 1, the widening access goal of enabling programs which results in the attempt to attract students who are not certain of their intentions, coupled with the lack of tuition fees means not only that many students leave the program as a result of “tasting” and discovering they do not actually like it that much, but also that they often do so without going through the process of formal withdrawal. Insofar as these students are correct in their judgement that university is not for them, this aspect of students' attrition is not only inevitable but positively desirable, in that it is “sorting” these students out of the system before they engage in an undergraduate degree program with the associated costs for both the student and the institution.

The results also point to some important features of students enrolling in enabling programs. The first of these is the great *diversity*, especially for the open entry programs, of the student cohort in terms of pedagogically salient variables. These include:

- the level of prior educational achievement, ranging from partial completion of secondary school only to post-secondary VET qualifications
- the amount of time since they last studied, from fewer than two years to more than ten
- their ages which, in other than the under 20 year programs, can range from 20 to the mid-70s
- the existence in one program (USQ) of a sizeable cohort of incarcerated students.

Undergraduate programs will rarely experience such a range of these student characteristics.[51] Nor does the student diversity stop there. Program experience, although we did not target this in the study, suggests an equal diversity is displayed across all student characteristics, including confidence levels, expectations (of university study and of possible career choices) and effectiveness of study habits, along with the variety of family and relationship situations and of life experiences (ranging from long-term unemployment to successful trades and, sometimes, white collar occupations) typical of mature age students.[52] The overall result is a very challenging pedagogical environment.

Not only do the results reveal this range of diversity but they also indicate that one of the extremes of this diversity represents a substantial level of "lack of preparedness" (Rose-Adams, 2012, p. 31). Students in enabling programs, by the very fact of their utilising this pathway, tend to have a generally less than successful educational history and, as a result, to be less well prepared for formal study. We can see this clearly in the proportions of students who enter the programs without having finished secondary school: between one fifth and a third of the open entry program students (completing Q1) contrasted with the mere 10% of those at ECU.

As a result of these differences, enabling students exhibit quite different patterns of departure from, and early engagement with, their programs from those of undergraduate students. These differences manifested in the study particularly in the pattern of early departure revealed in the retention rates of those engaged in Week 2, and the number of students never submitting any assessment work, as well as in UoN Exit Surveys. At the same time, those students who persist beyond Week 2 of the program exhibit a degree of diversity, underpinned by a substantial group manifesting a lack of preparedness for university study. This presents programs and, more immediately, lecturers and tutors within those programs, with a uniquely challenging pedagogical environment.

[51] Although with falling entry levels there is a tendency for them to be converging.

[52] Program experience suggests also that at least some enabling programs are being used as pathways to encourage people with a range of disabilities (mental, physical and emotional) to re-engage with the work force. Such is the concern in the OF program, for example, that a HEPPP project was mounted in 2012 to provide targeted support to students with disabilities entering the program (see 4.3.6).

Chapter 4. Enhancing student retention

Barry Hodges with Elizabeth Greenhalgh

Chapter 3 has presented the issues that emerge as important to consider in improving student retention rates in enabling programs. This chapter will offer some responses to those issues. The objective is not to attempt to provide a set of definitive answers to the many different issues concerning the complex problem of student retention faced by individual programs, but rather to:

a. Develop a substantial dataset for our colleagues in enabling education to draw on in the development of retention enhancement strategies in their programs and also on which to base further research, to extend and refine this information.

b. Provide an overview of the sorts of responses that enabling programs in Australia are making to these issues and to suggest some useful retention enhancement strategies along with some thoughts on how to relate the issue in enabling programs to the wider discussions based primarily on undergraduate students.

c. Facilitate a collaborative process to encourage further study and sharing of information and to contribute to the development of a Community of Practice on enhancing student retention in enabling programs.

To begin this process, this chapter will offer a discussion of responses to student attrition in enabling programs and a sampling of the most promising approaches to enhancing student retention currently being used in Australian enabling programs.

These strategies have been gathered from the experience of staff in the participating programs and/or via a series of regional workshops offered to date in Hobart, Launceston, Sydney, Newcastle, Perth and Brisbane, with a combined attendance of almost a hundred practitioners in enabling programs offered by the Universities of Tasmania, NSW, Western Sydney, Newcastle, Queensland, Southern Queensland and Griffith, Charles Sturt and Australian Catholic Universities, Edith Cowan University, the University of Technology, Sydney, Queensland University of Technology and a number of VET institutes.[53]

The workshops have served a dual purpose of dissemination of preliminary results and as consultations on retention practices. (Thanks are due to all those who participated in these workshops and contributed to the emerging collective awareness of the range of retention measures being undertaken in Australian enabling programs.) Further workshops are planned for University of the Sunshine Coast, Sippy Downs, Central Queensland University in June 2013 and for Sydney and Adelaide later in the year.

[53] A modified version of the workshop was presented at the 2012 FABENZ (Foundation and Bridging Educators NZ) Conference in Auckland, NZ.

We have argued that the processes underlying student attrition in enabling programs are different to those in undergraduate programs and hence the need is to develop specific retention enhancement strategies for enabling programs rather than simply to adopt those found in the undergraduate literature. This is not, however, to say that there are no processes in common or that there is no place for the sensitive adaptation or even, in cases where it is found to be appropriate, direct adoption of undergraduate retention strategies in addition to those which are particularly appropriate to enabling programs.

4.1 Introduction: The problem in context

4.1.1 The environment

Before looking at measures which can improve retention, a number of factors form the context in which these measures will be operating and within which they will need to be evaluated. These factors are discussed below.

a. Widening access: It is the purpose of an enabling program to encourage access to university study by non-traditional students and enabling programs should be mindful of any potential for retention enhancement strategies under consideration to interfere with this aim (see 1.2.1).

b. Limited resources: In a context of reduced funding for universities, enabling programs are always going to be competing for what are increasingly scarce resources, especially where they may not be seen as “core business” of a university.

As an example, the UoN Open Foundation program had for most of its existence since 1974 a staffing basis which was overwhelmingly sessional, with this category comprising up to 90% of its staff for much of this time. Between 2008 and 2010, when it was taking in around 2,000 students per year, it was staffed by 3.3 EFT supported by around 50-60 sessional lecturing staff. This situation began to change only in mid-2010 with the offering of nine full-time and fractional positions. This experience has not been atypical of other programs.

c. Diminishing returns: The law of diminishing returns applies to investment in retention as it does to any intervention in teaching and learning activities: there is a strong tendency for a small range of behaviours to be susceptible to relatively easy, cheap interventions which will produce a relatively high degree of improvement while, at the other extreme, to gain even a small degree of improvement will be very difficult and expensive. Some things are relatively amenable to a given investment of resources (time, energy, staff costs) while others are relatively resistant. (See Simpson, 2008 for further discussion of the concept.)

This is more understandable if we consider, for example, the difference between the effect of a lecturer showing a student how to get into the virtual learning environment (VLE) in a lecture on (a) a student who is worried but not fearful of the technology as opposed to (b) a student who is a complete technophobe. Or again, the ease with which a student with some relatively recent success in study who is feeling some concern about their first assignment might be reassured and retained in the program, as opposed to difficulties likely to be encountered doing the same with a student who has never had any real success in

education and has additional learning needs.

d. Program isolation: One of the things which has emerged in discussions in the regional workshops is the expression of a sense of isolation felt by those in enabling programs and the clear desire for sharing of ideas with colleagues in other programs. This is perhaps not too surprising in a field which is relatively immature and finding its collective identity, but the tendency is for those in each program, especially those in geographically more remote regions, to see it as being a factor for them alone.

There are clear manifestations of this need for contact and sharing. Despite the existence in Australia of programs of this type since 1974, the first ever Australian national conference devoted specifically to enabling education was held only as recently as 2003 (UoN, Newcastle) with another four years later in 2007 (UoN, Newcastle again), followed by others in 2009 (USQ, Toowoomba) and 2011 (UniSA, Adelaide) with a further conference in planning for 2013 (Australian Catholic University, Melbourne).

Until the Adelaide conference in 2011, these conferences were organised either entirely by the hosting organisation or, in more recent years, with the assistance of an informal association of some of the more experienced players from the larger programs (Seamus Fagan, UoN and David Bull, USQ deserve special mention).

The 2011 Adelaide conference (organised by Chris Klinger and Neil Murray) saw the beginnings of a national association, the National Association of Enabling Educators of Australia (NAEEA). It is expected that the establishment of this association will facilitate contact and collaboration between Australian enabling programs. Queensland has been leading the way in the development of networks between enabling programs, with the Queensland Enabling Programs Symposium having been held yearly since 2011 (hosted by University of the Sunshine Coast, Sippy Downs, with the 2012 symposium hosted by Bond University) and 2013 about to be held in Toowoomba, hosted by USQ). Attendance has been strong and the invitation to be involved is being extended to colleagues in other states.

It is crucial for the development of a national understanding of how to go about improving student retention in Australian enabling programs that this need for sharing information and experience is addressed. That has become a major focus in this project and potentially one of its most valuable outcomes.

e. Trade-offs

There are a number of important “trade-offs” between conflicting activities that have to be managed in the development and implementation of retention enhancement strategies.

The goal of **widening access** and **its link to attrition rates**: the more an enabling program eases up entry requirements, in order to facilitate entry for a wider range of potential students, the higher the base rate of attrition is likely to be. That is, the more a program is made welcoming and open, the more students who are not suited to or ready for university study, or who try the program and then decide that, after all, they are not really interested, will enrol in the program and the greater the number likely not to persist in the program will

be.

The overall higher rates of retention of those who are engaged in Week 2 (see 3.1) is probably a reflection of this trade-off, as is the overall difference in attrition rates between the four participating programs with open entry models and ECU with some entry requirements. It may be that enabling programs must be prepared for some base level of attrition as a consequence of the widening access aim, simply as a result of the curious and the newly aspirational "tasting" what is offered and then, in some cases, deciding it is not for them.

There is a trade-off between **retention strategies** and **other program activities**: in the context of limited resources, resources spent on retention enhancement strategies are not then available for servicing students who are, in fact, engaged in the program. Thus resources devoted to identifying, contacting and counselling students who are not fully engaged in the program in the early weeks will not be available for improving the teaching and learning environment for those students who are committed to the program. In many cases the same measures will improve both retention and the learning experience of all students but identifying these measures will require experience and good judgement.

Again, in the context of limited resources, there is a necessary trade-off between **different retention measures:** resources spent on targeting one group of students are not available to use on targeting others. Perhaps the clearest expression of this is the choice between focussing on non-commencers and early non-engagers: program resources devoted to identifying and facilitating the exit of those who never commence the program are not then available to identify and support those who become at least partially engaged in the program but then require further support to confirm that engagement. Clever design of support strategies can maximise the extent to which the two are addressed at the same time, but at some point they will come into conflict for staff time and other resources.

In the case of all these trade-offs, it is clearly important that each institution and program finds the appropriate balance that best serves the needs of its students and its region as well as any specific program-related retention issues that have been identified. This balancing will most successful when informed by the practice of other, comparable, programs.

4.1.2 General principles of retention in enabling programs

In the context of the above factors, a number of general principles should be borne in mind when designing and implementing strategies to enhance student retention in enabling programs. The principles as presented here represent a distillation of the extensive experience in enabling programs of the project partners, colleagues and those attending regional workshops previously detailed.

These principles are not proposed in any dogmatic fashion but are offered firstly, as an attempt to structure the process of designing and considering implementation of retention strategies, and, secondly, to stimulate discussion and act as a stimulus to continuing exploration of retention measures. None of them is likely to be surprising to experienced practitioners, being largely the articulation of common sense understandings, but it will be

useful to state them clearly as a preliminary to consideration of specific retention enhancement strategies.

1. Retention measures should foster the widening access strategy.

The obvious illustration of this principle is in the temptation to introduce academic entry requirements[54] in order to reduce attrition rates, an approach which it is likely to have the effect of restricting program entry to those who are both academically ready and relatively clear on their goal. The cost, however, is equally likely to be a reduction in the breadth of the targeted students likely to be attracted to the program as students with lower levels of prior educational achievement or, indeed, lower levels of confidence in their academic capacities (whatever the reality is for them) are less likely to apply.

This is not to say that academic entry requirements are a bad thing; only that they have a cost in relation to the potential students they are likely to discourage and such a cost must be balanced with the benefit of reduced attrition rates.

2. Retention measures should avoid adding to the student perception of time pressures.

It is clearly a feature of the student experience in enabling programs that there is a feeling of there being too much to learn in too short a time. This may be due to the steepness of the learning curve engendered by a low level of academic skills on entry, the challenges of adding the equivalent of a half-time job (or more) into the existing structure of their lives (most especially for mature age students), to a lack of skills in time management or, most likely, to some combination of all these factors. Given this perception, any attempt to add extra course modules to support students in persisting in the program has the potential to have the opposite effect, in further increasing the sense of time pressure felt by at least some students in the program.[55]

3. Retention measures should be strategically targeted

In designing measures to improve retention it is important to be clear just what the target is: in a context of limited resources which are subject to the kind of trade-offs noted above, it is inefficient to target the wrong things – things that cannot be affected, things that are beyond the economical limit or things that are only apparently a problem.

Recall the discussion in Section 3.1, above: focussing on the effective rate of attrition in a given program rather than the raw or the official rate, both the extent and the nature of the problem may look quite different. In the IOF program, with an effective rate of attrition of 4% there may be value in investing resources to improve retention during the course of the program after the first two weeks, but this will be only a relatively limited value. What is

[54] Or cognate requirements, such as proof of commitment via an entry hurdle such as an entry test or writing task.

[55] When tutorials were introduced for the first time into the Open Foundation program in 2008 as an addition to lectures in order to enhance the student learning experience, while most students responded highly positively when surveyed, a substantial number saw them negatively as a further demand on their scarce time, despite the tutorials being only fortnightly.

going to be far more important is to appropriately target the students who never actually commence the program, that is, identify the reasons that students enrol but do not ever actually begin, and to engage the uncertain engagers in those crucial first two weeks.

4. Retention measures should allow the maximum space for the exercise and development of student initiative.

It is a consequence of the variety of educational experience that students in enabling programs will manifest even greater diversity than is now experienced in undergraduate programs. This in turn means that they will differ substantially, and program experience bears this out, in their capacity to self-motivate and to organise their own pathways through the processes of formal education. Development of this capacity is also something that needs to be fostered, so it is important both for the student's positive experience of the program and the development of their sense of self-efficacy (Whannell et al., 2010) and for the efficient use of resources that any retention measures should, in the first instance, be accessible by the student individually as far as this is possible, with further intervention occurring only if it is necessary because of the failure of the self-instigated process.

There is a limit to how much students who are in need of help are likely to be able to self-instigate, so programs have to always be prepared to step in with a more active approach. Simpson, for example, suggests that "the most important [retention] activities will be proactive rather than reactive—that is the institution will need to initiate active individual contact with its students rather than provide services—however good—which require students to take the initiative" and that what we have here referred to as self-instigated activities do not promote retention as students who "need help the most are the least likely to seek it". (Simpson, 2005, p. 42, quoting Anderson, 2003.)

The caveat to this, especially when applied to attempts to achieve a positive exit for a student who may already have left or be about to do so, is that there are limits to the extent to which an enabling program should intrude into students' lives with direct program interventions. Too great an attempt to contact a student who is not responding risks intruding on not only the individual's autonomy but also his/her privacy. This may be a greater problem for younger students rather than older: Bowen, E., Price, T., Lloyd, S., & Thomas, S. (2005) showed that mature learners appreciated attendance monitoring, follow-up and interventions, because they did not know who to speak with when faced with problems, and it made them feel as though the university cared. [56] Again, we have here a trade-off which must be approached with sensitivity.

Note also the dangers of setting into play a self-fulfilling prophecy with the identification of a student as being "at risk" in some way, a problem which is particularly relevant to marginalised/disadvantaged groups. ("They think I am likely not to do well so there must be something wrong with me"). (See, for example, Jussim, L., & Harber, K. D. (2005).)

On the basis of the above principles, a three-stage filtering process is proposed:

[56] McGivney (2004) agrees that older adults appreciate being "chased" regarding their attendance (unlike younger ones who can perceive it as interference) and that follow-up regarding attendance is best when conducted promptly, and by telephone.

1. **Self-instigated** action: The program provides information and mechanisms to allow students to take the relevant action(s) themselves;
2. **Program invited** action: Where student self-instigated action does not occur, the program extends an invitation either to all students or specifically to students identified as at-risk, as appropriate, to participate in the relevant activity, along with provision of relevant information on the need and the available pathways;
3. **Program action**: Where neither of the above approaches succeeds, the program undertakes direct intervention in response to the needs of identified students, ranging from telephone or written contact and counselling, to action taken on behalf of the student, after appropriate checks, where this is the only remaining avenue of intervention.

In some cases, such as a continuing lack of engagement, almost by definition the self-instigation option will not be taken up and intervention would move to the second and third stages as necessary.

4.2 Broad approaches to enhancing retention

There are two broad approaches to developing measures to improve student retention which appear in discussions: prior identification of students deemed to be "at-risk" because of pre-identified demographic or other factors; and post facto in-program event-driven "red flags" which indicate a possible problem. Each has characteristic advantages and disadvantages and different levels of costs and benefits. A third approach is to embed aspects of pastoral care into programs but this has far less of a profile and it will not be considered in detail here.

4.2.1 Prior identification of "at-risk" students

Many of the retention measures in the undergraduate literature approach the problem via the identification of various student characteristics which have been found to be linked to increased likelihood of non-persistence: factors such as the student's prior educational level, low SES, status as first in family to attend university, etc. Resources are targeted appropriately, such as supplemental student support, to just those students. An outstanding example of this approach is due to John Wiley who proposes a comprehensive technology-driven student support for non-traditional students (Wiley, 2005a).

This approach has two significant advantages. It allows for the identification of individual students who are deemed to be at higher risk of not persisting before the program actually begins, thus allowing for relatively precise targeting for the retention measures and an efficient use of resources. And it enables support measures to be in place in *advance* of the need becoming apparent in the student's performance in the program, thus allowing for early intervention. (Early intervention can be a crucial point in a 12 week enabling program where the student is among the more challenged in terms of their program entry point.)

A major disadvantage is that it is relatively resource-intensive in the design and administration and rapid analysis of the student information prior to the beginning of

semester, a time which tends to be very busy, especially in enabling programs with queries from students not familiar with university procedures. This disadvantage becomes the greater as the potential usefulness of the approach increases with increases in the level of detailed information that is gathered to begin with. Wiley's approach, for example, uses comprehensive early interviews with all students: a strategy which has the immense advantages of personal contact and case-specific information but which is clearly highly resource-intensive.[57] It has a further disadvantage in that the use of a questionnaire (even more so, an interview, especially if this is for selected students on the basis of a preliminary questionnaire) opens the possibility of students becoming aware of their labelling of being "at-risk" with the associated dangers of this becoming a self-fulfilling prophecy (as noted above).

From the point of view of enabling programs, the approach will be most successful where the "at-risk" categories are valid predictors of non-persistence and also where the information about students' entry characteristics is most fully developed. There is a problem in the lack of connection between such demographic factors and the likelihood of non-persistence in the participating programs revealed by our study (with just a few exceptions). Where the approach is feasible for an enabling program which has identified such "at-risk" categories (perhaps for the level of the student's prior educational achievement and time since last study), whether the potential benefits of this approach outweigh the disadvantages will of course be a strategic decision properly made by individual programs.

A further problem for enabling programs is that the initial diagnostic questionnaire employed has the potential to itself become an entry hurdle, the more so the more comprehensive the information it garners, with the potential to discourage the very students who are most the target of the widening access goal. The possibility of a further personal interview is only likely to raise this potential discouragement for some students; for others, of course, it could have the potential to facilitate program engagement, allowing for a necessary first contact with support staff. Whatever the effects on attrition rates, it would suffer from the same difficulty as above, as potentially militating against the goal of widening access.[58]

4.2.2 Program event-driven "red flags"

The second general approach is a more targeted one not requiring prior identification of students on the basis of their entry characteristics. Rather, various aspects deemed to be crucial to the student's success are monitored in the early program stages with a "red flag" being raised in the event of one of the identified risk factors appearing. Such risk factors would include various indicators of non-engagement (such as non-attendance, lack of accessing of online resources or failure to complete a required early program task), of lack of academic skills revealed in an early assignment (such as literacy, language or numeracy

[57] A simpler version is available in the administration of a simpler questionnaire to all students, perhaps as part of the application form (which usually contain a number of basic demographic questions already as part of the program reporting requirements); the corresponding disadvantage arises because of another trade-off: the lower the level of information gained, the less precise can be the targeting of support measures.

[58] Such a check at the enrolment stage has the potential to be particularly discouraging in that it would be hard for the individual to see it as other than a confirmation of their incapacity to cope with the demands of higher education, a perception likely to reduce the potential of them trying again at some point.

deficits) or of time management capacities (such as being late submitting the first assignment without gaining an extension). Once such students have been identified, the follow-up process will be similar to the first approach, with the invitation to identified students to take up further support or skills development in the relevant area or, more direct program action to direct them into remediation activities.

The advantages and disadvantages tend to be the mirror-image of the first approach. The advantages include the more direct targeting of remediation measures and the corresponding saving of program resources, especially in the pre-program period, and the lack of pre-program entry hurdles. On the other hand, identification of such students is unlikely to be earlier than Week 3 (giving the student time to become accustomed to the program and then allowing time for marking of the first assignment) and the time available to help the student to make a difference is much less than if it were able to start from Week 1. Both approaches will also run into the reluctance displayed by many enabling students to take up available support, but the second perhaps less so, the referral to support services arising as it does from a clear and visible indicator.

A further, less easily delineated approach is also possible, in which resources for pastoral care are embedded in courses in a range of ways so as to have a high visibility, but with no attempt to target individual students. The purpose is to have easy access to support always close at hand. While this approach has the advantage of not requiring the identification of a student in need it does rely much more on the student instigating action to access the available support.

4.3 Enhancing student retention

4.3.1 The issues

Chapter 3 presented a number of focus areas of concern for retention of students in enabling programs:

1. Pre-program: Non-commencing students
2. Early- program: Uncertain engagers
3. In-program issues:
    a. The perception of lack of sufficient time (in the various ways that might mean)
    b. A lack of awareness and/or accessing of student support services
    c. Lack of engagement with other students and their program
    d. Life events impacting negatively on their studies, which in many cases students are unable to cope with (likely to be exacerbated by the low levels of awareness and usage of available student support services)
    e. Specific program-related issues, such as issues related to studying externally, issues with assignments and so on.

4. Surface learning approaches.

Retention enhancement strategies targeted at each of these areas will now be considered.

4.3.2 Non-commencers

We have seen that there is a group of students who never actually commences their program for good reasons, such as having achieved or changed their aims. Sometimes these students formally withdraw but, as we have seen, often they do not.

The needs of these students are clear: they do not need the program or any further close contact with it, but they do need a clear exit pathway available to them so that they can formalise their departure from the program and, sometimes, they will need a reminder to use it. Formalising their exit is important both for their own sakes – so they do not suffer a penalty from their enrolment by gaining a Fail grade on their student record[59] – and for the sake of the program, so that these students can be removed from the system before the HECS census date. In this way they are not incorrectly counted as being amongst the commencing students, thus inflating the apparent rate of attrition and, potentially, attracting resources to an unnecessary effort to re-engage them.[60]

In order to encourage self-instigated action, it is important both that the reason that formal withdrawal is useful to them is clear to them on enrolment, and that the procedure to do this is both clear and simple. Where they do not withdraw, this may be for the simple reason that they have moved on from the decision to enrol and simply do not see any further action as necessary. Clearly it is important for the information sent to students on acceptance to emphasise both the importance of this and the procedure to do it. But even where this is done, experience suggests that students frequently do not process and remember at the relevant time all the information sent to them.

Failing self-instigated action, these students must be *identified* so that they can be reminded and/or informed of the importance of formal withdrawal or, failing that, be formally withdrawn by program action. Clearly, formal withdrawal by program action cannot be done unless it is confirmed that the student has indeed left the program. A simple way to identify this group is to require of all students (with notification in the enrolment process) a *confirmation* of enrolment via a simple mechanism either in the week before the program begins (a reminder can be given in the Orientation session) or no later than in Week 1. This process should be simple, such as a single click on a prominently displayed button on the program VLE site or the requirement to participate in an opt-out online survey (see below, 4.3.3), in which failure to participate (either by a simple mouse click to opt out of the survey or by answering at least some of the questions) is evidence of non-engagement. (This approach has the further advantage that it is multipurpose; see 4.3.3, below.)

Those students who have moved on from the program will not provide this confirmation. Where follow-up contact through phone or post (up to a limit to be determined within the program) continues to fail to achieve contact, this will trigger program action to cancel the enrolment after a suitable warning interval.

[59] There are various mechanisms available to a program to prevent this but it is preferable to have the two goals achieved at the same time.

[60] Clarke et al. also point out a wider need to remove non-participating students before the HECS census date at the point at which they are attracting funding (2000, p. 234).

The benefit then is that these students can be provided an exit from the program with no institutional negative consequences and that the program develops a realistic number for the commencing students. The cost, however, is substantial: the follow-up to confirm the student's departure will be required before it would be fair to cancel a student's enrolment without explicit permission and all such follow-up is labour-intensive. This would be an appropriate task for a staff person dedicated to issues of student transition into and out of the program, as the work-load would be neatly split between the beginning and near the end of the program.

Those students who confirm their enrolment thereby engage with the program at a simple level; those who fail to do so have thereby identified themselves as non-commencers or as uncertain engagers. Attempts to communicate with them by normal program channels can determine which. If contact is achieved then confirmation of departure or (at least) the potential for re-engagement can be gained (see 4.3.3).

Recommendation:

R4.1 Enabling programs consider the appointment of a person devoted to developing and implementing systems for monitoring, reviewing and, where appropriate, contacting students in the period between enrolment and Week 3 of the program.

4.3.3 Uncertain engagers

There will doubtless be some overlap between this group and the first but the first step in each case will be the same: to identify and contact them in order to offer counselling, whether that be to provide an appropriate and accessible exit pathway for those who are clear on their next step, or to provide counselling and appropriate re-entry or exit pathways.

The need for these students is more complex: they are in need of help to sort out what it is they want to do now – to explore further, to be reassured, to be given learning or other support – and then with how to go about doing it. This requires not only identification and contact, but also sensitive counselling which may require specially trained staff.

Self-instigated action: Some of these students can be captured by the appropriate provision of counselling and support information and a clear and easily accessible access pathway, encouraging self-instigated action. For many early non-engagers, however, their uncertainty about engagement will extend to exactly these kinds of support.

Program invitations: For these students, program-initiated measures will be required. The first requirement is again identification of those who are not engaged in Weeks 1 and 2. Where attendance in a lecture in a compulsory core course is required and monitored (e.g. UoN Newstep) or participation in the online environment is required in an external program (e.g. UNE PEC), this is relatively simple. However, monitoring attendance is felt by some to be itself a barrier to engagement for some students, especially where they are carrying negative associations from their schooling experience.

Where attendance is not monitored and especially where no core courses exist,

identification of students who are not engaging at all or engaging only tentatively will be more difficult. These students may be identified by monitoring access to online learning resources (although some very engaged students can be leery of such systems, a problem in itself but one which would confuse the specific aims of this activity) or by means of an enrolment confirmation or online survey, as suggested above. An enrolment confirmation could also involve the offer of a range of activities to students for them to choose the one which most appeals to them.[61] These might include an online opt-out survey, accessing of a specified online document (monitored by automated statistics gathering), participation in an online learning activity or an on-campus social activity (such as a barbecue, film screening, meeting with past students, etc., with an RSVP to limit program costs) and so on.

The point of all these processes is to identify those who are not engaged at all in order to facilitate follow-up contact for facilitation of formal exit or counselling or other activity to facilitate re-engagement. They all have particular costs and benefits and will be suited in varying degrees to different enabling programs. Once identified, a range of measures is available to attempt to re-engage such students (see below).

Note that an online survey can serve multiple purposes: not only can it help to identify and hence facilitate contact with, non-commencing students and uncertain engagers, but it can actually serve to help uncertain engagers and others to engage with the program. This can occur through questions concerning such things as the ease and quality of the enrolment process and initial reactions to course choice. This can itself encourage reflection on the appropriateness of initial course choices with the possibility of change to something better fitted to student interests or capacities.[62]

Program action: For both the non-commencers and the uncertain engagers, it has been suggested[63] that an artificial "billing point" similar to the HECS census date could be established, although at an earlier program stage (e.g. end of Week 2) involving the payment on enrolment of a small "administration fee" (of the order, perhaps, of $50 - $75) which would be fully refundable after completion of some enrolment confirmation process (such as the opt-out survey). This would have the advantage of stimulating participation in the enrolment confirmation process.[64] The costs, however, would be substantial: it would represent a likely entry hurdle to the potential student (thus reducing the widening access potential of the program) and it would entail substantial administrative costs to the program (as well as possible legal and technical issues for the university), all of which would need to be carefully investigated before adopting such a measure.

ECU's UPC offers a prominent "thinking about withdrawal" button in the program VLE which activates a short survey and then connects them to student support for counselling on re-engagement or advice on formal withdrawal. In case of students slipping through the net, an

[61] UNSW Regional Workshop, November 2012.
[62] Note also the possibility of increasing engagement through an effect similar to the Hawthorne effect (see 3.1).
[63] A number of workshop participants suggested this, including both the UNSW and UoN Regional Workshops.
[64] The UoN experience of the lack of response to the prize draw offered for participation in the Exit Survey suggests that it would not necessarily be a sufficient stimulus, in which case it would represent a financial cost to the non-engaging student to add to a potential feeling of failure for not continuing with the commitment to the program.

SMS alert is sent to all UPC students one week before the Academic Penalty date to remind them of this penalty and the need to formally withdraw or have a fail recorded on their academic transcript.

The USQ TPP posts an individualised welcoming letter to all students at the start of the semester as a way of helping students to engage in the early weeks while UoN is in the process of appointing a student transition officer who will monitor student engagement in the early weeks of the program and offer options to students.

Having invited students in on the basis of trying university out to see if it is for them by providing an easy and accessible path *in*, programs have a corresponding responsibility to offer them just as easy and accessible a path *out* if they decide it is not for them. For a student simply to stop coming is a very easy path out but it has disadvantages for both the student and the program unless it can be set up in such a way as to allow official recognition.

Recommendation:

R4.2 Enabling programs make it a priority to develop and implement systems to monitor student engagement in the early weeks of programs and offer counselling and pathways to a formal withdrawal or a facilitated re-engagement.

4.3.4 In-program issues: Perceived lack of time

The prominent result that time pressures were the single most important factor in non-persistence at both institutions where Exit Surveys were received is important but must be treated with caution. What is perceived by the student as "having insufficient time" can be interpreted in a number of ways, none of them mutually exclusive:

a. An actual *lack of time*, itself due to some combination of at least two factors:

- external factors actually impinging on the time available to devote to their courses (family, work, etc.)
- the steepness of the learning curve arising from the student's relative "lack of preparedness" (Rose-Adams, 2012, p. 33).

b. Inadequate *time management* skills, where students are unable to deal with competing demands on what was intended to be study time due not so much to an absolute lack but to an incapacity to deal with the conflicting time demands of not only the preparation, study and assessment requirements of a number of different courses, but also arising from other aspects of their lives, which can be particularly severe in the case of the mature age students.

c. A *change in priorities*, where the initial priority given to undertaking study may be overtaken by other needs, especially where the initial commitment may have been weak or exploratory in nature. (Note the result for UoN above indicating that undertaking the program for reasons other than to gain entry to a higher education institution is associated with a greater likelihood of non-persistence.)

In the absence of further information it is not possible to know which of these interpretations apply to what proportion of the students especially as a clear division between any of these factors is hard to draw (and is likely to be for the student as well). This fact, as well as the salience of the *experience* of time pressure as a reported factor in non-persistence, strongly suggests that all of these possibilities be should be addressed by programs to enhance the chances of persistence.

Whether the experience of time pressure is due to an actual lack of time arising from a poor judgement as to the time commitment required or a lack of the skills to balance the new, competing demands on their time with other pressures, the issue derives largely from students' lack of experience in formal education, what Rose-Adams calls "lack of preparedness".

As was noted above (see 3.5), this descriptor is even more applicable to enabling students, especially those in open entry programs, than it is for the non-traditional students undergraduate students about whom it was constructed. The range of competencies and knowledge which is required for (restricted) entry to First Year undergraduate programs is relatively narrow when compared to the wide variations in terms of level of preparedness manifested by students on entry to enabling programs. For those at the lower end of the scale (however this is constructed), the learning curve involved to reach even the bottom of the range required for undergraduate entry is much steeper, involving much more work, than it is for those at the upper ends and these students are likely to experience "time pressures" in multiple ways. Preparedness would tend to be especially important where the student's prior level of academic achievement was low, as appeared as a significant factor in retention at UoN and UNE, and perhaps the length of time since last study (although this result was not widespread in the present study).[65]

In most cases, the perception of lack of time will be due to a combination of these factors, each of them more or less amenable to mitigation by the student or by the program. As the factors themselves will tend to multiply the effect on any individual student and the strategies to address them will also overlap, it will probably be more useful to offer a range of measures rather than attempting to devote program resources to identify individual factors more precisely (although this will be again a matter of program judgement). Such measures will involve a range of approaches, from teaching of time management skills to help with specific learning issues and, at times, counselling in the development of coping strategies. Similar considerations apply to the development of academic skills.

The teaching of time management skills is an obvious candidate for remediation and two approaches are possible: embedding of development of these skills into existing courses or the offering of optional extra skills classes; both have costs and benefits. The danger of

[65] So clear is the expectation that these factors will increase the steepness of the individual student's learning curve and hence their likelihood of non-persistence, that it was a surprise that the prior level of education, in particular, did not figure more prominently in the results. It suggests that the steepness of the learning curve itself is less important than the student reaction to this challenge, a reaction which will depend on multiple other factors. It will be a matter of individual program judgement to what extent it might, nonetheless, want to devote resources to attempting to address this potential issue.

"stand-alone" optional units, at least for undergraduate students, is pointed to by Wingate, suggesting that they tend to be remedial rather than inclusive and divorced from subject knowledge. Integration of study skills with subject content has been found to be more effective and beneficial for students' learning (Wingate, 2006). To what extent this is true of enabling students is a further question, but integration of study skills certainly has the benefit that it avoids the (oft-reported) student reaction that they do not have the time to attend further classes. On the other hand it has the corresponding disadvantage that students who do manage their time well will find the concentration on them to be boring, and hence tend towards *disengagement*. A further issue is that teaching of such skills, especially in a context of resistance by some students, can be beyond the skills of many of those who normally teach into disciplinary content courses.

It is a question, then, whether self-instigated action is appropriate here or whether program invitation or direct program action triggered by event-driven "red flags" (such as late submission of an assignment without an extension) are worth investing in as well. Both these approaches are in use in Australian enabling programs.

One flexible response would be to introduce a two-tiered sequential system, with students who are feeling time pressures, or exhibiting signs of not coping well with time management, in the early stages of the program guided into assessable course modules concentrating on academic and/or time management skills (as appropriate) while those who are not challenged in this way are offered course modules focussing on advanced disciplinary work, with work in both strands providing an equivalent contribution to final grades.

Recommendation:

R4.3 Enabling programs investigate the manifestations of "time pressure" on their students and develop flexible curriculum and course design responses to mitigate this source of attrition.

4.3.5 In-program issues: Student engagement

Student engagement is a complex issue but it has been noted that lower levels of engagement with both the program (as manifested in such things as contact with academics, the asking of questions in class or online tutorials, and so on) and with fellow students (as manifested in socialising and collaboration and discussion of work) may be a contributor to non-persistence. Increased contact with academics can help to promote the feeling of belonging and of the legitimacy of students' concerns; contact with fellow students allows them to support one another and share concerns, as well as building positive relationships. The range of dimensions to student engagement is great, including at least pedagogical elements such as encouragement of questioning behaviour, teaching and learning styles, facilitation of cooperative student work both in class and without, facilitation of access to academic staff, and so on, social interaction and a welcoming and supportive administrative and physical environment.

The undergraduate literature is rich in discussions of student engagement (see section 1.4).

The quite different nature of undergraduate and enabling programs again means that this literature cannot simply be taken over, although much of it will be directly applicable and much will be adaptable. The discussion here can only touch the surface.

One set of strategies to promote this kind of engagement is centred around student social activities, especially where these can occur in dedicated spaces in which students can congregate and socialise. Research at UQ showed that students who used specially designed, informal learning spaces demonstrated higher levels of engagement than those students who did not, though, this may not be a causal relationship, as many other variables could be involved (Matthews, Adams, & Gannaway, 2009). It is hard to see how the needs of enabling students would be very different from those of undergraduates in this way, except perhaps to be more in need of engagement, with an increased likelihood of feeling that they are not "real" university students (a possible negative effect of the lack of entry requirements). That this can be applicable to enabling students is demonstrated by the experience of USQ, in the offering of morning and afternoon teas to internal students, at which students have opportunities to mingle with other students and relevant staff members. This is designed not only to improve the opportunities for social interaction with other students but also to improve ease of access to staff by familiarisation.

Long- and medium-term rewards that accompany successful university activity (e.g. completion on time of assessment tasks with satisfactory feedback culminating in the successful completion of the program and gaining of access to an undergraduate degree program) may not be sufficient to maintain students' engagement and perseverance in an enabling program, especially given the lack of successful and/or recent educational experience of many enabling students.

More immediate short-term rewards may improve retention through providing students with an opportunity to monitor their progress and receive positive feedback throughout the course of each teaching period, rather than principally at the end of the period. This aims to increase students' sense of self-efficacy, confidence and pride in their work, as suggested by goal substitution theory (Garland & Conlon, 1998), where students replace long-term goals with weekly, manageable goals related to learning tasks. Goal substitution theory posits that, as a project progresses (or in this case, a unit of study), completion becomes more important than goals that may have been initially salient. Completing a task that one has begun can substitute for a more distant, less controllable outcome, which may have been originally desired (Garland & Conlon, 1998).

Learners' self-observation of their own performance, coupled with self-evaluation, can lead to increased self-efficacy and capacity for goal-setting (Schunk, 1990). When students feel they are satisfactorily progressing toward their goals, their sense of competence increases. Goal attainment and high self-efficacy are important for students to set new, challenging goals for themselves. Again, this work is based on studies of undergraduate students, but it offers possibilities for enabling students, especially when integrated within a unit (on time management and/or strategies of independent learning, for example).

A creative idea to help students to monitor their own engagement levels[66] is based on work by Schunk suggesting that learners' self-observation of their own performance, coupled with self-evaluation, can lead to increased self-efficacy and capacities in goal setting (Schunk, 1990). When students feel they are satisfactorily progressing toward their goals, their sense of competence increases. When students take responsibility for creating rules for monitoring their own engagement, they experience an increased sense of involvement and are better able to respond when a "red flag" event occurs (a self-identified behaviour that may indicate challenges in continuing with a course). In this approach, students begin (facilitated by instructors) by deciding upon the behaviours they would like monitored by a piece of software (for example, how many times they would like to log-on per week). These rules are then implemented in the program VLE student performance analytics' module. When their rules are not abided by (i.e. when the analytics' conditions are met) a predetermined action is generated, such as sending an email (which might even have been written by the student themselves, allowing no doubt for some creative encouragement). Students' expectations of themselves are made explicit and they are more likely to "own" the resulting warnings.

Engaging students can be particularly challenging in an externally delivered course. The UoN OF by Distance program introduced a pre-program engagement process ("Week Zero") in which distance students are asked to complete one simple task online each day for one week prior to commencement in order to connect with them and identify those not engaging for follow-up contact and counselling. The initiative was spectacularly successful in its first year of operation, with 94% of commencing students accessing the VLE by the end of Week Zero 2012, compared to an initial access rate of only 60% at the end of Week 2, 2011 and an increase in the retention rate in 2012 to 50% from only 30% in 2011.

CQU has found that increasing levels of online interaction and providing opportunities for students to socialise, discuss course content and provide feedback can significantly affect student retention with undergraduate distance learners, suggesting that social interaction may be crucial in encouraging persistence. Students reported that prompt feedback and responses from their lecturer and other students, emails, and time-limited lecture postings helped them to stay focused. While this level of interaction is resource-intensive, it is the sort of approach which should be effective in engaging enabling distance learners (Gallie, 2005). USQ's long-running TPP employs a range of such approaches to engage external students including provision of active, supportive discussion forums online (including separate forums for discussion of individual assessment items), live online interactive sessions and formative online quizzes.

4.3.6 In-program issues: Awareness and use of support services

The problem here is two-fold, as we saw in Chapter 3: assuming that adequate support services are in place, we are then faced with the dual challenges of developing student awareness of their availability and then encouraging take-up of the services, in the context of traditionally low rates of usage.

As noted in Chapter 1, results of the UoN pilot study in 2009 showed that students who

[66] UTAS Regional Workshop, November 2012. (Not implemented to date.)

dropped out were either not aware of the available support services, or had not made use of them. Students tend to expect adequate support services, but not necessarily appreciate them. In other words, even students who have benefited from support services tend to attribute their success to intrinsic factors, but students also notice the absence of adequate services, thus they have an indirect effect on student motivation. Regardless of these attributions, evidence-based support services contribute positively and meaningfully to retention (Nichols, 2010).

Simply providing information at orientation sessions and the like seems unlikely to be an effective strategy, with the fear being that students are over-loaded with information at this time and are not retaining it well. Comprehensive orientation and advisement, combined with redundant communication to students, have been shown to improve retention rates and persistence in undergraduate distance learners. This advisement and communication included an online orientation of around 10 minutes that showed students what to expect from their course, followed by a review quiz. Rather than receiving all course materials in one pack at the start of the teaching period, shorter, weekly emails regarding a single topic were sent to students. Each student also received a phone call from the university a few days prior to commencement, to establish personal contact and reiterate support services available (Clay, Rowland, & Packard, 2008). Such an approach could also be useful to enabling students and internal students generally.

Where self-instigated usage of support services is low, providing individualised and pro-active contact and support may have a powerful effect on student retention, albeit at a relatively high cost in terms of staff time. Case and Elliott (1997, again based on undergraduate students) found that increasing proactive contacts with students is likely to improve retention, with an optimal number of contacts ranging from two to five. The costs and benefits of this approach, and the point at which there is a diminishing return, requires further research (Simpson, 2008) as does the extent to which the result can be generalised to enabling students, although the remarks above (section 4.1.2) concerning the openness of mature age students to program contact offer hope.

A promising approach which has achieved very good results in improving take-up levels at UoN (both OF and Newstep) is the embedding of student support services within the program. The experience was that take-up of both language and learning support and counselling services was very low when these were offered through the same systems as they were to undergraduate students (including the booking process and the location of the service).[67]

Over a period of three years, beginning in 2008, staff dedicated to the university's enabling programs were appointed to these positions. Staff were located within the area where other enabling program services were located (including the program coordinator, administrative office, assessment drop-off boxes) and near at hand to venues which were much used by classes in the programs, accessed through a dedicated booking process designed to provide

[67] Newstep has a core course in academic skills but OF does not, with skills development integrated into disciplinary courses. Classes in essay-writing skills offered (mainly for OF students) through a casual lecturer struggled to achieve substantial levels of take-up despite the clear needs revealed in assessment work, with less than 0.3% of students appearing at the first and attendance falling off rapidly thereafter.

fast response times. Take-up was, again, low at first, but staff engaged in a process of close contact and liaison with course coordinators and individual lecturers, including visiting lecturers, placing material on the student VLE (including clearly useful resources tailored to discipline needs), providing in-lecture "tasters" of the services that are offered,[68] offering email support (in the case of academic skills) and providing (for Newstep students) a specialised extra non-optional tutorial for students identified through poor assessment results. The result has been a spectacular increase in student take-up of support in all three service areas beginning from very low levels to the point that resources are now being stretched: the Literacy Learning Development Advisor, for example, at first very much under-utilised, experienced an increase in take-up of 29% in the period 2009-11 with continued growth since.

This model aims at student-instigated action as far as possible, especially in OF, with awareness of the services being raised through multiple pathways (timely visits to lectures and posts to the VLE, including a simplified system for online contact), although with a greater focus on program invitation where in-program "red flags" are noted (e.g. poor or late assessments) with Course Coordinators referring students to support services.

UTAS, too, includes a high level of embedded support in its enabling programs, including a core Supportive Study unit which encourages students to develop peer support networks and study groups.

An additional strategy for increasing and embedding support within programs is the use of student mentors. A mentor is a more experienced person providing guidance, support and information to a less-experienced person, with the aim of fostering growth and success (Russell & Adams, 1997).

Results regarding the effectiveness of the use of student mentors are fairly limited and mixed, even in the undergraduate context, but several studies have shown that student mentors can achieve at least initial gains in retention (Campbell & Campbell, 1997, 2007).[69] In the context of enabling programs, the best such mentors are past students in the enabling program, who have "been there, done that", especially where they have completed the program successfully and are now enrolled in an undergraduate program. They are able to talk to current students from the perspective of personal experience and, more importantly, they represent the clear possibility of success for someone who was often faced with difficulties similar to those of the student seeking support.

Peer mentoring programs have shown a lack of effectiveness in improving retention where mentors are not well-trained (Jamelske, 2009) and this points to the resource-intensive nature of a student mentoring program: recruiting, training and connecting to the need are all costly in time and other resources. This is particularly noteworthy given the results in the current study suggesting that student mentors have not had a high level of usage despite

[68] This process has now developed to the point that the Literacy Learning Advisor will visit individual lectures at a strategically chosen time in relation to an upcoming assignment and deliver a presentation of essay-writing skills tailored to not only the discipline but also to the individual assignment.

[69] As well as in academic performance. They also report that these effects can dissipate by graduation but this is less likely to be an issue in the shorter time-frame of an enabling program.

most students reporting being aware of their availability (section 3.3.2.3). This suggests that if student mentors are to be employed, the program must be properly prepared and well resourced and a high priority must be given to facilitating take-up.

The ECU UPC has adopted a variant of the student mentors, in which former UPC students are attached to individual tutorials in order to provide informal support to groups or individual students. In the early program stages this support is focussed on getting a "feel" for university life while later the focus is on assessment related issues.[70]

UPC also employs an event-driven "red flag" approach it calls "Flag and follow", in which both attendance and submission of assignments are monitored, with program-initiated contact by the program Pathway Advisor in Week 3 (attendance) and Week 5 (attendance and no submission of assessments) for a support chat and to inform them about the formal program withdrawal process. (For some students further assignments are monitored with appropriate follow-up.) The USQ TPP utilises past students in a regular informal weekly voluntary drop-in session known as "Meet Up" facilitated by undergraduate students who recently successfully completed the TPP.

Approaches are many, but the key to all is identifying the student in need and then finding out more about what is needed; the initial contact, whether student- or program-initiated, is crucial. In smaller programs, with their greater opportunities for personal contact, this may be more easily achieved than in larger programs; larger programs will need to be creative in develop a multiplicity of approaches to allow the best chance of making that contact.

4.3.7 In-program issues: Coping with negative life events

The evidence is that students from non-traditional backgrounds are more likely to leave undergraduate programs early, in part due to pressures from life events (e.g. Rose-Adams, 2012). Similarly, mature age learners' ability to complete undergraduate qualifications can be particularly affected by a range of factors, including external restraints and commitments. it is clear from the results presented in Chapter 3 that the negative impact on their studies of a range of life-events, especially those to which mature age students are particularly exposed, figures largely in the reasons given for non-persistence in participating enabling programs.

Students who are engaged in the program and coping with the pressures of work and time management, not necessarily easily, but nonetheless coping, but who then suffer from some external shock or problem may find that this extra pressure makes the coping process too difficult emotionally or in terms of a real lack of time. Substantial illness of self or family members, children suffering from depression or mental illness, drug issues, in trouble with the police, and marital or partnership breakdown[71] – these are the sorts of life events that

[70] This is an example of the emerging approach of embedding pastoral support into central program activities.
[71] A substantial minority of these issues could be termed the "Educating Rita" syndrome: one partner, usually the male, being threatened by the new interests, capacities and confidence of the other and exerting pressure for things to return to "normal". At its most extreme this will include incidents of domestic violence but it is expressed more often in some variant of "You are neglecting the children and your duty to keep them (and me) fed and well looked after." More widely, the dramatic changes in culture, broadly interpreted, that arise

are all too common in the stories of enabling students and are reflected in the Exit Surveys" reporting of issues of employment, health and relationship issues.

Although external pressures cannot be removed, a range of strategies has been identified that are particularly helpful to adult learners in undergraduate programs. As previously noted, compared with younger students, older adults appreciate being "chased" regarding their engagement, perceiving it as evidence that their lecturers are concerned for them. Procedures for identifying and following-up absentee or under-performing students have been found to increase retention rates in undergraduate programs (McGivney, 2004) and there is every reason to expect this to apply even more strongly to (at least) mature age enabling programs and cohorts within mixed age programs.

Further, when faced with a negative life-event, the importance of self-efficacy and coping skills for retention are particularly apparent. Self-efficacy is a crucial factor in coping with unexpected hurdles (Devonport & Lane, 2006) as well as being a strong predictor of non-persistence in undergraduate programs, though this project's results have not explored this specifically.[72] Strategies such as those outlined above in 4.3.5 can be implemented to increase students' self-efficacy and coping skills (Schunk, 1990), in turn helping to prepare them for life events that may otherwise lead to their attrition.

The study also identified a number of specific program-related issues. The range of such issues is great, as experienced practitioners are only too aware, and too wide-ranging for it to be useful to canvas them here. (See www.enablingretention.org.au for specific measures in use or being considered for use by programs.)

4.3.8 Student learning approaches

As indicated briefly in the discussion in Chapter 3 (section 3.4), this is a very complex issue. While almost all practitioners in enabling programs see an important aim being to develop a capacity for independent learning and to foster the capacity for life-long learning, this is not in itself a simple thing to help a student cohort to develop. UoN OF, for example, has a commitment to "independent learning" but it is not a focus of professional development and tends to be left largely in the hands of individual lecturers. The results suggest that this is not an effective strategy, however (see 3.4). If, as seems to be the case, there is some impact on the chances of persistence, the need to address student learning approaches becomes more urgent.

The USQ TPP has made this a more direct focus, with the Inclusion of more "accommodative learning" strategies (Bedford, 2011) in the learning materials, to assist students to transform their "meaning scheme" (Mezirow (1997) regarding their concept of learning from one of memorising specific information presented in the learning materials to one of engagement in critical reflective thought about the information presented, that is, from a surface to a deep learning strategy. Unfortunately, it is not possible to see the results of this initiative

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from engagement with academic study, especially in the humanities, can often lead to conflict with established values and attitudes and result in a pressure to return to familiar friends and interests which is opposed to continuing in the enabling program.

[72] See Bedford, 2009.

due to the lack of Concluding Questionnaires received from this group.

When the great diversity of the entry level of skills etc. of enabling students is taken into account, such approaches, unless undertaken with great skill, have the potential to split the group into two: to engage the more capable but to terrify and, worse (in terms of the results of the present study) to increase at least the perception of (and possibly the reality of) the time pressures faced by the less capable students with a consequent risk of increased drop-out. This means that to address this issue properly, so as to avoid this result, would potentially require a substantial increase in staff pedagogical skills with the associated costs of professional development and resources.

The benefits of moving to address perceived deficiencies in student learning approaches are less clear, however: given the finding that the longer students are in a tertiary institution the more surface their learning approaches become (Biggs, 1986). It could be argued that allowing students to remain as surface learners is, in fact, to prepare them very well indeed for the learning environment they will encounter in undergraduate study (which is, of course, the point of an enabling program).

This issue is one which not only requires more research before it can be sensibly addressed, it also requires the development of a specifically enabling pedagogy, which is something to be endorsed whole-heartedly. Consequently the issue is raised for further thought, research and action but will not be further pursued here.

4.4 Effectiveness of retention enhancement strategies

Despite the extensive literature on student retention in undergraduate programs, the consideration of best practice is still relatively rudimentary and substantially subjective rather than being based on well-developed quantitative studies. This is somewhat surprising given the emphasis placed on the issue over the last 15 years but perhaps less so when the complexity of the phenomenon is considered, and the difficulties of separating out the improvement due to the implementation of any given suite of retention strategies from the background variables which affect student retention. These include the academic prestige of the institution, the level of its entry requirements, its age and location (metropolitan, provincial or regional), the general economic climate, and so on.[73]

In the far less well developed field of enabling education, this is even more the case. As has been seen, the extensive differences between enabling and undergraduate programs mean that to a very large extent those involved in enabling programs will have to develop their own understanding of best practice in student retention. This will of course be informed by the undergraduate literature, without being constrained by it.

As a preliminary to this process, a consultation process with other Australian enabling programs has been combined with dissemination activities in reporting this project's preliminary findings in a series of (ongoing) regional workshops in which in use and potential

[73] Although based on studies of undergraduate programs, the following may be of use in exploring this issue further: Ashby, 2004; Grant and Thornton, 2007; Tresman, 2000; Yorke and Thomas, 2003.

retention enhancement strategies were discussed and program experience shared. The intention is to continue this process through further regional workshops and by means of the posting of retention enhancement strategies to the project's website in the hope that others will continue to offer the fruits of their experience for sharing with the wider enabling community.

There is some evidence to suggest that some of these strategies are having effects on improving retention. In the UoN programs, for example, over the last five years a number of measures have been implemented, the more interesting of which are the embedding of support services and the OF by Distance "Week Zero" student engagement process (see above).

The official attrition rate as measured by university statistics is showing a steady trend downwards over the past six years. (See Table 4.1; Figure 4.1.)

Table 4.1
UoN: Average attrition rates Open Foundation and Newstep 2007-12

	2007	2008	2009	2010	2011	2012	Average
Part-time OF	58%	56%	48%	53%	42%	51%	49%
Intensive OF	46%	43%	40%	42%	35%	44%	40%
Newstep	44%	38%	38%	40%	38%	39%	39%

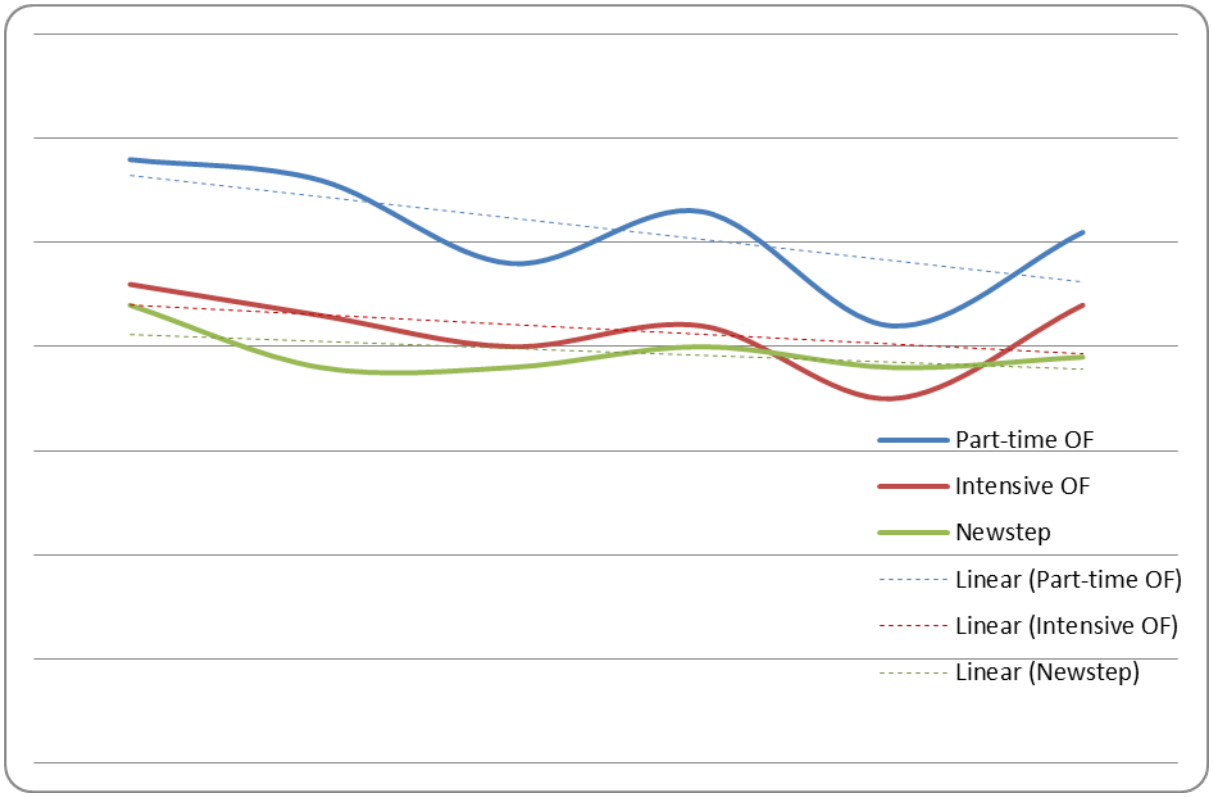

Figure 4.1
UoN: Trends in attrition rates Open Foundation and Newstep 2007-12

As indicated above, it is very difficult to pin this down to any set of retention enhancement strategies or, indeed, to be confident that these have contributed for the reasons noted above. It is certainly the hope of those involved that there is a causal relationship here and efforts continue to retain the downward trend in attrition. This will be difficult to do unless enabling programs have relevant, reliable and comparable information as to what their effective rates of student attrition actually are.

Recommendation:

R4.4 That the five participating institutions facilitate the development of appropriate benchmarking of student retention in their programs with the aim of extending it to other enabling programs as appropriate.

4.5 Conclusion: The way ahead

It is clear from the above that there are a range of retention enhancement strategies already being used in Australian enabling programs, largely as a result of distilled program experience which, especially in the older of these programs, is both extensive and comprehensive. There is some evidence that these are having effects on student attrition in these programs which, as we have seen, are different in substantive ways from undergraduate programs.

It is also clear from the results presented here that this difference must be kept firmly in mind in any attempts to improve retention rates or there is a risk of wasting resources on inappropriately targeted retention enhancement strategies. This is not to say that there is nothing to be learned from the lessons of undergraduate attrition but it is to say that these lessons must be the right ones and the learning must be in a way which is appropriate to the circumstances and needs of enabling programs.

The above discussion, along with the findings presented in Chapter 3, suggests that, for a given level of resourcing, there are two lower limits on the extent to which student attrition in enabling programs can be reduced:

a. The inevitable and indeed desirable aspects of this attrition.

When students who are not suited to tertiary study, or are not sufficiently motivated to take the attempt to study at tertiary level sufficiently seriously, are enabled to discover this and so move on to a different path, this is, indeed, attrition, but it must be seen as a *desirable* aspect of it: the enabling program is here enacting a sorting function for the higher education institution, with its greater level of necessary commitment and costs. Where the student has achieved the goal of enrolment without the need to continue with the program, this is, again, attrition, but it is *positive* attrition (see 1.3.1). Where students who may still be interested in trying tertiary study at some future point have found a change in their immediate priorities and moved on, for the time being at least, this is *neutral* attrition (see 3.3.3).

No program will be able to affect these aspects of student attrition, nor should they try to: the program's responsibility for these groups, indeed, is to facilitate their exit and so help them on to the next stage of their life's journey.

b. The lower limit introduced by diminishing returns.

These two limitations together will result in a rate of attrition which is "natural" to enabling programs in general as well as to any individual program, as they do in corresponding ways for any educational program. Just what this natural rate of attrition will be is entirely unclear at this point and attempting to discover it is beyond the scope of this project.[74]

To what extent any individual enabling program will be able to approach these theoretical limits in improvement of retention rates will, of course, depend on the level skill, sensitivity and commitment – as well as resourcing – with which it approaches the *remainder* of the problem: the elements of student early departure which are open to program remediation. This includes the students who depart because of a failure to properly service them before the program begins, those who are afraid to engage in the early stages and need gentle encouragement, those who are failed by social relationships or pedagogies which do not engage them or, in other cases, terrify them and fail to nurture a frail self-confidence, those who are put off by the fear of an upcoming assignment or the depression caused by poor performance in it, those who encounter a life-event which disrupts their perhaps already fragile attempts to cope with a steep learning curve ... and so on, in all the ways that students "can't cope", many of which were encountered in our discussion of Exit Surveys and are so often encountered in attempts to counsel and help students in programs. It is these students and these problems that are open to remediation and it is to these students that responsibility is owed.

A range of examples of strategies which seem to exemplify best practice have been presented, based on the practical wisdom of experienced practitioners in enabling programs. Discussion has been presented in which the lessons of undergraduate attrition might be learned and retention enhancement strategies adapted or, perhaps in some cases, directly adopted.

However, in order to further develop the capacities to improve the student experience, there is a need collectively to add to this experience and, further, to develop a more sophisticated understanding of what constitutes best practice in student retention in enabling programs. It is to be hoped that this project can facilitate this process and that the embryonic community of practice which has begun to emerge in Australian enabling programs – partly as a result of regional workshops and partly as a result of other trends such as the emergence and consolidation of the Queensland symposium of enabling educators – will continue to develop. The project website will be maintained for at least the next three years to serve as a focus for this process.[75]

In order to maximise the capacity of programs to respond to the challenges of student

[74] Simpson (2003, p. 11) offers a start on what would be a rewarding research challenge.
[75] It is hoped that we will be able to work with the recently formed national association of enabling educators to maximise the effectiveness of such collaboration.

attrition, there is a need to share with one another and learn from each other as much as possible. In particular, reflecting the popular question exemplified in the 2007 Newcastle enabling educators' conference, to continually attempt to discover *what works*: what retention enhancement strategies work best in what circumstances and kinds of programs?

Recommendations:

R4.5 That Australian enabling programs undertake to develop a Community of Practice in addressing student attrition, including a collaborative process of sharing and mutual discussion of retention enhancement strategies.

R4.6 That Australian enabling programs devote resources, including seeking dedicated funding, to develop a more rigorous understanding of best practice in student retention in enabling programs.

Chapter 5. Conclusion and recommendations

Chris Klinger and Neil Murray

5.1 Discussion

The aims of this project were threefold and are worth reiterating here:

1. Investigate the nature and patterns of student attrition from five University-based Enabling Programs across Australia, to compare attrition patterns from each of the participating institutions and identify systemic similarities and differences to patterns of student attrition in undergraduate degree programs.
2. Develop a suite of appropriately targeted evidence-based intervention strategies to improve student retention rates in University-based Enabling Programs on the basis of the information obtained from our investigation.
3. Develop guidelines of best practice to accompany the suite of strategies and disseminate the strategies and guidelines for their use nationally and internationally.

It is also worth reiterating, at this point, the present context in which enabling programs in Australia operate, as described in some depth in Chapter 1. Despite a clear agenda for change by a series of Australian Governments, James (2008, p. 2) reported that those from low SES backgrounds and rural and remote communities remained "significantly under-represented" in Australian higher education and figures had remained static for over 15 years. The Bradley Review confirmed James's overview of participation rates and identified that, while Australia had been at the forefront of equity programs in the 1990s, it now lagged behind other OECD countries in the new decade in regard to inclusion of equity groups (Ryan, 2011). In response, the Commonwealth Government sought to "redress" this perceived neglect by the release of new guidelines for the Higher Education Participation Partnerships Program (HEPPP). The HEPPP seeks to "encourage and assist providers to meet the Commonwealth Government's ambition that, by 2020, 20 per cent of domestic undergraduate students must be from low SES backgrounds" (HESA 2013 – Other Grant Guidelines, 1.40.1). The new funding program was focussed not only on enhancing participation rates in bridging courses of targeted equity groups but on enhancing retention and completion rates as well (Ryan, 2011). As James (2008) points out, additional funding has increased the numbers of students from equity groups but successful completions and progression to higher degrees remains an ongoing issue.

While there is a wide range of enabling and enabling-like programs in Australia, they share common features in their specificity of program objectives and embedded supports for identifiable student targets for the purposes of widening access into undergraduate award programs. This encompasses: the provision and support of alternative pathways for non-traditional students by seeking to "address the outcomes of disadvantage" (Clarke, Bull, Neil, Turner & Birney 2000, p. 59); providing "second chance" opportunities for those who

made different life choices on completion of secondary education; and, increasingly, providing a strategically legitimate pathway into higher education for school leavers wanting an alternative to the conventional entry pathway via competitive ATAR scores.

This study provides yet further affirmation of the well-documented phenomenon that enabling programs have substantially and significantly lower retention rates than undergraduate programs, with attrition typically in the order of 50% for open-access programs and somewhat lower for those with mandatory entry requirements and/or more than token tuition fees, and this is largely independent of the details of program type, design, and delivery. Indeed, this is a global phenomenon – especially so within OECD jurisdictions – and certainly not confined to the Australian education context. It would be interesting to surmise why attrition rates are lower in programs that attract fees but all of the programs associated with the present study are fee-free, putting the question out of reach. One might speculate that students who invest financially in an enabling education opportunity may possess greater self-belief/confidence levels at the outset and the financial commitment likely provides incentive to engage – an aspect that we have found to be a highly significant factor in attrition. Some aspects of the impact of mandatory entry requirements are revealed in the differences noted in Chapter 3 with respect to the single participating institution (ECU) with such criteria. Whilst struggles with student retention and course completion are ongoing, arguably the structures exist within and across established enabling education programs to individually (particularly where programs are large and well-established) and/or collaboratively develop strategies to increase success. However, at present there are scant resources and local institutional policies to support such an undertaking – a factor that is perhaps symptomatic, and reflective, of the issues surrounding the enabling education sector generally.

The means by which success (and, likewise, attrition, retention, withdrawal, engagement, etc) in enabling programs is evaluated is one of the most problematic aspects of the enabling education sector, one which inevitably impacted on the current study. Largely, this is a result of issues of nomenclature and definition, the meanings and conceptual associations customarily associated with terminology adopted in the context of the delivery of “mainstream” undergraduate and postgraduate programs, and the means by which various performance measures are determined, defined, calculated, and used within institutions both for internal purposes and for upstream reporting to government. The underlying principles and methodology that are appropriate for the evaluation of undergraduate program (and individual student) performance too often do not translate well in terms of either accuracy or effectiveness when applied non-critically to the evaluation of enabling programs. A crucial “take home message” from this study is the re-iteration and emphasis of the views expressed by McInnes et al. (2000): *non-completion of a program does not (in and of itself) equate with failure*. On the contrary, there are sound reasons for seeing and acknowledging certain forms of non-completion as a successful outcome – for the student, for the institution, for the higher education sector, and for society. It is crucial, then, that this vital aspect of institutional “account keeping” be closely scrutinised and re-evaluated so as to ensure that the big picture is not obscured or confounded by inappropriate and unreasonable comparisons with undergraduate statistics. Certainly, this is a view that aligns with the establishing guidelines for student load in enabling programs (DETYA, 2000a), though not one with which university administrators

uniformly agree.

Turning aside from debate over interpretations of success in the particular context of attrition rates and the various attendant implications (both in relation to policy and pedagogy), the other end of the scale is both free of ambiguity and highly noteworthy – that is, there is now a considerable body of empirical data that highlights the quality, success and value of enabling programs and underscores the need to continue their strategic expansion. In the first place, those who complete enabling programs and gain entry to university degree programs represent an increasingly significant (in the present higher education climate in Australia) and substantial number of new undergraduate students who would not otherwise have gained admission; moreover, they are well prepared to succeed in that endeavour. Of those who transition from enabling education into undergraduate award programs, many go on to become some of their institution's highest-achieving graduates (and, indeed, post-graduates), while, more generally, transitioning students perform academically at least as well, on average, as those who enter university by any other means and tend to display higher retention rates within their undergraduate programs than those who enter via more "traditional" means (Klinger & Murray, 2011; Klinger & Tranter, 2009).

Given the diversity and complexity of enabling and enabling-like programs, it is not surprising that questions arise when attempting to find common ground on matters such as reporting retention rates and what constitutes student success. The identified 35 university-based enabling programs differ considerably in terms of openness of access and academic entry requirements, eligibility restrictions on the basis of age or other criteria, whether or not the programs are fee-paying or fully supported, and whether they are offered only to domestic students or available either concurrently or exclusively to international students. They differ also in their mode of delivery, administration arrangements, course offerings, program duration, requirement to complete within a specified time-frame, and the pathways and opportunities afforded by successful completion. For this project, the nature and extent of institutional and program variation turned out to be a profound and unexpected obstacle to meaningful comparisons between the participating universities, to an extent that was barely foreseen at the outset – although, of course, the initial conceptions of anticipated diversity were viewed in a positive light as providing the opportunity to draw comparisons between similar modes and situations while learning from observations of differences, with the prospect of potentially being able to isolate and assess the impact of significant variables.

In some programs, enabling education students are considered to be full students of the university, and treated as such, in others they are not. While many universities fully embrace and support the ideology and ethos of enabling education, in some institutions (or among some of their staff) enabling students and contributing staff are, in practice at least, marginalised as "less than" an institution's core business of undergraduate and postgraduate education and research. In many cases, staff delivering enabling programs are appointed as teaching-only staff or as service providers, rather than as full academic staff members with a full spectrum of discipline-related teaching and research work-load. In many institutions, there is considerable reliance on staff who are appointed on casual and/or fixed-term contract bases. This lack of investment in human resources infrastructure must surely raise legitimate questions around the extent to which it may impact on

retention and in what ways. Although most managers, teachers, and administrators working in access programs are no doubt highly committed to their work, the lack of long-term security reflected in their contractual arrangements arguably undermines the extent to which they feel able to invest themselves in their activities and limits the kind of flexibility that would help ensure a better student experience – and, most critically, the support their non-traditional peer cohorts receive.

The fact is that casual and fixed-term contracts undermine morale, in part because they can prevent staff from engaging in a way that enables them to feel they are giving the best they can and achieving the best results of which they are capable, but also because their use sends a message that the university is not wholly committed to the widening participation agenda. While this may gradually change with, for example, the tying of institutional funding to the meeting of widening participation targets, access initiatives are nonetheless still seen by many as peripheral, as not part of universities' core business, and this undermines their perceived value and thus the resources that are directed to them. High levels of casual staffing in itself invariably translates to a concentration of resources on curriculum teaching rather than on overt supports such as off-curriculum academic skills development, pastoral advice, and mentoring activities to promote engagement. Inevitably, then, difficult decisions have to be made as to whether to invest limited means in retention-enhancement strategies or in servicing the needs of those students who are engaged. Seeking to do both in the absence of adequate (and appropriately skilled) resources is likely to result in meagre results in both cases.

And this presents something of a "Catch-22". So long as attrition rates are perceived to be "high", universities are likely to continue viewing access programs as peripheral and thus a dubious source of investment, for returns are unlikely to be forthcoming in terms of a significant through-flow of student to degree programs. However, without such investment retention rates are unlikely to increase significantly, for the kinds of strategies this study has sought to explore are largely dependent on human resources for their effective implementation.

Enabling students, too, have numerous dimensions of difference. They differ in their life experience and their personal and family history of educational experience and attainment (or lack thereof), and they have varying degrees of commitment to (and capacity for) study. Moreover, in contrast with the relative homogeneity of the undergraduate student body, enabling education cohorts – especially within open-entry models – are extremely heterogeneous in terms of student age and cultural, social, demographic, and personal characteristics.

Given such diversity, together with failings within some institutions to fully understand and appreciate the ways in which enabling education programs and enabling students differ from the mainstream teaching experience, it is hardly surprising that issues arise not only in terms of finding common ground over such matters as measures (and meaning) of retention and success, etc., but also in terms of the capacity (or, rather, lack thereof) to engage in meaningful research to inform the design and delivery of the programs and the development of innovative pedagogy. As a result, the enabling education sector in Australia is fragmented and, we may conclude from observations made in Chapter 4, rather lacking in

the sort of academic culture found (and expected) within undergraduate education, though this is certainly no reflection on the educators and administrators of the various programs, who appear keen to engage in and with a cohesive and collegial body of practice with a collective identity that employs accepted and well-defined terminology and in which there are shared understandings. While enabling education is a relatively young undertaking, by comparison with the mainstream higher education sector, it is not too young to have developed at least the foundations of such a cultural base. That it has not yet done so in any clearly recognisable sense serves to emphasise that the sector is in many respects as marginalised as the sub-populations with which it is necessarily associated. Indeed, everything that has made this project difficult (and there have been many challenges) may be seen as symptomatic of such marginalisation, so that the various issues have been both real in their impact on the project and, on reflection, apt metaphors for the not inconsiderable range of systemic shortcomings that are revealed variously within this report.

Attrition rates in enabling programs could be reduced (perhaps dramatically) via selection criteria for admission and the imposition of entry restrictions. For example, the establishment of a tuition fee could have the effect of motivating those who might otherwise withdraw, to "battle on". Conversely, the absence of a tuition fee may mean that many students who have the potential to succeed but merely lack the self belief, withdraw and never realise that potential. In other words, withdrawal becomes too easy and it is by pushing through the barriers that these (and indeed other) students face that helps ensure they are better prepared for their undergraduate degree programs. If institutions choose to institute a tuition fee, a key question is on what basis that fee should be set, for the possible motivational benefits must be carefully weighed against the disincentive it can represent. How this balance might be struck is a question that would certainly benefit from further research.

The issue of entry criteria and admission restrictions also bears on the matter discussed above; that is, how access programs are perceived within institutions. The very fact of having no entry criteria/restrictions can reinforce perceptions that such programs are marginal, anomalous, and (critically, given their relatively high attrition rates) generate comparatively little income for the university. While there may be a rationale for charging tuition fees for access programs, we argue that such processes and procedures run counter to the very principles of social inclusion and widening participation that are the raison d'être of the enabling education sector. They undermine the fundamental principle that, while a university education may not be for everyone (for numerous reasons), every citizen – regardless of cultural factors, socio-economic circumstance, prior educational disadvantage, lack of pre-tertiary educational achievement, or previous life-choices – should have the opportunity to at least attempt higher education and seek to realise their full (academic) potential. They undermine, too, the social and economic principles that underpin a widening participation agenda; that is, that the nation needs a more highly educated workforce to be competitive in an increasingly globalised market economy.

Regardless of the economic imperatives and the institution's or individual's ideological stance regarding the validity of entry criteria, attrition can be regarded in both positive and negative terms. In a positive sense, it may be seen as an inevitable consequence of

academic competition and a form of quality assurance. In enabling programs, if attrition comes as a result of participating students having come to an *informed* decision that higher education is not for them (or perhaps not for them at that particular point in their lives), their withdrawal signals a valid form of success that may, in itself, also represent a level of academic achievement. Moreover, for the student it is a relatively benign experience that not only may be free of the negative impact on self-esteem and confidence associated with failure but may promote self-esteem and confidence through (a) the experience of discovering they have the capacity to undertake higher education, should they choose to re-engage; and (b) the development of skills and knowledge that, while not sufficient to lead to a formal qualification, nevertheless may find application outside of university, in some cases making for greater employability or creating other opportunities (McInnis et al., 2000), and potentially sowing the seeds of lifelong learning. And then there is the fact of these students becoming determinants of their own futures; they, and not somebody else, have made a conscious decision that university is not for them and the very process of having done so is, it can reasonably be argued, self-affirming.

In a negative sense, attrition is ordinarily seen to represent a prima facie economic (and perhaps reputational) loss for institutions. Attrition in enabling programs, however, might better be regarded – to use commercial terms that are increasingly relevant in today's higher education setting – as an acceptable "loss leader": the funding value that derives from a single student going on to successfully undertake undergraduate study (and perhaps beyond) is sufficient to more than outweigh the costs of investing in a number of students who make the attempt unsuccessfully. If the reality – or indeed the perception – is that the through-flow of students into degree programs is minimal, though, then senior management is unlikely to see loss-making access programs as sustainable or to invest in them in anything other than a token fashion.

For those students for whom attrition is other than the result of an informed decision – that is, if it is a consequence of academic shortcoming or external factors, such as family, social, or employment issues – it may carry significant costs in terms of impact on well-being, reinforcement of feelings of past educational failure, perpetuation of disadvantage, and possible (further) alienation from formal education. When those particular individuals come from "at-risk" student groups then, from an equity and social inclusion point of view, this is a continued denial of further higher education opportunities (Cleary & Nicholls, 1998). Clearly, in such circumstances it is in the interests of the individual, the institution and society that those involved in policy making, administration, and the delivery of enabling education programs seek to develop and implement effective support and intervention mechanisms to serve as preventative measures that enhance student engagement and promote the quality of the learning experience.

As was pointed out in the opening chapter of this report, the problems of determining a meaningful definition of attrition and of establishing valid attrition rates within enabling programs are fundamental to our understanding of the enabling education sector and critical in terms of future planning in this area. A vital aspect that emerges from this project is that it is essential to clearly delineate measures of attrition determined in different ways, which include (a) merely the ratio of those who complete a program to the gross number of those who were granted admission; (b) the ratio of completing students to the total number

who enrol in courses (i.e. making a distinction between program admission and the separate act of actual enrolment); and (c) the ratio of completers to the total number of students who actually attended classes at the start of the teaching period – i.e. attrition expressed in terms that relate clearly to participation and persistence (or lack thereof). The need for such conceptual clarity of course extends to corresponding notions of retention and success and their respective measures.

A lack of consistency in the literature and between institutions around terminology meant that, due to differing administrative arrangements and internal cultural expectations, a major challenge during the project was the development of protocols to allow comparability across the different institutions. For instance, “enrolment” and “completion” have various interpretations and emphases across the participating institutions, the latter being further complicated by different time limits for students to complete their respective programs so that cross-institutional comparison of the very important attribute of student persistence is far from simple. Furthermore, across all institutions students can “drop out” without formally withdrawing and there are significant institutional differences in terms of when, and on what basis, such students are deemed to have left the program – and thus (a) become part of the official attrition rate; and (b) could be identified as eligible to undertake the Exit Survey. Compounding these problems flowing from differences in institutional culture, exit surveys (generally) are notorious for their low rates of return and this was especially the case in this project, with three of the five institutions receiving no significant numbers of completed exit surveys. Moreover, internal program restructuring and staffing/resource issues within some of the participating institutions added to difficulties in data collection. Nonetheless, overall a substantial amount of data has been collected, which is a rich source of empirical evidence from which the project recommendations derive, and will further serve as invaluable reference material for future studies. Moreover, as indicated at the conclusion of Chapter 2, the volume of qualitative responses to open-ended questions provides a substantial repository of first-hand student accounts for future analysis and further reporting.

While there is a considerable body of literature on student attrition in undergraduate programs, there is very little published material that relates specifically to student attrition in enabling programs, generally, and pre-tertiary preparation programs, in particular. What is clear from the available range of literature is that factors relating to personal circumstances (e.g. unsustainable time pressures, financial, health, social burdens), lack of motivation, and low level of engagement are all known to be significant influences on attrition in enabling education programs. However, factors such as age, English language background, prior academic achievement, being the first in family to undertake higher education, geographic location, mode of study, and employment status – all of which feature in relation to attrition studies for undergraduate programs – are under-researched in relation specifically to enabling education. Consequently, the research design for this project encompasses consideration of all these potential influences and an important finding (Chapter 3 refers) that must be emphasised in this concluding chapter is that most of the avenues for improving student retention reported in the undergraduate literature are unlikely to be effective in the enabling education sector. This finding results from the observation that, within the participating programs, little to no correlation is found between attrition and pre-existing student characteristics of parental educational achievement, time

since last study, age, first-in-family, reason for doing the program, and hours of paid employment. The exception, unsurprisingly, is prior level of educational achievement.

Another key finding is that students who are most likely to persist in an enabling program are those displaying some (at least minimal) level of engagement with the program during the first two weeks, which also suggests that a relatively high proportion of students who do not persist have never committed to, or engaged in any meaningful way, with the program. As noted in Chapter 3, this is in line with the (unpublished) findings of Clarke et al. (2000) that shows that retention rates of enabling students are on a par with those of undergraduate students *once non-participating students are excluded from the retention measurement methodology*.

The present study identifies numerous indicators of non-engagement, including early departure from the program, "phantom" or "ghost" enrolment (to use the vernacular terms employed in some institutions), and non-submission of assessment tasks. It also finds that the proportion of non-participating students is quite high, accounting for perhaps as much as 45% of those admitted. A lesser-known aspect, though, is rigorous information about the underlying reasons for non-participation, other than that these are broad, various, and generally non-arbitrary. Often, they are very good reasons that go not only to the program itself but to the motivation and purpose of seeking admission in the first instance. Nonetheless, regardless of the underlying cause, the fact of high non-engagement rates highlights two particular areas of concern. The first is the need to develop *and resource* effective measures to identify non-participation at the earliest possible point in a program cycle (as well as progressively as the program proceeds) so that non-engaging students can be contacted and, if appropriate and necessary, counselled to help them engage with the program and the institution. Chapter 3 notes that this is an obvious area for remediation but, where remediation is not an appropriate avenue for individual students, early contact would at least afford an opportunity to help students to identify a positive exit strategy, potentially including advice about returning to the program when the time and conditions are more favourable, and (importantly) encourage them to formally withdraw (failing which they may legitimately be culled from the enrolment records).

Along with definitional issues and institutional and program variation, a further area of concern relates to the methodology around measuring attrition – clearly a theme that repeatedly emerges throughout the study. The level of observed non-participation provides a sound empirical basis to support the argument that *it is seriously inappropriate to apply undergraduate attrition methodology to enabling education*. Where that occurs, it is not only detrimental to perceptions of the programs (and, indeed, the enabling education sector more generally) but contributes to and reinforces inappropriate stereotypes. In short, it taints the nature and meaning of discourse with language and terminology that misleads, rather than informs, institutional policy development and decision making.

One of the broad, most salient themes that emerges from this study is the existence of and need to reconcile multiple tensions that appear from the moment one begins unpacking the issue of retention and attrition in enabling programs of the kind that have formed the focus of this project. Such reconciliation essentially requires a determination of an acceptable balance – often, in reality, a compromise – that assures the best of both worlds while

minimising the negative aspects of each. How, for example, does one balance the need to invest in resources associated with retention strategies with resources that enhance the learning experience of those more fully engaged? In efforts to maximise retention rates, how does one balance the principle of sensitively intervening to support the student with the need to avoid intrusiveness into the student's life – a difficult call given differing student needs and perceptions and the risk that advances perceived as intrusive may ultimately be counter-productive? How does one balance the importance of affording space to the student to allow them to take initiative in their learning with the need to ensure that they receive the support they need? How does one weigh the relative advantages and disadvantages of charging a tuition fee for enabling programs; a fee which, on the one hand, may discourage disengagement and thus ensure higher retention rates but, on the other, discourage enrolment and thus filter out a proportion of students who, were they to enrol, would ultimately succeed? How does one intervene in a way that supports students without stigmatising them, highlighting pre-existing insecurities, and undermining their confidence and enthusiasm? For example, while the diagnostic testing of students early on in their program may allow for the identification of skills deficits and resources to be assigned accordingly, any such test is likely to deter the more fragile students from enrolling or attending. And for those who attend but perform poorly this could have negative consequences on their sense of self-esteem.

The fact that there are many such tensions is an indication of the complexity of the issues faced by those institutions and individuals navigating the field of enabling education and the need for them to understand deeply and respond sensitively to the many factors at play in retention/attrition and the variability that can exist across institutions and geographic regions. The list of recommendations below, with which we conclude this report, is intended not as a detailed prescription of how to address the kinds of issues and resolve the tensions we have identified but, rather, as a set of guidelines or general principles, based on our and others' findings, that we believe can serve usefully to inform institutional policy and practice in what is likely to become an area of increasing activity and importance in a world where notions of "the knowledge economy" and "the globalised market economy" are paramount. What we would emphasise strongly is the need for governments, other funding bodies, and institutions of higher education to recognise that enabling education is a sub-sector within higher education and a field of inquiry that demands its own distinct line of research funding. Only then can all stakeholders feel confident that enabling education is both well-informed and best positioned to realise its aims most effectively. Furthermore, with the development of a significant body of research will come greater credibility and acknowledgement of the important educational, economic, and social roles fulfilled by enabling education programs.

5.2 Recommendations

R1.1 That procedures be developed for identifying non-participating students, contacting them and assisting in re-engagement *or* a positive exit process *or* (as a last resort) administratively cancelling their enrolment.

R1.2 That funding be sought for a study of as many enabling programs as possible to ascertain the rate of non-commencing students.

R1.3 That enabling programs devote resources to identifying and mitigating possible program-related impediments to actual commencement following enrolment.

R2.1 That enabling programs investigate pre-enrolment processes to find the optimal mix of information and experiences to best prepare students for what it means to study at university, especially with reference to the kind of time commitment involved.

R2.2 That enabling programs, where appropriate, increase provision of counselling services, with special reference to meeting the challenge of provision in an external program and for students attending lectures in the evening.

R2.3 That enabling programs investigate and develop processes to facilitate student access to existing counselling services.

R3.1 That enabling programs should undertake further investigation into the effect of learning approaches on attrition and undergraduate performance both within programs and across programs.

R3.2 That funding should be sought to investigate the particular challenges of teaching and learning for enabling students and to develop a range of appropriate enabling pedagogies.

R4.1 That enabling programs consider the appointment of a person devoted to developing and implementing systems for monitoring, reviewing and, where appropriate, contacting students in the period between enrolment and Week 3 of the program.

R4.2 That enabling programs make it a priority to develop and implement systems to monitor student engagement in the early weeks of programs and offer counselling and pathways to a formal withdrawal or a facilitated re-engagement.

R4.3 That enabling programs investigate the manifestations of “time pressure” on their students and develop flexible curriculum and course design responses to mitigate this source of attrition.

R4.4 That the five participating institutions facilitate the development of appropriate benchmarking of student retention in their programs with the aim of extending it to other enabling programs as appropriate.

R4.5 That Australian enabling programs undertake to develop a Community of Practice in addressing student attrition, including a collaborative process of sharing and mutual discussion of retention enhancement strategies.

R4.6 That Australian enabling programs devote resources, including seeking dedicated funding, to develop a more rigorous understanding of best practice in student retention in enabling programs.

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Appendix A: Listing of Australian university-based enabling programs[76]

Please note that this table has been compiled largely from university web pages; while every care has been taken and the table is as correct as we can make it at the time of compilation, due to the speed with which new programs are being created and existing programs are being changed, as well as the variable nature of enabling programs and the occasional difficulty of identifying what is one program or two, it is likely to be at least slightly inaccurate. It serves to provide a general snapshot of the existing scene, however. We will try to keep it updated on our website (www.enablingretention.org.au). (Information on omissions and errors and updates will be gratefully received.)

	Eligibility requirements					Cost		Mode of delivery		
Institution and program	**21 yrs and over**	**20 yrs and under**	**Open to all ages**	**Domestic students only**	**Int. and domestic students**	**Free**	**Cost**	**Run by the uni**	**Run by a university college**	**Run with external partners**
1 UoN: Newstep		X		X		X		X		
2 UoN: Open Foundation (OF)	X[1]			X		X		X		
3 UNE: Pathways Enabling Course (PEC)			X	X		X		X		
4 UNSW: University Preparation Program	X			X		X		X		
5 UNSW: University Preparation Program		X		X		X				
6 UniSyd: University Preparation Courses	X			X			X	X		
7 CSU: Diploma of General Studies			X	X			X			X[2]
8 CSU: Study Link			X	X			X	X		
9 UoW: University Access Program (UAP)	X				X		X		X[3]	
10 UoW: Foundation Studies			X		X		X		X[3]	
11 UWS: University Foundation Studies			X		X		X		X[4]	
12 MU: Foundation program			X		X		X	X		
13 MU: Mature Age Jubilee Scheme	X			X			X	X		

[76] This table was originally compiled by Michelle Jamieson under the auspices of the UNSW University Preparation Program (December 2012) and revised by Barry Hodges (February 2013). It is used here by kind permission of The Learning Centre, UNSW.

14 ANU: University Preparation Scheme (UPS)	X			X			X	X		
15 UCanberra: UC-Prep			X[5]	X		X			X[6]	
16 Deakin U: Associate Degree of Arts, Business, and Sciences[7]			X	X			X	X		X[7]
17 Monash U: Diploma of Tertiary Studies			X		X		X	X		
18 Monash U: Monash College Diplomas			X		X		X		X[8]	
19 SUT: The Course in Tertiary Transition Skills			X	X			X	X		
20 Flinders U: Flinders Foundation Studies Program			X	X		X		X		
21 U Adelaide: University Preparatory Program (UPP)			X	X		X		X		
22 Uni A: Foundation Studies Program			X	X		X			X[9]	
23 Bond U: Bond College Foundation Program			X		X		X		X[10]	
24 CQU: Skills for Tertiary Education Studies (STEPS)			X	X		X		X		
25 JCU: Tertiary Access Course (TAC)	X			X		X		X		
26 USQ: Tertiary Preparation Program (TPP) (Non-award)			X	X		X			X[11]	
27 USQ: Tertiary Preparation Program (TPP)			X	X		X		X		
28 USC: Tertiary Preparation Pathway (TPP)			X		X	X[12]	X[13]			
29 Curtin U: UniReady			X	X		X		X		
30 ECU: University Preparation Course (UPC)			X	X		X		X		X
31 Murdoch U: Preparation Course (MUPC)			X		X		X		X[14]	
32 UND: Tertiary Enabling Course	X	X[15]			X	X[12]	X[13]	X		
33 UWA: Mature Age Access Program	X[1]			X			X			
34 UT: University Preparation Program (UPP)			X	X		X		X		
35 CDU: Tertiary Enabling Program (TEP)			X	X		X		X		

Notes:

[1] 20 yrs and over
[2] In conjunction with TAFE
[3] UOW College
[4] UWS College
[5] With restrictions
[6] UC College
[7] Can be completed at university only or in conjunction with TAFE
[8] Monash College
[9] UniSA College
[10] Bond College
[11] UOQ College
[12] Domestic students
[13] International students
[14] Murdoch Institute of Technology
[15] Restricted to students who haven't completed tertiary study

Appendix B: Profiles of participating programs

B1 Summary of all programs

Institution	Program	Features
Edith Cowan University	University Preparation Course (Internal & External)	Age: 17 +; Full-time, Half year *or* Part-time, Full year
	University Preparation Course - Education Assistant Program (Internal)	Age: 17 +; Full-time, Half year *or* Part-time, Full year (delivered over weekends)
	University Preparation Course - Education Assistant: Special Needs (Internal)	Age: 17 +; Full-time, Half year *or* Part-time, Full year (delivered over weekends, 2 week practicum)
	Indigenous University Orientation Course (Internal & External)	Age: 17 +; Full-time, Half year *or* Part-time, Full year
The University of Newcastle	Open Foundation	Age: 20 +; Part-time, Full year, Internal
	Open Foundation by Distance	Age: 20 +; Part-time, Full year, External
	Intensive Open Foundation	Age: 20 +; Full-time, Half year, Internal
	Newstep	Age: 17 - 20; Full-time, Full year, Internal
	Yapug	Age: 17 +; Full-time, Full year, Internal, Indigenous
University of New England	Pathways Enabling Course (External)	Age: no restrictions; Part-time, 2 – 4 semesters
University of South Australia	Foundation Studies (Internal & External)	Age: 18 – 20; Full-time, Full year
	Foundation Studies (Internal & External)	Age: 20 +; Full-time, Full year
University of Southern Queensland	Tertiary Preparation Program by Distance	Age: 18+; Full-time, External
	Tertiary Preparation Program (Internal)	Age: 18+; Full-time, Internal

B2 Individual programs

Program	**University Preparation Course (UPC)** [link: http://www.ecu.edu.au/future-students/non-school-leavers/how-to-get-into-ecu/entry-pathways/university-preparation-courses]	
Institution/Unit	Edith Cowan University Faculty of Education and Arts	
Contact	Dr John O'Rourke – Program Coordinator j.o_rourke@ecu.edu.au (08) 9370 6517	
Mode of offer	On-campus	Off-campus
Location of offer	Joondalup Mt Lawley Bunbury	Online
Full/part-time/length	Full-time – 0.5 years	Part-time – 1 year
Program structure	Full-time – 4 units across 1 semester	As on-campus
	Part-time – 2 units per semester across 2 semesters	As on-campus
Program completion	Completion of 4 units (50% or above)	As on-campus
Academic entry requirements	**School leavers:** Meet the requirements of the Western Australian Certificate of Education (WACE), ECU's English Competency requirements, and either: • Have studied a minimum of four ECU approved subjects/ courses in year 12 (at least 2 WACE courses must be undertaken at Stage 2 or above) or • Successfully completed a Certificate lll in year 12 **Mature age:** • Achieved year 12 results from a previous year or • Have a minimum score of 110 (post Feb 2010) or 125 (prior to Feb 2010) in English and at least 110 (post Feb 2010) or 115 (prior to Feb 2010) in either the STAT Verbal or Quantitative components or • Have successfully completed a Certificate III or	As on-campus

	higher from a Registered Training Organisation or • Applied via the Portfolio entry pathway *Applicants must meet ECU's UPC English Competency requirements through the Portfolio entry pathway or other means.*	
Other entry requirements	17+ years old; Australian Citizens, Permanent Residents, New Zealand Citizens and holders of a Permanent Humanitarian Visa	As on-campus
Tuition fees	None	As on-campus
Other fees	None	As on-campus
Other program information	Can be used as an alternative entry pathway to a wide range of undergraduate courses - dependent on prerequisites, minimum TER requirements and available places	As on-campus
Nature of courses	Teaches the required skills for academic success with an emphasis on the student becoming an independent learner	As on-campus
Certificate	Non-award certificate with ATAR-like tertiary entrance score	As on-campus
Other relevant information	Apply via Tertiary Institutions Service Centre (www.tisc.edu.au) unless applying via portfolio pathway or for semester 2	As on-campus

Program	**Pathways Enabling Course** [link: http://www.une.edu.au/for/future-students/undergraduates/pathways.php#item10]	
Institution/Unit	University of New England Teaching & Learning Centre	
Contact	Ingrid Wijeyewardene, Pathways Enabling Course Coordinator iwijeyew@une.edu.au Phone: 02 6773 5189	
Mode of offer	Distance ONLY	
Location of offer	Online only	

Full/part-time/length	Part time over two-four trimesters (with period of candidature open for four years)	
Program structure	Four units totalling 24 credit points, comprising two Foundation units and two pathways elective units. Maximum of 12 credit points can be taken in one trimester	
Program completion	Within 4 years	
Academic entry requirements	None	
Other entry requirements	Students must be Australian citizens and will have completed year 12 *OR* may have left school in year 10 or 11 and been in the workforce for a period of time. Students have not previously completed any part of a course leading to an award of the university.	
Tuition fees	None	
Other fees	None	
Other program information	Foundation units can be attempted or completed only once. Pathways elective unit may be attempted only twice. If three Pathways elective units are attempted and not passed, candidature shall lapse	
Nature of courses	Foundation units focus on academic literacies of academic writing, critical thinking, information literacy and computer literacy. FNDN101 has a top-down approach, introducing students to genres and text types that they are likely to encounter in their elective units. FNDN102 has a bottom-up approach to help students refine their writing skills. Elective units are drawn from suitable first year units offered within the schools.	
Certificate	None (Students can request an academic transcript if they want to use it for entry into another institution)	

Other relevant information	Successful completion of the Pathways Enabling Course provides the basis for admission to most undergraduate courses at UNE.

Program	**Open Foundation** [link: http://www.newcastle.edu.au/students/foundation-studies]	
Institution/Unit	The University of Newcastle English Language and Foundation Studies Centre	
Contact	Dr Anna Bennett, Program Coordinator Anna.Bennett@newcastle.edu.au Foundation Studies office: (02) 4921 5558	
Mode of offer	On-campus	Distance
Location of offer	Callagahan campus Ourimbah campus	Online with paper-based option
Full/part-time/length	Part-time Semester 1 & 2 Full-time (Intensive) Semester 2	Part-time Semester 1 & 2
Program structure	Part time: 2 x 10 unit courses per semester = 40 units Intensive (Full-time): 2 x 20 unit courses = 40 units	As on-campus Not available
Program completion	Pass 40 units in one calendar year	As on-campus
Academic entry requirements	None (Year 10 literacy and numeracy recommended but not monitored)	As on-campus
Other entry requirements	20 + years old; Australian citizen or permanent resident	As on-campus
Tuition fees	None	As on-campus
Other fees	None	As on-campus
Other program information	No intermediate success exit points; Failure of 10 units in Semester 1 allowed to do 1 x 20 unit Semester 2 course	As on-campus (but no Semester 2 Intensive Distance option)
Nature of courses	Adapted from undergraduate disciplines; Close integration of skills and content; no separate	As on-campus

	skills-specific components	
Certificate	Non-award certificate with ATAR-like tertiary entrance score	
Other relevant information	Successful applicants apply through Universities Admissions Centre on a competitive basis	

Program	**Newstep** [link: http://www.newcastle.edu.au/students/foundation-studies]	
Institution/Unit	The University of Newcastle English Language and Foundation Studies Centre	
Contact	Ms Beverley Wilson, Coordinator, Newstep Program Beverley.Wilson@newcastle.edu.au Foundation Studies office: (02) 4921 5558	
Mode of offer	On-campus ONLY	Distance Not available
Location of offer	Callagahan campus Ourimbah campus	
Full/part-time/length	Full-time Semester 1 & 2	
Program structure	6 x 10 unit courses 1 x 20 unit courses (from Intensive Open Foundation offerings)	
Program completion	Pass 70 out of 80 units	
Academic entry requirements	Applicants may have completed the HSC or equivalent or may have left during their senior schooling due to adverse circumstances	
Other entry requirements	17 - 20 years of age Australian citizen or permanent resident Completion of HSC or equivalent but not met the requirements for entrance to university or not completed year 12 studies due to adverse circumstances	
Tuition fees	None	

Other fees	None	
Other program information	Program may be completed over two consecutive years	
Nature of courses	Provide the knowledge and the academic and technical skills required for successful study at undergraduate level in a wide range of disciplines	
Certificate	Non-award certificate with ATAR-like tertiary entrance score	
Other relevant information	Successful applicants apply through Universities Admissions Centre on a competitive basis	

Program	**Tertiary Preparation Program** [link: http://www.usq.edu.au/handbook/current/lang/ACEQorPREPorTPPG.html]	
Institution/Unit	University of Southern Queensland Open Access College	
Contact	Dr Tasman Bedford, Coordinator Domestic Preparatory Programs Tas.Bedford@usq.edu.au 07 46 311 815	
Mode of offer	On campus	Distance
Location of offer	Fraser Coast campus Springfield Campus Toowoomba campus	Online with paper-based and DVD options
Full/part-time/length	Full time, offered semesters 1, 2, and 3	Full time, offered semesters 1, 2, and 3
Program structure	1 x 2 unit point course + 1 x 1 unit point course	1 x 2 unit point course + 1 x 1 unit point course
Program completion	Pass both courses	Pass both courses
Academic entry requirements	Nil	Nil
Other entry requirements	At least18 years old during year of enrolment	At least18 years old during year of enrolment
Tuition fees	Nil	Nil

Other fees	Nil	Nil
Other program information		
Nature of courses	Consist of equal components of study-management skills, academic communication skills, and mathematical skills integrated via the study-management components	Consist of equal components of study-management skills, academic communication skills, and mathematical skills integrated via the study-management components
Certificate	Non-award certificate of completion issued by University Council	Non-award certificate of completion issued by University Council
Other relevant information	Successful completion provides entry to USQ undergraduate programs (additional TPP maths course may be required by some Faculties)	Successful completion provides entry to USQ undergraduate programs (additional TPP maths course may be required by some Faculties)

Appendix C: Survey instruments

C1. Initial Questionnaire

Section A: General Information

1. Please tell us your gender:

Male? 1 ☐
Female? 2 ☐

2. Please indicate your age range:

under 20 1 ☐
20-30 2 ☐
31-40 3 ☐
41-50 4 ☐
over 50 5 ☐

3. Please write in your Residential Postcode* ☐☐☐☐

* Where you normally live, *not* a temporary address to allow you to attend this program.

4. What is the highest level of education achieved by either one of your parents?

No school at all or primary school only 1 ☐

Some but not all of secondary school 2 ☐
All of secondary school 3 ☐
Vocational certificate or diploma (e.g. TAFE) 4 ☐
Undergraduate university degree or diploma 5 ☐
Postgraduate university degree or diploma 6 ☐
Not sure 7 ☐

5. What is the highest level of education you have previously achieved?

No school at all or primary school only 1 ☐

Some but not all of secondary school 2 ☐
All of secondary school 3 ☐
Vocational certificate or diploma (e.g. TAFE) 4 ☐

6. Are you:

of Aboriginal or Torres Strait Islander descent? 1 ☐
of Non English-speaking background? 2 ☐

In Questions 7 and 8, the numbers indicate:

1. Not true
2. Somewhat true
3. Mostly true
4. Completely true

7. Personal circumstances.

a. It is easy for me to travel to and from the university	1 - 2 - 3 - 4	N/A
b. I can arrange a study timetable which will give me enough	1 - 2 - 3 - 4	

quiet time to study, apart from other work and family commitments		
c. I have an easily arranged physical space for studying	1 - 2 - 3 - 4	
d. I have regular access to a computer	1 - 2 - 3 - 4	
e. My family is very supportive of my current study activities and future study aims	1 - 2 - 3 - 4	N/A
f. I have been able to make adequate arrangements for child minding when I have to study	1 - 2 - 3 - 4	N/A

8. I decided to enrol in this Program

a. so that I can undertake a university degree course	1 - 2 - 3 - 4
b. because I hope to be able to take up a new career	1 - 2 - 3 - 4
c. because I hope to be able to earn more money	1 - 2 - 3 - 4
d. for my own satisfaction: I just want to learn more	1 - 2 - 3 - 4
e. to prove to myself that I can do it	1 - 2 - 3 - 4
f. to re-train after being made redundant	1 - 2 - 3 - 4
g. to re-train after injury or medical problem	1 - 2 - 3 - 4
h. for some other reason	1 - 2 - 3 - 4

9. I heard about this Program through:

A friend or relative 1 ☐
An employment counsellor/advisor 2 ☐
University Open Day 3 ☐
University staff 4 ☐
University website 5 ☐
School Careers Advisor 6 ☐
Newspaper 7 ☐
Radio 8 ☐
Other 9 ☐

10. How many years is it since you last did any formal study (e.g. school, vocational education)?

Less than 2 years 1 ☐
2 - 5 years 2 ☐
6 - 10 years 3 ☐
More than 10 years 4 ☐

11. Are you the first in your immediate family to undertake university study? Yes 1 ☐ No 2 ☐

12. Have any of your friends undertaken university study? Yes 1 ☐ No 2 ☐

13. Do you have a paid job? Yes 1 ☐ No 2 ☐

14. If you answered Yes to Question 13, roughly how many hours per week do you work on average?

Less than 5 hours per week 1 ☐
6 – 14 hours per week 2 ☐
15 – 25 hours per week 3 ☐
More than 25 hours per week 4 ☐

15. Excluding paid work, do you have other unavoidable commitments on your time? (Please tick all that apply.)

Family responsibilities?	1 ☐
Carer responsibilities?	2 ☐
Other	3 ☐

16. If you ticked any of the boxes in Question 15, roughly how many hours per week does this usually involve in total?

Less than 5 hours per week	1 ☐
6 – 15 hours per week	2 ☐
More than 15 hours per week	3 ☐

17. At the end of this course, I intend to:

Go on to study a university degree	1 ☐
Look for a better job without further study	2 ☐
Seek promotion in my current job	3 ☐
Other	4 ☐

18. Do you have readily available broadband access to the internet? Yes 1 ☐ No 2 ☐

19. If you have readily available broadband access to the internet, how often do you use it for your studies in the Program?

At least once per week	1 ☐
Occasionally, but less than once per week	2 ☐
Never	3 ☐

Section B: Your expectations of this Program

1. Did you attend the Orientation session at the start of semester? Yes 1 ☐ No 2 ☐ No Orientation session was available 3 ☐

2. In terms of each of the following, how well informed do you feel about the courses you have started?

For this question, the numbers mean:
1 Not well informed
2 Fairly well informed
3 Well informed
4 Very well informed

a. Amount of background reading required	1 ☐	2 ☐	3 ☐	4 ☐
b. Assignment dates	1 ☐	2 ☐	3 ☐	4 ☐
c. Times and venues of lectures and tutorials	1 ☐	2 ☐	3 ☐	4 ☐
d. The study skills required of you	1 ☐	2 ☐	3 ☐	4 ☐
e. The amount of time required for study	1 ☐	2 ☐	3 ☐	4 ☐
f. The degree of difficulty of the course	1 ☐	2 ☐	3 ☐	4 ☐
g. The extent to which you are expected to study independently	1 ☐	2 ☐	3 ☐	4 ☐

3. Do you expect this Program to be more or less difficult than school? More difficult 1 ☐ Less difficult 2 ☐ About the same 3 ☐

4. Do you expect to have to work harder in this Program than you did at school?

Yes	1 ☐
No	2 ☐
About the same	3 ☐

5. How confident are you that you know what to do, or who to ask, if you need help in any of the following areas?

For this question, the numbers mean: 1 Not at all confident
2 Fairly confident
3 Confident
4 Absolutely confident)

a. Academic difficulties (course content)	1 ☐	2 ☐	3 ☐	4 ☐
b. Personal difficulties	1 ☐	2 ☐	3 ☐	4 ☐
c. Financial difficulties	1 ☐	2 ☐	3 ☐	4 ☐
d. Career questions	1 ☐	2 ☐	3 ☐	4 ☐
e. Other	1 ☐	2 ☐	3 ☐	4 ☐

6. Are there any other comments about your expectations of this Program you would like to make?

……
……
……
……

Section C: How do you go about studying?

(Study Process Questionnaire, adapted from Biggs, 1986)

How to answer:

For each statement below, please indicate how true that statement is for you, by circling the appropriate number. The numbers stand for the following responses:

1. This item is *never* or *very rarely* true of me
2. This item is *sometimes* true of me
3. This item is *often* true of me
4. This item is *always* or *almost always* true of me

In the statements below reference is made to "class" (on-campus students) and "study module" (distance students). Please interpret this in the way that is relevant to you.

1. I find that learning gives me a feeling of deep personal satisfaction	1 - 2 - 3 - 4
2. I find that I have to do enough work on something so that I can form my own conclusions before I am satisfied	1 - 2 - 3 - 4
3. My aim is to pass the course with the minimum of effort	1 - 2 - 3 - 4
4. I think wider reading is a waste of time, so I only study seriously what is specified in the course or given out in class	1 - 2 - 3 - 4
5. I usually try to get top grades, so that I will be able to select from the best jobs later	1 - 2 - 3 - 4
6. I try to work consistently throughout the term, and revise my work regularly	1 - 2 - 3 - 4
7. I feel that virtually any topic can be highly interesting once I get into it	1 - 2 - 3 - 4
8. I find most new topics interesting and often spend extra time trying to	1 - 2 - 3 - 4

obtain more information about them	
9. I do not find studying very interesting in itself, so I keep my work to the minimum	1 - 2 - 3 - 4
10. I always want to do well in my studies	1 - 2 - 3 - 4
11. I try to do all my assignments as soon as possible	1 - 2 - 3 - 4
12. I learn some things by rote, going over and over them until I know them by heart, even if I do not understand them	1 - 2 - 3 - 4
13. I find that studying academic topics can at times be as exciting as a good novel or movie	1 - 2 - 3 - 4
14. I test myself on important topics until I understand them completely	1 - 2 - 3 - 4
15. I find I can get by in most assessments by memorising key sections, rather than trying to understand them all	1 - 2 - 3 - 4
16. Overall, I am an ambitious person and I want to get to the top in whatever I do	1 - 2 - 3 - 4
17. After a class/study module or a major assignment, I reread my notes to make sure that I understand them	1 - 2 - 3 - 4
18. I generally restrict my study to what is set, as I think it is unnecessary to do anything extra	1 - 2 - 3 - 4
19. One of the most important considerations about whether I like a course is whether I can get top marks in it	1 - 2 - 3 - 4
20. I work hard at my studies because I find the material interesting	1 - 2 - 3 - 4
21. I spend a lot of my free time finding out more about interesting topics which have been discussed in different classes or the course study notes	1 - 2 - 3 - 4
22. I prefer subjects with a lot of factual content, rather than theoretical kinds of subjects	1 - 2 - 3 - 4
23. I believe teachers shouldn't expect students to spend a lot of time studying material everyone knows won't be assessed/examined	1 - 2 - 3 - 4
24. I make a point of always reading what the teacher suggests we read	1 - 2 - 3 - 4
25. I come to most classes/study modules with questions in mind that I want answering	1 - 2 - 3 - 4
26. I usually become increasingly absorbed in my work the more that I do	1 - 2 - 3 - 4
27. I see no point in learning material which we are not likely to be assessed/tested on	1 - 2 - 3 - 4
28. I find the best way to pass tests is to try to remember answers to likely questions	1 - 2 - 3 - 4
29. I believe that society is based on competition, so schools and universities should reflect this	1 - 2 - 3 - 4
30. I keep neat, well-organised notes for most courses	1 - 2 - 3 - 4

Thank you for your assistance. Your participation is entirely voluntary and failure to participate will not affect your results in any way. All information is **confidential** and none of the teachers will have access to your answers. If you wish to follow up some of the issues that have been raised or you would like any further information about the survey, you can contact the Program Coordinator as listed on the cover sheet.

C2. Exit Survey

Section A: Your personal experience of the Program

In this section, the numbers mean:

1 Of no importance at all
2 Of not much importance
3 Quite important
4 Very important

1. *While doing the Program, I found that*:

a. The time required for study turned out to be more than I had available	1 - 2 - 3 - 4
b. I just couldn't afford financially to continue at Uni	1 - 2 - 3 - 4
c. I had medical problems (physical/emotional)	1 - 2 - 3 - 4
d. My family responsibilities were heavier than I had anticipated	1 - 2 - 3 - 4
e. Travel to and from the university was too difficult (on-campus students only)	1 - 2 - 3 - 4
f. I felt that I just didn't have the skills that I needed to do the course	1 - 2 - 3 - 4
g. The official information I was given before enrolling was inadequate	1 - 2 - 3 - 4
h. I hadn't understood that my course required prior, assumed knowledge	1 - 2 - 3 - 4
i. I hadn't understood the different demands of studying by distance education (off-campus students only)	1 - 2 - 3 - 4

2. *As a result of my time in this Program*:

I learned some skills which helped me feel better able to cope with work and life
1 ☐ 2 ☐ 3 ☐ 4 ☐

3. *Was there a particular event or thing which led to your leaving the Program?* Yes 1 ☐
No 2 ☐

4. *If you answered "Yes" to Question 3, please indicate what the event was.* (Tick any that apply.)

I took on a new job 1 ☐
My hours at work were increased 2 ☐
I fell ill, or a family member fell ill 3 ☐
The arrangements I had made for child care turned out to be inadequate 4 ☐
I panicked when the time to submit the first assignment got close 5 ☐
I received the first assignment back and was disappointed with how I went in it 6 ☐
Other 7 ☐

If *Other*, can you give some more detail? ……..

……

……

5. *When did you leave the Program?*

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	After Week 13
Please tick														

6. *Now that you are not continuing in this Program:*

a. Do you intend to re-enrol at a later date?

Yes 1 ☐
No 2 ☐
Maybe 3 ☐

b. Do you have an immediate goal in mind? (Please tick *any* that apply.)

New job 1 ☐
Further study or training at a different institution 2 ☐
Return to previous occupation 3 ☐
Other 4 ☐

If *Other*, can you give some more detail? ……..

……

……

Section B: Your expectations of the Program

1. *From your experience of the Program, do you now feel that you were well enough informed about its content and what was required of you?*

a. Not well informed 1 ☐
b. Fairly well informed 2 ☐
c. Well informed 3 ☐
d. Very well informed 4 ☐

2. *How easy was it for you to ask for help, if and when you needed it?*

For this question, the numbers mean: 1 Impossible
2 Difficult
3 Fairly easy
4 No problems

a. Academic difficulties (course content)	1 ☐	2 ☐	3 ☐	4 ☐
b. Personal difficulties	1 ☐	2 ☐	3 ☐	4 ☐
c. Financial difficulties	1 ☐	2 ☐	3 ☐	4 ☐
d. Career questions	1 ☐	2 ☐	3 ☐	4 ☐
e. Other	1 ☐	2 ☐	3 ☐	4 ☐

If *Other*, can you give some more detail? ……..

……

……

3. *How well prepared do you now feel you were when you began the Program?*

a. Not at all prepared 1 ☐
b. Somewhat prepared 2 ☐
c. Sufficiently well prepared 3 ☐
d. Very well prepared 4 ☐

4. *Was the course work more or less difficult than school?*

More difficult 1 ☐
Less difficult 2 ☐
About the same 3 ☐

5. *Did you have to work harder than you did at school?*

Yes 1 ☐
No 2 ☐
About the same 3 ☐

6. *What further information would have been useful to you at the start of the Program?*

……

……

……

Section C: Your awareness and use of Student Support Services

1. *For each of the following services available to students at your University, please indicate which of the options best describes your awareness and/or use of the service, where applicable, as well as your satisfaction with the service. If the service is not available to you (because you are an off-campus student, for example), just leave it blank.*

	Not aware of service	Aware but never used	Used only once	Used as needed		Quality Of Service		
						Poor	Satisfactory	Excellent
Departmental secretaries' office								
Student administration								
Student mentors								
Program Coordinator								
Library								
Accommodation								
Loans								
Learning Support								
Counselling								
Chaplaincy								
Careers service								
Health service								
Distance support (off-campus only)								

2. *Did you discuss your impending decision to withdraw with any of the above?* Yes 1 ☐
No 2 ☐

3. *If not, could you give some idea of why not?* ……

……

4. *Have you any additional comments to make about your satisfaction with university services?*

……

……

Section D: Your academic experience

1. *While you were enrolled in this Program, about how often did you do each of the following?*

	Never	Sometimes	Often	Very often
Asked questions in class (on-campus students only)				
Sought advice from academic staff				
Used library resources on campus or on-line				
Found the content difficult but nevertheless worked hard to try to master it				
Used workplace experience and skills to help you understand course work				
Came to class without completing reading or assignments (on-campus students only)				
Attempted assignments without studying the study materials related to them (off-campus students only)				
Was unable to keep up to date with studies for work, personal or family reasons				
Worked with other students on projects during class (on-campus students only)				
Worked with other students outside class to prepare assignments				
Used an electronic medium (such as Blackboard, Study Desk or the Web) to discuss or complete an assignment (on-campus students only)				
Had a weekly study plan and stuck to it				
Used email to communicate with teaching staff				
Discussed your work with teaching staff				
Discussed your career plans with teaching staff or advisors				
Received prompt written or oral feedback from teachers on your performance				
Worked harder than you thought you could to meet a teacher's standards or expectations or your own				
Skipped lectures or tutorials (on-campus students only)				
Read the online course materials (on, for example, Blackboard or Study Desk)				
Was not sure how to take notes in class (on-campus students only)				

2. *Please circle the numbers that best represent the quality of your relationships with each group of other people in this Program on a scale where 1 is "Unfriendly, unsupportive, sense of alienation" and 10 "Friendly, supportive, sense of belonging".*

	Unfriendly, unsupportive, sense of alienation ←									Friendly, supportive, sense of belonging →
a. Relationships with other students	1	2	3	4	5	6	7	8	9	10
b. Relationships with academic staff	1	2	3	4	5	6	7	8	9	10
c. Relationships with administration staff	1	2	3	4	5	6	7	8	9	10
d. Relationship with support staff	1	2	3	4	5	6	7	8	9	10

3. *Overall, how would you evaluate the quality of* ***academic advice*** *that you have received in this Program?*

Poor 1 ☐
Fair 2 ☐
Good 3 ☐
Excellent 4 ☐

4. *How would you evaluate your entire educational experience at this institution?*

Poor 1 ☐
Fair 2 ☐
Good 3 ☐
Excellent 4 ☐

5. *Did you attend an Orientation Session?*

Yes 1 ☐
No 2 ☐
No Orientation available 3 ☐

If Y*es*, how helpful did you find it?

Not at all 1 ☐
Somewhat 2 ☐
Very helpful 3 ☐

Section E: General

1. *What do you think are the best aspects of how the Program engages students in learning?*

……

……

.....

.....

.....

2. *What could be done to improve how the Program engages students?*

……

……

……

……

……

3. *Do you have any reason, other than those listed above, for leaving the Program?*

……

……

……

……

……

4. *Is there any further comment you would like to make?*

……

……

……

……

……

Thank you very much for your help in completing this survey.

C3 Concluding Questionnaire

A. How do you go about studying?

(Study Process Questionnaire, adapted from Biggs, 1986)

How to answer:

For each statement below, please indicate how true that statement is for you, by circling the appropriate number. The numbers stand for the following responses:

1. This item is *never* or *very rarely* true of me
2. This item is *sometimes* true of me
3. This item is *often* true of me
4. This item is *always* or *almost always* true of me

In the statements below reference is made to "class" (on-campus students) and "study module" (distance students). Please interpret this in the way that is relevant to you.

1. I find that learning gives me a feeling of deep personal satisfaction	1 - 2 - 3 - 4
2. I find that I have to do enough work on something so that I can form my own conclusions before I am satisfied	1 - 2 - 3 - 4
3. My aim is to pass the course with the minimum of effort	1 - 2 - 3 - 4
4. I think wider reading is a waste of time, so I only study seriously what is specified in the course or given out in class	1 - 2 - 3 - 4
5. I usually try to get top grades, so that I will be able to select from the best jobs later	1 - 2 - 3 - 4
6. I try to work consistently throughout the term, and revise my work regularly	1 - 2 - 3 - 4
7. I feel that virtually any topic can be highly interesting once I get into it	1 - 2 - 3 - 4
8. I find most new topics interesting and often spend extra time trying to obtain more information about them	1 - 2 - 3 - 4
9. I do not find studying very interesting in itself, so I keep my work to the minimum	1 - 2 - 3 - 4
10. I always want to do well in my studies	1 - 2 - 3 - 4
11. I try to do all my assignments as soon as possible	1 - 2 - 3 - 4
12. I learn some things by rote, going over and over them until I know them by heart, even if I do not understand them	1 - 2 - 3 - 4
13. I find that studying academic topics can at times be as exciting as a good novel or movie	1 - 2 - 3 - 4
14. I test myself on important topics until I understand them completely	1 - 2 - 3 - 4
15. I find I can get by in most assessments by memorising key sections, rather than trying to understand them all	1 - 2 - 3 - 4
16. Overall, I am an ambitious person and I want to get to the top in whatever I do	1 - 2 - 3 - 4
17. After a class/study module or a major assignment, I reread my notes to make sure that I understand them	1 - 2 - 3 - 4
18. I generally restrict my study to what is set, as I think it is unnecessary to do anything extra	1 - 2 - 3 - 4
19. One of the most important considerations about whether I like a course is whether I can get top marks in it	1 - 2 - 3 - 4
20. I work hard at my studies because I find the material interesting	1 - 2 - 3 - 4

21. I spend a lot of my free time finding out more about interesting topics which have been discussed in different classes or the course study notes	1 - 2 - 3 - 4
22. I prefer subjects with a lot of factual content, rather than theoretical kinds of subjects	1 - 2 - 3 - 4
23. I believe teachers shouldn't expect students to spend a lot of time studying material everyone knows won't be assessed/examined	1 - 2 - 3 - 4
24. I make a point of always reading what the teacher suggests we read	1 - 2 - 3 - 4
25. I come to most classes/study modules with questions in mind that I want answering	1 - 2 - 3 - 4
26. I usually become increasingly absorbed in my work the more that I do	1 - 2 - 3 - 4
27. I see no point in learning material which we are not likely to be assessed/tested on	1 - 2 - 3 - 4
28. I find the best way to pass tests is to try to remember answers to likely questions	1 - 2 - 3 - 4
29. I believe that society is based on competition, so schools and universities should reflect this	1 - 2 - 3 - 4
30. I keep neat, well-organised notes for most courses	1 - 2 - 3 - 4

B. Your awareness and use of Student Support Services

1. For each of the following services available to students at your University, please indicate which of the options best describes your awareness and/or use of the service, where applicable, as well as your satisfaction with the service. If the service is not available to you (because you are an off-campus student, for example), just leave it blank.

	Not aware of service	Aware but never used	Used only once	Used as needed		Quality Of Service		
						Poor	Satisfactory	Excellent
Departmental secretaries' office								
Student administration								
Student mentors								
Program Coordinator								
Library								
Accommodation								
Loans								
Learning Support								
Counselling								
Chaplaincy								
Careers service								
Health service								
Distance support (off-campus only)								

2. *Have you any comments to make about your satisfaction with university services?*

……

……

……

C. Your academic experience

1. *While you were enrolled in this Program, about how often did you do each of the following?*

	Never	Sometimes	Often	Very often
Asked questions in class (on-campus students only)				
Sought advice from academic staff				
Used library resources on campus or on-line				
Found the content difficult but nevertheless worked hard to try to master it				
Used workplace experience and skills to help you understand course work				
Came to class without completing reading or assignments (on-campus students only)				
Attempted assignments without studying the study materials related to them (off-campus students only)				
Was unable to keep up to date with studies for work, personal or family reasons				
Worked with other students on projects during class (on-campus students only)				
Worked with other students outside class to prepare assignments				
Used an electronic medium (such as Blackboard, Study Desk or the Web) to discuss or complete an assignment (on-campus students only)				
Had a weekly study plan and stuck to it				
Used email to communicate with teaching staff				
Discussed your work with teaching staff				
Discussed your career plans with teaching staff or advisors				
Received prompt written or oral feedback from teachers on your performance				
Worked harder than you thought you could to meet a teacher's standards or expectations or your own				
Skipped lectures or tutorials (on-campus students only)				
Read the online course materials (on, for example, Blackboard or Study Desk)				
Was not sure how to take notes in class (on-campus students only)				

2. *Please circle the numbers that best represent the quality of your relationships with each group of other people in this Program on a scale where 1 is "Unfriendly, unsupportive, sense of alienation" and 10 "Friendly, supportive, sense of belonging".*

	Unfriendly, unsupportive, sense of alienation ←◄◄◄									Friendly, supportive, sense of belonging ►►►→
a. Relationships with other students	1	2	3	4	5	6	7	8	9	10
b. Relationships with academic staff	1	2	3	4	5	6	7	8	9	10
c. Relationships with administration staff	1	2	3	4	5	6	7	8	9	10
d. Relationship with support staff	1	2	3	4	5	6	7	8	9	10

3. *Overall, how would you evaluate the quality of* ***academic advice*** *that you have received in this Program?*

Poor 1 ☐
Fair 2 ☐
Good 3 ☐
Excellent 4 ☐

4. *How would you evaluate your entire educational experience at this institution?*

Poor 1 ☐
Fair 2 ☐
Good 3 ☐
Excellent 4 ☐

D. General information

1. Did you feel tempted to give up the Program at some point during the year?

Yes 1 ☐
No 2 ☐

If yes, did you talk over the decision with any of the following?

Your Course Coordinator or Lecturer 1 ☐
A person from the program office 2 ☐
The Program Coordinator 3 ☐
The University Counselling Service 4 ☐
University Learning Support 5 ☐
Members of your family 6 ☐
Friends 7 ☐

If so, did you find this discussion … not helpful helpful very helpful?

If you did feel tempted to stop, can you say what led you to decide to stay with the program?
…….....
…….....
…….....
…….....

2. Have you applied to study at university next year? Yes 1 ☐

No 2 ☐

At the University of Newcastle? Yes No

What degree program do you want to study? .....

3. Did you have a particular degree program to study in mind when you began the Open Foundation program?

Yes No

If yes, what was it? .....

If yes, do you still intend to study:

The same degree program? ❑
A different degree program? ❑

Which degree program? .....

If no, are you undecided what you want to do? Yes No

4. A future survey?

❑ Please tick this box if you are willing for us to contact you later in your university career to follow up on your Open Foundation experience.

… continues over the page

D. Some final questions

1. What do you think were the best aspects of the Open Foundation Program for you?

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……
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2. What do you think could be done to improve the Open Foundation course?

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3. Do you have any other comments about the course which you feel we ought to know about?

……
……
……
……
……
……
……
……

Appendix D: Selected data tables: Student demographic information

See Section 3.2

D1. The University of Newcastle (Semester 1 intake), University of South Australia, University of Southern Queensland

Due to the dramatic difference in effective retention for the Semester 2 Intensive Open Foundation (full-time, internal) students, demographic tables for the Semester 1 and Semester 2 intakes are presented separately.

The Semester 1 student intake included students in Open Foundation (20+, internal, part-time), Open Foundation by Distance (20+, external, part-time) and Newstep (17-20; internal, full-time) programs. Open Foundation and Newstep students can enrol at either the Callaghan or Central Coast campuses; results are combined campuses.

Table D1.1
UoN, USQ, UniSA: Numbers of students by program

Program

Institution			Frequency	Percent	Valid Percent	Cumulative Percent
2.00	Valid	1 distance	52	3.5	3.5	3.5
		2 Nwstp (Cal	374	25.5	25.5	29.0
		3 Nwstp (CC	182	12.4	12.4	41.4
		4 F-F Call	562	38.3	38.3	79.7
		5 F-F CC	286	19.5	19.5	99.2
		6 YAPUG	11	.7	.7	99.9
		Missing	1	.1	.1	100.0
		Total	1468	100.0	100.0	
4.00	Valid	7 18-20s Grp	48	26.6	29.6	29.6
		8 20+ Grp	129	63.3	70.4	100.0
	Total		177	100.0		
5.00	Valid	10 TPP Dist	65	35.3	39.3	39.3
		11 TPP on-c	35	22.4	25.0	64.3
		12 ONC S/f	21	12.2	13.6	77.9
		13 ONC F/c	20	10.3	11.4	89.3
		14 Prisoners	15	9.6	10.7	100.0
	Total		156	100.0		

Key: Institution 2: UoN
Institution 4: UNiSA
Institution 5: USQ

Table D1.2
UoN, USQ, UniSA: Age groupings by institution

AGE

Institution			Frequency	Percent	Valid Percent	Cumulative Percent
2.00	Valid	Under 20 years of age	585	39.9	39.9	39.9
		20 – 30	601	40.9	40.9	80.8
		31 – 40	182	12.4	12.4	93.2
		41 – 50	77	5.2	5.2	98.4
		Over 50	23	1.6	1.6	100.0
		Total	1468	100.0	100.0	
4.00	Valid	Under 20 years of age	74	41.8	42.0	42.0
		20 – 30	74	41.8	42.0	84.1
		31 – 40	17	9.6	9.7	93.8
		41 - 50	6	3.4	3.4	97.2
		Over 50	5	2.8	2.8	100.0
		Total	176	99.4	100.0	
	Missing	System	1	.6		
	Total		177	100.0		
5.00	Valid	Under 20 years of age	38	24.4	24.5	24.5
		20 – 30	53	34.0	34.2	58.7
		31 – 40	31	19.9	20.0	78.7
		41 – 50	20	12.8	12.9	91.6
		Over 50	13	8.3	8.4	100.0
		Total	155	99.4	100.0	
	Missing	System	1	.6		
	Total		156	100.0		

Table D1.3
UoN, USQ, UniSA: Levels of parental education by Institution

PARENTEDUC

Institution			Frequency	Percent	Valid Percent	Cumulative Percent
2.00	Valid	No school at all or primary school only	11	.7	.8	.8
		Some but not all of secondary school	389	26.5	27.7	28.5
		All of secondary school	309	21.0	22.0	50.6
		Vocational certificate or diploma (e.g. TAFE)	273	18.6	19.5	70.0
		Undergraduate university degree or diploma	132	9.0	9.4	79.5
		Postgraduate university degree or diploma	205	14.0	14.6	94.1
		Not sure	83	5.7	5.9	100.0
		Total	1402	95.5	100.0	

	Missing	System	66	4.5		
		Total	1468	100.0		
4.00	Valid	No school at all or primary school only	13	7.3	7.9	7.9
		Some but not all of secondary school	45	25.4	27.3	35.2
		All of secondary school	24	13.6	14.5	49.7
		Vocational certificate or diploma (e.g. TAFE)	26	14.7	15.8	65.5
		Undergraduate university degree or diploma	13	7.3	7.9	73.3
		Postgraduate university degree or diploma	25	14.1	15.2	88.5
		Not sure	19	10.7	11.5	100.0
		Total	165	93.2	100.0	
	Missing	System	12	6.8		
	Total		177	100.0		
5.00	Valid	No school at all or primary school only	8	5.1	5.6	5.6
		Some but not all of secondary school	45	28.8	31.7	37.3
		All of secondary school	32	20.5	22.5	59.9
		Vocational certificate or diploma (e.g. TAFE)	27	17.3	19.0	78.9
		Undergraduate university degree or diploma	11	7.1	7.7	86.6
		Postgraduate university degree or diploma	12	7.7	8.5	95.1
		Not sure	7	4.5	4.9	100.0
		Total	142	91.0	100.0	
	Missing	System	14	9.0		
	Total		156	100.0		

Table D1.4
UoN, USQ, UniSA: Personal Education by Institution

SELFEDUC

Institution			Frequency	Percent	Valid Percent	Cumulative Percent
2.00	Valid	No school at all or primary school only	4	.3	.3	.3
		Some but not all of secondary school	289	19.7	20.9	21.2
		All of secondary school	759	51.7	54.9	76.1
		Vocational certificate or diploma (e.g. TAFE)	331	22.5	23.9	100.0
		Total	1383	94.2	100.0	
	Missing	System	85	5.8		
	Total		1468	100.0		

4.00	Valid	Some but not all of secondary school	44	24.9	26.5	26.5
		All of secondary school	86	48.6	51.8	78.3
		Vocational certificate or diploma (e.g. TAFE)	36	20.3	21.7	100.0
		Total	166	93.8	100.0	
	Missing	System	11	6.2		
	Total		177	100.0		
5.00	Valid	No school at all or primary school only	2	1.3	1.4	1.4
		Some but not all of secondary school	45	28.8	31.0	32.4
		All of secondary school	51	32.7	35.2	67.6
		Vocational certificate or diploma (e.g. TAFE)	47	30.1	32.4	100.0
		Total	145	92.9	100.0	
	Missing	System	11	7.1		
	Total		156	100.0		

Table D1.5
UoN, USQ, UniSA: Ethnic Diversity by Institution

ETHNICITY

Institution			Frequency	Percent	Valid Percent	Cumulative Percent
2.00	Valid	of Aboriginal or Torres Strait Islander descent?	58	4.0	40.6	40.6
		of Non English-speaking background?	84	5.7	58.7	99.3
		3.00	1	.1	.7	100.0
		Total	143	9.7	100.0	
	Missing	System	1325	90.3		
	Total		1468	100.0		
4.00	Valid	of Aboriginal or Torres Strait Islander descent?	4	2.3	6.3	6.3
		of Non English-speaking background?	59	33.3	93.7	100.0
		Total	63	35.6	100.0	
	Missing	System	114	64.4		
	Total		177	100.0		
5.00	Valid	of Aboriginal or Torres Strait Islander descent?	3	1.9	13.0	13.0
		of Non English-speaking background?	20	12.8	87.0	100.0
		Total	23	14.7	100.0	
	Missing	System	133	85.3		
	Total		156	100.0		

Table D1.6
UoN, USQ, UniSA: Time since last study by Institution

YRSLASTSTUDY

Institution			Frequency	Percent	Valid Percent	Cumulative Percent
2.00	Valid	Less than 2 years	744	50.7	50.8	50.8
		2 - 5 years	342	23.3	23.4	74.2
		6 - 10 years	180	12.3	12.3	86.5
		More than 10 years	198	13.5	13.5	100.0
		Total	1464	99.7	100.0	
	Missing	System	4	.3		
	Total		1468	100.0		
4.00	Valid	Less than 2 years	97	54.8	55.1	55.1
		2 - 5 years	35	19.8	19.9	75.0
		6 - 10 years	23	13.0	13.1	88.1
		More than 10 years	21	11.9	11.9	100.0
		Total	176	99.4	100.0	
	Missing	System	1	.6		
	Total		177	100.0		
5.00	Valid	Less than 2 years	50	32.1	32.5	32.5
		2 - 5 years	26	16.7	16.9	49.4
		6 - 10 years	26	16.7	16.9	66.2
		More than 10 years	52	33.3	33.8	100.0
		Total	154	98.7	100.0	
	Missing	System	2	1.3		
	Total		156	100.0		

Table D1.7
UoN, USQ, UniSA: First in Family by Institution

FIRSTINFAM

Institution			Frequency	Percent	Valid Percent	Cumulative Percent
2.00	Valid	Yes	701	47.8	48.0	48.0
		No	759	51.7	52.0	99.9
		3.00	1	.1	.1	100.0
		Total	1461	99.5	100.0	
	Missing	System	7	.5		
	Total		1468	100.0		
4.00	Valid	Yes	82	46.3	46.3	46.3
		No	95	53.7	53.7	100.0
		Total	177	100.0	100.0	
5.00	Valid	Yes	80	51.3	51.9	51.9
		No	74	47.4	48.1	100.0
		Total	154	98.7	100.0	
	Missing	System	2	1.3		
	Total		156	100.0		

Table D1.8
UoN, USQ, UniSA: Students with paid employment by Institution

PAIDJOB

Institution			Frequency	Percent	Valid Percent	Cumulative Percent
2.00	Valid	Yes	1009	68.7	69.1	69.1
		No	451	30.7	30.9	99.9
		3.00	1	.1	.1	100.0
		Total	1461	99.5	100.0	
	Missing	System	7	.5		
	Total		1468	100.0		
4.00	Valid	Yes	87	49.2	49.4	49.4
		No	89	50.3	50.6	100.0
		Total	176	99.4	100.0	
	Missing	System	1	.6		
	Total		177	100.0		
5.00	Valid	Yes	70	44.9	45.2	45.2
		No	85	54.5	54.8	100.0
		Total	155	99.4	100.0	
	Missing	System	1	.6		
	Total		156	100.0		

D2. The University of Newcastle Semester 2 intake students

Table D2.1
UoN Semester 2: Gender

GENDER

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	287	45.8	45.9	45.9
	Female	338	54.0	54.1	100.0
	Total	625	99.8	100.0	
Missing	System	1	.2		
Total		626	100.0		

Table D2.2
UoN Semester 2: Age

Key: 1: < 20; 2: 20-30; 3: 31-40; 4: 41-50; 5: > 50

AGE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	44	7.0	7.1	7.1
	2.00	424	67.7	68.4	75.5
	3.00	90	14.4	14.5	90.0
	4.00	41	6.5	6.6	96.6
	5.00	21	3.4	3.4	100.0
	Total	620	99.0	100.0	
Missing	System	6	1.0		
Total		626	100.0		

Table D2.4
UoN Semester 2: Parental level of education

Key: 1: No school/primary only; 2: Some but not all secondary school; 3: All secondary school; 4: VET certificate/diploma; 5: Undergraduate degree/diploma; 6: Postgraduate degree/diploma.

PARENTEDUC

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	8	1.3	1.3	1.3
	2.00	171	27.3	27.4	28.6
	3.00	125	20.0	20.0	48.6
	4.00	142	22.7	22.7	71.4
	5.00	83	13.3	13.3	84.6
	6.00	69	11.0	11.0	95.7
	7.00	27	4.3	4.3	100.0
	Total	625	99.8	100.0	
Missing	System	1	.2		
Total		626	100.0		

Table D2.5
UoN Semester 2: Personal level of education

Key: 1: No school/primary only; 2: Some but not all secondary school; 3: All secondary school; 4: VET certificate/diploma

SELFEDUC

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	3	.5	.5	.5
	2.00	151	24.1	24.2	24.6
	3.00	216	34.5	34.6	59.2
	4.00	255	40.7	40.8	100.0
	Total	625	99.8	100.0	
Missing	System	1	.2		
Total		626	100.0		

Table D2.6
UoN Semester 2: Ethnicity

Key: 1: ATSI; 2: NESB

ETHNICITY

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	17	2.7	27.4	27.4
	2.00	45	7.2	72.6	100.0
	Total	62	9.9	100.0	
Missing	System	564	90.1		
Total		626	100.0		

Table D2.7
UoN Semester 2: Time since last study

Key: 1: < 2 years; 2: 2 – 5 years; 3: 6 – 10 years; > 10 years

YRSLASTSTUDY

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	176	28.1	28.4	28.4
	2.00	212	33.9	34.2	62.6
	3.00	108	17.3	17.4	80.0
	4.00	124	19.8	20.0	100.0
	Total	620	99.0	100.0	
Missing	System	6	1.0		
Total		626	100.0		

Table D2.8
UoN Semester 2: First in family to attend university

FIRSTINFAM

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	304	48.6	49.2	49.2
	No	314	50.2	50.8	100.0
	Total	618	98.7	100.0	
Missing	System	8	1.3		
Total		626	100.0		

Table D2.9
UoN Semester 2: Friends having studied at university

FRIENDSUNI

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	553	88.3	89.0	89.0
	No	68	10.9	11.0	100.0
	Total	621	99.2	100.0	
Missing	System	5	.8		
Total		626	100.0		

Table D2.10
UoN Semester 2: Paid employment

PAIDJOB

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	360	57.5	58.2	58.2
	No	254	40.6	41.0	99.2
	Total	619	98.9	100.0	
Missing	System	7	1.1		
Total		626	100.0		

Table D2.10a
UoN Semester 2: Hours of paid employment per week

Key: 1: < 5 hours/week; 2: 6-14 hours/week; 15-15 hours/week; > 25 hours/week

HRSPERWEEK

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	21	3.4	5.7	5.7
	2.00	94	15.0	25.6	31.3
	3.00	126	20.1	34.3	65.7
	4.00	126	20.1	34.3	100.0
	Total	367	58.6	100.0	
Missing	System	259	41.4		
Total		626	100.0		

Table D2.11a
UoN Semester 2: Family responsibilities

FAMILYRESP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	335	53.5	53.5	53.5
	Yes	290	46.3	46.3	99.8
	Total	626	100.0	100.0	

Table D2.11b
UoN Semester 2: Carer responsibilities

CARER

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	567	90.6	90.6	90.6
	Yes	57	9.1	9.1	100.0
	Total	626	100.0	100.0	

Table D2.11c
UoN Semester 2: Other responsibilities

OTHRRESP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	434	69.3	69.3	69.3
	Yes	192	30.7	30.7	100.0
	Total	626	100.0	100.0	

Table D2.11d
UoN Semester 2: Hours per week demanded by responsibilities

Key: 1: < 5 hours/week; 2: 6-15 hours/week, 3: > 15 hours/week

Timeforresp

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	125	20.0	29.8	29.8
	2.00	130	20.8	31.0	60.7
	3.00	165	26.4	39.3	100.0
	Total	420	67.1	100.0	
Missing	System	206	32.9		
Total		626	100.0		

Table D2.12
UoN Semester 2: Aim at conclusion of program

Key: 1: University degree; 2: Look for better job without further study; 3: Seek promotion in current job; 4: Other

ATTHEEND$

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		5	.8	.8	.8
	1	606	96.8	96.8	97.6
	2	2	.3	.3	97.9
	3	2	.3	.3	98.2
	4	11	1.8	1.8	100.0
	Total	626	100.0	100.0	

D3. University of New England

Table D3.1
UNE: Gender

GENDER

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	23	21.5	21.9	21.9
	Female	82	76.6	78.1	100.0
	Total	105	98.1	100.0	
Missing	System	2	1.9		
Total		107	100.0		

Table D3.2
UNE: Age

AGE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under 20 years of age	12	11.2	11.2	11.2
	20 – 30	36	33.6	33.6	44.9
	31 – 40	35	32.7	32.7	77.6
	41 – 50	16	15.0	15.0	92.5
	Over 50	8	7.5	7.5	100.0
	Total	107	100.0	100.0	

Table D3.3
UNE: Parental level of education

PARENTEDUC

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No school at all or primary school only	1	.9	.9	.9
	Some but not all of secondary school	34	31.8	31.8	32.7
	All of secondary school	20	18.7	18.7	51.4
	Vocational certificate or diploma (e.g. TAFE)	24	22.4	22.4	73.8
	Undergraduate university degree or diploma	12	11.2	11.2	85.0
	Postgraduate university degree or diploma	11	10.3	10.3	95.3
	Not sure	5	4.7	4.7	100.0
	Total	107	100.0	100.0	

Table D3.4
UNE: Personal level of education

SELFEDUC

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Some but not all of secondary school	25	23.4	23.4	23.4
	All of secondary school	41	38.3	38.3	61.7
	Vocational certificate or diploma (e.g. TAFE)	41	38.3	38.3	100.0
	Total	107	100.0	100.0	

Table D3.5
UNE: Ethnicity

ETHNICITY

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	of Aboriginal or Torres Strait Islander descent?	3	2.8	37.5	37.5
	of Non English-speaking background?	5	4.7	62.5	100.0
	Total	8	7.5	100.0	
Missing	System	99	92.5		
Total		107	100.0		

Table D3.6
UNE: Time since last study

YRSLASTSTUDY

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 2 years	27	25.2	25.5	25.5
	2 - 5 years	23	21.5	21.7	47.2
	6 - 10 years	11	10.3	10.4	57.5
	More than 10 years	45	42.1	42.5	100.0
	Total	106	99.1	100.0	
Missing	System	1	.9		
Total		107	100.0		

Table D3.7
UNE: First in family to attend university

FIRSTINFAM

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	37	34.6	34.6	34.6
	No	70	65.4	65.4	100.0
	Total	107	100.0	100.0	

Table D3.8
UNE: Paid employment

PAIDJOB

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	71	66.4	66.4	66.4
	No	36	33.6	33.6	100.0
	Total	107	100.0	100.0	

Table D3.8a
UNE: Hours of paid employment

HRSPERWEEK

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 5 hours per week	2	1.9	2.8	2.8
	6 - 14 hours per week	9	8.4	12.5	15.3
	15 - 25 hours per week	16	15.0	22.2	37.5
	More than 25 hours per week	45	42.1	62.5	100.0
	Total	72	67.3	100.0	
Missing	System	35	32.7		
Total		107	100.0		

D4. Edith Cowan University

Table D4.1
ECU: Gender

GENDER

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	129	31.4	35.2	35.2
	Female	237	57.7	64.8	100.0
	Total	366	89.1	100.0	
Missing	System	45	10.9		
Total		411	100.0		

Table D4.2
ECU: Age

Key: 1: < 20; 2: 20-30; 3: 31-40; 4: 41-50; 5: > 50

AGE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	186	45.3	50.8	50.8
	2.00	134	32.6	36.6	87.4
	3.00	24	5.8	6.6	94.0
	4.00	15	3.6	4.1	98.1
	5.00	7	1.7	1.9	100.0
	Total	366	89.1	100.0	
Missing	System	45	10.9		
Total		411	100.0		

Table D4.3
ECU: Parental level of education

Key: 1: No school/primary only; 2: Some but not all secondary school; 3: All secondary school; 4: VET certificate/diploma; 5: Undergraduate degree/diploma; 6: Postgraduate degree/diploma.

PARENTEDUC

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	4	1.0	1.1	1.1
	2.00	73	17.8	20.0	21.1
	3.00	84	20.4	23.0	44.1
	4.00	72	17.5	19.7	63.8
	5.00	53	12.9	14.5	78.4
	6.00	53	12.9	14.5	92.9
	7.00	26	6.3	7.1	100.0
	Total	365	88.8	100.0	
Missing	System	46	11.2		
Total		411	100.0		

Table D4.4
ECU: Personal level of education

Key: 1: No school/primary only; 2: Some but not all secondary school; 3: All secondary school; 4: VET certificate/diploma

SELFEDUC

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	1	.2	.3	.3
	2.00	37	9.0	10.1	10.4
	3.00	197	47.9	53.8	64.2
	4.00	131	31.9	35.8	100.0
	Total	366	89.1	100.0	
Missing	System	45	10.9		
Total		411	100.0		

Table D4.5
ECU: Ethnicity

ETHNICITY

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	5	1.2	7.4	8.8
	2.00	62	15.1	91.2	100.0
	Total	68	16.5	100.0	
Missing	System	343	83.5		
Total		411	100.0		

Table D4.6
ECU: Time since last study

YRSLASTSTUDY

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	218	53.0	59.7	59.7
	2.00	73	17.8	20.0	79.7
	3.00	33	8.0	9.0	88.8
	4.00	41	10.0	11.2	100.0
	Total	365	88.8	100.0	
Missing	System	46	11.2		
Total		411	100.0		

Table D4.7
ECU: First in family to attend university

FIRSTINFAM

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	162	39.4	44.4	44.4
	2.00	203	49.4	55.6	100.0
	Total	365	88.8	100.0	
Missing	System	46	11.2		
Total		411	100.0		

Table D4.8
ECU: Paid employment

PAIDJOB

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	244	59.4	67.0	67.0
	2.00	119	29.0	32.7	99.7
	14.00	1	.2	.3	100.0
	Total	364	88.6	100.0	
Missing	System	47	11.4		
Total		411	100.0		

Appendix E: Data tables: Persistence and non-persistence

See section 3.31

E1. The University of Newcastle, University of South Australia and University of Southern Queensland

Table E1.1
Persistence and non-persistence by variables: Differences in Means by Institution (UoN, UniSA, USQ).

Note: Significance levels are shown in bold. A level less than 0.05 is considered to be significant. Also note that many results for Newcastle (Institution 2) are significant, while those for UniSA (Institution 4) and USQ (Institution 5) are not. In all cases, equal variances can be assumed.

Institution			t	df	**Sig. (2-tailed)**	Mean Difference
2.00	GENDER	Equal variances assumed	-1.403	1448	**.161**	-.03716
		Equal variances not assumed	-1.396	1077.716	**.163**	-.03716
	AGE	Equal variances assumed	2.769	1448	**.006**	.13946
		Equal variances not assumed	2.782	1109.253	**.006**	.13946
	PARENTEDUC	Equal variances assumed	-3.050	1383	**.002**	-.27127
		Equal variances not assumed	-3.068	1077.957	**.002**	-.27127
	SELFEDUC	Equal variances assumed	-3.469	1363	**.001**	-.13175
		Equal variances not assumed	-3.342	922.817	**.001**	-.13175
	Program	Equal variances assumed	1.855	1448	**.064**	.118
		Equal variances not assumed	1.878	1136.874	**.061**	.118
	YRSLASTSTUDY	Equal variances assumed	2.987	1444	**.003**	.17500
		Equal variances not assumed	2.992	1099.115	**.003**	.17500
	FIRSTINFAM	Equal variances assumed	-2.239	1441	**.025**	-.06138
		Equal variances not assumed	-2.240	1086.213	**.025**	-.06138
	PAIDJOB	Equal variances assumed	.211	1441	**.833**	.00535
		Equal variances not assumed	.210	1081.226	**.833**	.00535
	deepmotive	Equal variances assumed	.674	1383	**.500**	.02452
		Equal variances not assumed	.700	1169.377	**.484**	.02452
	deepstrat	Equal variances assumed	-.942	1372	**.346**	-.02903
		Equal variances not assumed	-.908	920.333	**.364**	-.02903
	surfmotive	Equal variances assumed	2.229	1344	**.026**	.07011
		Equal variances not assumed	2.131	878.237	**.033**	.07011
	surfstrat	Equal variances assumed	1.170	1356	**.242**	.03326
		Equal variances not assumed	1.162	1005.451	**.246**	.03326
	achievemot	Equal variances assumed	-1.443	1360	**.149**	-.04078
		Equal variances not assumed	-1.409	953.293	**.159**	-.04078
	achievestrat	Equal variances assumed	-2.216	1371	**.027**	-.07408
		Equal variances not assumed	-2.176	967.363	**.030**	-.07408
	deep	Equal variances assumed	-.001	1339	**1.000**	-.00002
		Equal variances not assumed	-.001	998.036	**1.000**	-.00002
	surface	Equal variances assumed	1.740	1303	**.082**	.04582
		Equal variances not assumed	1.701	913.658	**.089**	.04582

	achievement	Equal variances assumed	-2.222	1323	**.026**	-.05813
		Equal variances not assumed	-2.165	915.505	**.031**	-.05813
4.00	GENDER	Equal variances assumed	-1.216	169	**.226**	-.09972
		Equal variances not assumed	-1.208	101.530	**.230**	-.09972
	AGE	Equal variances assumed	-1.473	168	**.143**	-.22989
		Equal variances not assumed	-1.693	146.660	**.093**	-.22989
	PARENTEDUC	Equal variances assumed	.015	157	**.988**	.00503
		Equal variances not assumed	.016	104.299	**.988**	.00503
	SELFEDUC	Equal variances assumed	-.981	158	**.328**	-.11583
		Equal variances not assumed	-.944	84.268	**.348**	-.11583
	Program	Equal variances assumed	-.792	169	**.429**	-.058
		Equal variances not assumed	-.773	97.209	**.442**	-.058
	YRSLASTSTUDY	Equal variances assumed	-.670	168	**.504**	-.11885
		Equal variances not assumed	-.694	109.598	**.489**	-.11885
	FIRSTINFAM	Equal variances assumed	-.345	169	**.730**	-.02849
		Equal variances not assumed	-.344	102.351	**.731**	-.02849
	PAIDJOB	Equal variances assumed	.656	168	**.513**	.05428
		Equal variances not assumed	.655	103.226	**.514**	.05428
	deepmotive	Equal variances assumed	.204	162	**.839**	.02080
		Equal variances not assumed	.212	99.266	**.832**	.02080
	deepstrat	Equal variances assumed	-.082	158	**.934**	-.00800
		Equal variances not assumed	-.081	91.839	**.935**	-.00800
	surfmotive	Equal variances assumed	.609	154	**.543**	.05509
		Equal variances not assumed	.595	85.403	**.554**	.05509
	surfstrat	Equal variances assumed	-.186	157	**.853**	-.01662
		Equal variances not assumed	-.195	107.187	**.846**	-.01662
	achievemot	Equal variances assumed	.342	160	**.733**	.03400
		Equal variances not assumed	.365	110.691	**.716**	.03400
	achievestrat	Equal variances assumed	-1.024	159	**.307**	-.10995
		Equal variances not assumed	-1.031	99.226	**.305**	-.10995
	deep	Equal variances assumed	.120	154	**.904**	.01144
		Equal variances not assumed	.123	92.185	**.902**	.01144
	surface	Equal variances assumed	.233	147	**.816**	.01798
		Equal variances not assumed	.234	89.921	**.816**	.01798
	achievement	Equal variances assumed	-.359	155	**.720**	-.03399
		Equal variances not assumed	-.369	99.124	**.713**	-.03399
5.00	GENDER	Equal variances assumed	-.375	154	**.708**	-.02910
		Equal variances not assumed	-.375	153.987	**.708**	-.02910
	AGE	Equal variances assumed	-.552	153	**.582**	-.10922
		Equal variances not assumed	-.552	152.925	**.582**	-.10922
	PARENTEDUC	Equal variances assumed	.717	140	**.474**	.18980
		Equal variances not assumed	.715	136.920	**.476**	.18980
	SELFEDUC	Equal variances assumed	-.001	143	**.999**	-.00019
		Equal variances not assumed	-.001	142.072	**.999**	-.00019
	Program	Equal variances assumed	-.439	154	**.661**	-.096
		Equal variances not assumed	-.440	153.432	**.661**	-.096
	YRSLASTSTUDY	Equal variances assumed	-1.611	152	**.109**	-.32524
		Equal variances not assumed	-1.610	150.499	**.110**	-.32524
	FIRSTINFAM	Equal variances assumed	-.797	152	**.427**	-.06444
		Equal variances not assumed	-.797	151.852	**.427**	-.06444
	PAIDJOB	Equal variances assumed	.861	153	**.391**	.06912
		Equal variances not assumed	.861	152.578	**.391**	.06912
	deepmotive	Equal variances assumed	-.839	153	**.403**	-.07203
		Equal variances not assumed	-.840	150.596	**.402**	-.07203
	deepstrat	Equal variances assumed	-.726	148	**.469**	-.06060
		Equal variances not assumed	-.725	146.363	**.470**	-.06060
	surfmotive	Equal variances assumed	1.169	141	**.244**	.10501
		Equal variances not assumed	1.168	140.250	**.245**	.10501
	surfstrat	Equal variances assumed	.619	150	**.537**	.05000
		Equal variances not assumed	.619	148.849	**.537**	.05000
	achievemot	Equal variances assumed	-.313	147	**.754**	-.02663

		Equal variances not assumed	-.314	145.884	**.754**	-.02663
	achievestrat	Equal variances assumed	-1.451	145	**.149**	-.12103
		Equal variances not assumed	-1.451	144.991	**.149**	-.12103
	deep	Equal variances assumed	-.910	148	**.364**	-.07187
		Equal variances not assumed	-.909	145.986	**.365**	-.07187
	surface	Equal variances assumed	1.138	141	**.257**	.08577
		Equal variances not assumed	1.138	140.982	**.257**	.08577
	achievement	Equal variances assumed	-1.052	141	**.295**	-.07496
		Equal variances not assumed	-1.052	140.889	**.295**	-.07496

Table E1.2
UoN, USQ, UniSA: LSES and persistence – Group statistics

Institution		ATTRIT	N	Mean	Std. Deviation	Std. Error Mean
2.00	LSES	1.00	524	.3187	.46642	.02038
		2.00	914	.3479	.47657	.01576
4.00	LSES	1.00	52	.3654	.48624	.06743
		2.00	115	.2609	.44103	.04113
5.00	LSES	1.00	74	.4730	.50268	.05844
		2.00	77	.4675	.50222	.05723

Table E1.3
UoN, USQ, UniSA: LSES and persistence – t-tests

Institution			t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
2.00	LSES	Equal variances assumed	-1.128	1436	.260	-.02922	.02591
		Equal variances not assumed	-1.134	1108.872	.257	-.02922	.02576
4.00	LSES	Equal variances assumed	1.373	165	.172	.10452	.07612
		Equal variances not assumed	1.323	90.405	.189	.10452	.07898
5.00	LSES	Equal variances assumed	.067	149	.947	.00544	.08179
		Equal variances not assumed	.067	148.751	.947	.00544	.08179

E2. University of New England

Table E2.1

UNE: Means and SDs of persisting and non-persisting students

Group Statistics

	ATTRIT	N	Mean	Std. Deviation	Std. Error Mean
GENDER	1.00	64	1.7813	.41667	.05208
	2.00	41	1.7805	.41906	.06545
AGE	1.00	65	2.7231	.97640	.12111
	2.00	42	2.7619	1.24567	.19221
PARENTEDUC	1.00	65	3.7231	1.65367	.20511
	2.00	42	3.4286	1.32781	.20488
SELFEDUC	1.00	65	3.0154	.80024	.09926
	2.00	42	3.3571	.69217	.10680
STUDYTIME	1.00	65	3.0154	.76019	.09429
	2.00	42	3.0714	.83791	.12929
STUDYSPACE	1.00	65	3.3231	.90325	.11203
	2.00	42	3.1429	.87154	.13448
COMPUTER	1.00	65	3.8000	.56458	.07003
	2.00	42	3.8333	.58086	.08963
FAMSUPPORT	1.00	65	3.6769	.75224	.09330
	2.00	42	3.8571	.41739	.06440
YRSLASTSTUDY	1.00	65	2.8000	1.25250	.15535
	2.00	41	2.5366	1.26684	.19785
FIRSTINFAM	1.00	65	1.6462	.48188	.05977
	2.00	42	1.6667	.47712	.07362
PAIDJOB	1.00	65	1.3538	.48188	.05977
	2.00	42	1.3095	.46790	.07220
ORIENT	1.00	48	2.29	.683	.099
	2.00	28	2.00	.667	.126
DEEPMOTIVE	1.00	62	2.8677	.56446	.07169
	2.00	40	2.9250	.58122	.09190
DEEPSTRAT	1.00	62	2.9903	.48374	.06143
	2.00	39	3.0615	.49023	.07850
SURFMOT	1.00	62	1.7548	.45725	.05807
	2.00	39	1.7385	.44992	.07205
SURFSTRAT	1.00	62	1.9806	.52817	.06708
	2.00	38	1.9105	.44283	.07184
ACHIEVEMOT	1.00	63	2.4857	.47480	.05982
	2.00	40	2.5150	.38931	.06156
ACHIEVESTRAT	1.00	60	2.8433	.51564	.06657
	2.00	39	2.8256	.51540	.08253
DEEP	1.00	61	2.9311	.48906	.06262
	2.00	39	2.9949	.49786	.07972
SURFACE	1.00	61	1.8738	.41589	.05325
	2.00	37	1.8405	.40032	.06581
ACHIEVE	1.00	60	2.6600	.41628	.05374
	2.00	39	2.6667	.34514	.05527

Table E2.2

UNE: Differences between persisting and non-persisting students

Independent Samples Test		t	df	**Sig. (2-tailed)**	Mean Difference
GENDER	Equal variances assumed				
	Equal variances not assumed	.009	85.051	**.993**	.00076
AGE	Equal variances assumed	-.180	105	**.857**	-.03883
	Equal variances not assumed	-.171	72.678	**.865**	-.03883
PARENTEDUC	Equal variances assumed	.969	105	**.335**	.29451
	Equal variances not assumed	1.016	100.010	**.312**	.29451
SELFEDUC	Equal variances assumed	-2.272	105	**.025**	-.34176
	Equal variances not assumed	-2.344	96.359	**.021**	-.34176
STUDYTIME	Equal variances assumed	-.358	105	**.721**	-.05604
	Equal variances not assumed	-.350	81.449	**.727**	-.05604
STUDYSPACE	Equal variances assumed	1.022	105	**.309**	.18022
	Equal variances not assumed	1.030	89.914	**.306**	.18022
COMPUTER	Equal variances assumed	-.295	105	**.769**	-.03333
	Equal variances not assumed	-.293	85.842	**.770**	-.03333
FAMSUPPORT	Equal variances assumed	-1.417	105	**.160**	-.18022
	Equal variances not assumed	-1.590	103.012	**.115**	-.18022
YRSLASTSTUDY	Equal variances assumed	1.050	104	**.296**	.26341
	Equal variances not assumed	1.047	84.463	**.298**	.26341
FIRSTINFAM	Equal variances assumed	-.216	105	**.830**	-.02051
	Equal variances not assumed	-.216	88.288	**.829**	-.02051
PAIDJOB	Equal variances assumed	.470	105	**.639**	.04432
	Equal variances not assumed	.473	89.520	**.637**	.04432
ORIENT	Equal variances assumed	1.812	74	**.074**	.292
	Equal variances not assumed	1.823	57.739	**.073**	.292
DEEPMOTIVE	Equal variances assumed	-.494	100	**.622**	-.05726
	Equal variances not assumed	-.491	81.588	**.625**	-.05726
DEEPSTRAT	Equal variances assumed	-.717	99	**.475**	-.07122
	Equal variances not assumed	-.714	80.088	**.477**	-.07122
SURFMOT	Equal variances assumed	.176	99	**.860**	.01638
	Equal variances not assumed	.177	81.884	**.860**	.01638
SURFSTRAT	Equal variances assumed	.684	98	**.496**	.07012
	Equal variances not assumed	.713	88.732	**.477**	.07012
ACHIEVEMOT	Equal variances assumed	-.326	101	**.745**	-.02929
	Equal variances not assumed	-.341	94.455	**.734**	-.02929
ACHIEVESTRAT	Equal variances assumed	.167	97	**.868**	.01769
	Equal variances not assumed	.167	81.352	**.868**	.01769
DEEP	Equal variances assumed	-.631	98	**.529**	-.06372
	Equal variances not assumed	-.629	80.053	**.531**	-.06372
SURFACE	Equal variances assumed	.389	96	**.698**	.03323
	Equal variances not assumed	.393	78.404	**.696**	.03323
ACHIEVE	Equal variances assumed	-.083	97	**.934**	-.00667
	Equal variances not assumed	-.086	91.276	**.931**	-.00667

E3. Edith Cowan University

Table E3.1
ECU: Means and SDs for Demographics and Approaches to Learning for Persisters and Non-Persisters

	ATTRIT	N	Mean	Std. Deviation	Std. Error Mean
LSES	1.00	54	1.8889	.31722	.04317
	2.00	265	1.8340	.37282	.02290
GENDER	1.00	55	1.6909	.46638	.06289
	2.00	267	1.6404	.48077	.02942
AGE	1.00	55	1.7273	.80403	.10842
	2.00	267	1.6404	.88743	.05431
PARENTEDUC	1.00	55	3.9818	1.59270	.21476
	2.00	266	3.9962	1.56011	.09566
SELFEDUC	1.00	55	3.1636	.71398	.09627
	2.00	267	3.2697	.60878	.03726
STUDYTIME	1.00	52	2.9038	.86907	.12052
	2.00	262	3.0382	.77711	.04801
STUDYSPACE	1.00	53	2.7547	.97873	.13444
	2.00	265	3.0830	.83524	.05131
COMPUTER	1.00	51	3.5098	.88029	.12326
	2.00	258	3.7326	.58697	.03654
FAMSUPPORT	1.00	49	3.5714	.61237	.08748
	2.00	259	3.6448	.68574	.04261
YRSLASTSTUDY	1.00	55	1.7636	.98062	.13223
	2.00	266	1.6842	1.02326	.06274
FIRSTINFAM	1.00	55	1.6182	.49031	.06611
	2.00	266	1.5526	.49816	.03054
PAIDJOB	1.00	55	1.3455	.47990	.06471
	2.00	265	1.3698	.90821	.05579
HRSPERWEEK	1.00	36	2.9444	.79082	.13180
	2.00	187	2.5134	.80561	.05891
DEEPMOT1	1.00	50	2.6360	.56955	.08055
	2.00	251	2.6430	.61193	.03862
DEEPSTRAT1	1.00	50	2.8440	.56754	.08026
	2.00	248	2.8105	.53331	.03387
SURFMOT1	1.00	49	2.1020	.55696	.07957
	2.00	239	1.9975	.53624	.03469
SURFSTRAT1	1.00	52	2.3269	.57262	.07941
	2.00	251	2.3060	.53822	.03397
ACHIEVEMOT1	1.00	52	2.7962	.49068	.06805
	2.00	247	2.8858	.54795	.03487
ACHIEVESTRAT1	1.00	52	2.8731	.56711	.07864
	2.00	251	2.8685	.54940	.03468
DEEP1	1.00	47	2.7255	.55265	.08061
	2.00	242	2.7285	.54519	.03505
SURFACE1	1.00	48	2.2021	.50085	.07229
	2.00	232	2.1526	.46486	.03052
ACHIEVE1	1.00	51	2.8255	.45071	.06311
	2.00	238	2.8664	.44952	.02914

Table E3.2
ECU: Differences between Persisters and Non-Persisters

		t	df	**Sig. (2-tailed)**	Mean Difference
LSES	Equal variances assumed	1.010	317	**.313**	.05493
	Equal variances not assumed	1.124	85.671	**.264**	.05493
GENDER	Equal variances assumed	.712	320	**.477**	.05046
	Equal variances not assumed	.727	79.456	**.469**	.05046
AGE	Equal variances assumed	.671	320	**.503**	.08682
	Equal variances not assumed	.716	83.436	**.476**	.08682
PARENTEDUC	Equal variances assumed	-.062	319	**.950**	-.01442
	Equal variances not assumed	-.061	76.935	**.951**	-.01442
SELFEDUC	Equal variances assumed	-1.141	320	**.255**	-.10603
	Equal variances not assumed	-1.027	71.062	**.308**	-.10603
STUDYTIME	Equal variances assumed	-1.116	312	**.265**	-.13432
	Equal variances not assumed	-1.035	68.136	**.304**	-.13432
STUDYSPACE	Equal variances assumed	-2.536	316	**.012**	-.32830
	Equal variances not assumed	-2.282	67.967	**.026**	-.32830
COMPUTER	Equal variances assumed	-2.257	307	**.025**	-.22275
	Equal variances not assumed	-1.733	59.086	**.088**	-.22275
FAMSUPPORT	Equal variances assumed	-.698	306	**.486**	-.07336
	Equal variances not assumed	-.754	72.715	**.453**	-.07336
YRSLASTSTUDY	Equal variances assumed	.528	319	**.598**	.07943
	Equal variances not assumed	.543	80.224	**.589**	.07943
FIRSTINFAM	Equal variances assumed	.891	319	**.374**	.06555
	Equal variances not assumed	.900	78.780	**.371**	.06555
PAIDJOB	Equal variances assumed	-.193	318	**.847**	-.02436
	Equal variances not assumed	-.285	147.453	**.776**	-.02436
HRSPERWEEK	Equal variances assumed	2.948	221	**.004**	.43108
	Equal variances not assumed	2.986	50.006	**.004**	.43108
DEEPMOT1	Equal variances assumed	-.075	299	**.940**	-.00703
	Equal variances not assumed	-.079	73.366	**.938**	-.00703
DEEPSTRAT1	Equal variances assumed	.401	296	**.689**	.03352
	Equal variances not assumed	.385	67.575	**.702**	.03352
SURFMOT1	Equal variances assumed	1.235	286	**.218**	.10455
	Equal variances not assumed	1.205	67.487	**.233**	.10455
SURFSTRAT1	Equal variances assumed	.253	301	**.801**	.02095
	Equal variances not assumed	.243	70.893	**.809**	.02095
ACHIEVEMOT1	Equal variances assumed	-1.091	297	**.276**	-.08968
	Equal variances not assumed	-1.173	80.148	**.244**	-.08968
ACHIEVESTRAT1	Equal variances assumed	.054	301	**.957**	.00455
	Equal variances not assumed	.053	72.204	**.958**	.00455
DEEP1	Equal variances assumed	-.034	287	**.973**	-.00298
	Equal variances not assumed	-.034	64.592	**.973**	-.00298
SURFACE1	Equal variances assumed	.663	278	**.508**	.04950
	Equal variances not assumed	.631	64.828	**.530**	.04950
ACHIEVE1	Equal variances assumed	-.589	287	**.556**	-.04090
	Equal variances not assumed	-.588	72.889	**.558**	-.04090

Appendix F: Data tables: Persisting students – engagement

For discussion, see section 3.2

F1. The University of Newcastle

The following table gives details of means and SDs for each of the groups examined. Group 1= OF by Distance (part-time, external), Group 2 = Newstep (full-time, internal), Group 3 = OF part-time (internal) and Group 4 = Intensive (full-time, internal, semester 2 only).

Table F1.1
UoN: Means and SDs for Attrition across three program groups

Program	N	**Mean**	Std. Deviation	Std. Error
1.00	51	**1.5294**	.50410	.07059
2.00	555	**1.7081**	.45504	.01932
3.00	844	**1.5960**	.49099	.01690
Total	1450	**1.6366**	.48116	.01264

Table F1.2
UoN: Post hoc comparisons between Program Groups

(I) Program	(J) Program	Mean Difference (I-J)	Std. Error	**Sig.**
1.00	2.00	-.17870*	.06994	**.011**
	3.00	-.06656	.06893	**.334**
2.00	1.00	.17870*	.06994	**.011**
	3.00	.11214*	.02612	**.000**
3.00	1.00	.06656	.06893	**.334**
	2.00	-.11214*	.02612	**.000**

Table F1.3
UoN: Attrition rates across the three Program Groups

ATTRITION

Program			Frequency	Percent	Valid Percent	Cumulative Percent
1.00	Valid	1.00	24	45.3	47.1	47.1
		2.00	27	50.9	52.9	100.0
		Total	51	96.2	100.0	
	Missing	System	2	3.8		
	Total		53	100.0		
2.00	Valid	1.00	162	29.2	29.2	29.2
		2.00	393	70.8	70.8	100.0
		Total	555	100.0	100.0	
3.00	Valid	1.00	341	40.2	40.4	40.4
		2.00	503	59.3	59.6	100.0
		Total	844	99.5	100.0	
	Missing	System	4	.5		
	Total		848	100.0		

Table F1.4
UoN Engagement by Program groups: Descriptive Statistics

		N	Mean	Std. Deviation	Std. Error
CONSULT	1.00	3	2.5238	.29738	.17169
	2.00	251	2.4650	.54298	.03427
	3.00	333	2.4307	.55345	.03033
	Total	587	2.4459	.54767	.02260
COOP	1.00	2	1.1667	.23570	.16667
	2.00	248	2.1788	.67660	.04296
	3.00	340	1.9657	.65110	.03531
	Total	590	2.0525	.67066	.02761
ORGANISED	1.00	8	2.8125	.45806	.16195
	2.00	255	2.4529	.62253	.03898
	3.00	354	2.4308	.64762	.03442
	Total	617	2.4449	.63594	.02560

Table F1.5
UoN: One-Way ANOVA Engagement by Program Groups

Dependent Variable	(I) condensprog	(J) condensprog	Mean Difference (I-J)	Std. Error	**Sig.**
CONSULT	1.00	2.00	.05881	.31845	**.854**
		3.00	.09309	.31799	**.770**
	2.00	1.00	-.05881	.31845	**.854**
		3.00	.03428	.04583	**.455**
	3.00	1.00	-.09309	.31799	**.770**
		2.00	-.03428	.04583	**.455**
COOP	1.00	2.00	-1.01210*	.46962	**.032**
		3.00	-.79902	.46911	**.089**
	2.00	1.00	1.01210*	.46962	**.032**
		3.00	.21308*	.05524	**.000**
	3.00	1.00	.79902	.46911	**.089**
		2.00	-.21308*	.05524	**.000**
ORGANISED	1.00	2.00	.35956	.22817	**.116**
		3.00	.38171	.22720	**.093**
	2.00	1.00	-.35956	.22817	**.116**
		3.00	.02215	.05220	**.671**
	3.00	1.00	-.38171	.22720	**.093**
		2.00	-.02215	.05220	**.671**
		3.00	-.10407	.30708	**.735**

Table F1.6
UoN: Modified Groups by Engagement - Descriptive Statistics

		N	Mean	Std. Deviation	Std. Error
CONSULT	1.00	3	2.5238	.29738	.17169
	2.00	251	2.4650	.54298	.03427
	3.00	333	2.4307	.55345	.03033
	4.00	239	2.4262	.57247	.03703
	Total	826	2.4402	.55468	.01930
COOP	1.00	2	1.1667	.23570	.16667
	2.00	248	2.1788	.67660	.04296
	3.00	340	1.9657	.65110	.03531
	4.00	235	2.1688	.71901	.04690
	Total	825	2.0857	.68635	.02390
ORGANISED	1.00	8	2.8125	.45806	.16195
	2.00	255	2.4529	.62253	.03898
	3.00	354	2.4308	.64762	.03442
	4.00	249	2.4759	.58322	.03696
	Total	866	2.4538	.62107	.02110

Table F1.7
UoN Comparisons between Program Groups

Multiple Comparisons
LSD

Dependent Variable	(I) CONDENSPROG	(J) CONDENSPROG	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
CONSULT	1.00	2.00	.05881	.32258	.855	-.5744	.6920
		3.00	.09309	.32211	.773	-.5392	.7253
		4.00	.09763	.32268	.762	-.5357	.7310
	2.00	1.00	-.05881	.32258	.855	-.6920	.5744
		3.00	.03428	.04643	.460	-.0568	.1254
		4.00	.03882	.05020	.440	-.0597	.1373
	3.00	1.00	-.09309	.32211	.773	-.7253	.5392
		2.00	-.03428	.04643	.460	-.1254	.0568
		4.00	.00454	.04709	.923	-.0879	.0970
	4.00	1.00	-.09763	.32268	.762	-.7310	.5357
		2.00	-.03882	.05020	.440	-.1373	.0597
		3.00	-.00454	.04709	.923	-.0970	.0879
COOP	1.00	2.00	-1.01210*	.48161	.036	-1.9574	-.0668
		3.00	-.79902	.48109	.097	-1.7433	.1453
		4.00	-1.00213*	.48172	.038	-1.9477	-.0566
	2.00	1.00	1.01210*	.48161	.036	.0668	1.9574
		3.00	.21308*	.05665	.000	.1019	.3243
		4.00	.00997	.06176	.872	-.1112	.1312
	3.00	1.00	.79902	.48109	.097	-.1453	1.7433
		2.00	-.21308*	.05665	.000	-.3243	-.1019
		4.00	-.20311*	.05755	.000	-.3161	-.0902
	4.00	1.00	1.00213*	.48172	.038	.0566	1.9477
		2.00	-.00997	.06176	.872	-.1312	.1112
		3.00	.20311*	.05755	.000	.0902	.3161
ORGANISED	1.00	2.00	.35956	.22294	.107	-.0780	.7971
		3.00	.38171	.22199	.086	-.0540	.8174
		4.00	.33660	.22302	.132	-.1011	.7743
	2.00	1.00	-.35956	.22294	.107	-.7971	.0780
		3.00	.02215	.05100	.664	-.0779	.1222
		4.00	-.02296	.05532	.678	-.1315	.0856
	3.00	1.00	-.38171	.22199	.086	-.8174	.0540
		2.00	-.02215	.05100	.664	-.1222	.0779
		4.00	-.04511	.05135	.380	-.1459	.0557
	4.00	1.00	-.33660	.22302	.132	-.7743	.1011
		2.00	.02296	.05532	.678	-.0856	.1315
		3.00	.04511	.05135	.380	-.0557	.1459

*. The mean difference is significant at the 0.05 level.

Table F1.8
UoN: Semester 1 engagement descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CONSULT	597	1.00	4.00	2.4427	.54647
COOP	602	1.00	4.00	2.0471	.66930
ORGANISED	629	1.00	4.00	2.4467	.63279
ENGAGEMENT	576	1.19	3.83	2.3100	.43139
Valid N (listwise)	576				

Table F1.9
UoN: semester 2 engagement descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CONSULT	240	1.14	4.00	2.4274	.57158
COOP	235	1.00	4.00	2.1688	.71901
ORGANISED	250	1.00	4.00	2.4780	.58299
ENGAGEMENT	223	1.21	3.61	2.3568	.44797
Valid N (listwise)	223				

Table F1.10
UoN: Semester 2 engagement Principal Components Analysis

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
dimension0 1	3.687	30.724	30.724	3.687	30.724	30.724	3.264	27.201	27.201
2	1.449	12.076	42.799	1.449	12.076	42.799	1.776	14.798	41.999
3	1.148	9.569	52.369	1.148	9.569	52.369	1.244	10.370	52.369
4	.988	8.229	60.598						
5	.950	7.913	68.511						
6	.762	6.346	74.858						
7	.677	5.642	80.499						
8	.658	5.484	85.983						
9	.598	4.983	90.966						
10	.400	3.331	94.297						
11	.368	3.063	97.359						
12	.317	2.641	100.000						

Extraction Method: Principal Component Analysis.

F2. University of New England

Table F2.1
UNE: Student engagement

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CONSULTATIVE	57	1.00	3.25	2.1316	.53683
COOPERATIVE	56	1.00	3.50	2.0357	.68661
ORGANISED	57	1.00	4.00	2.7982	.62578
Valid N (listwise)	55				

F3. Edith Cowan University

Table F3.1
ECU: Mean Levels of Engagement: Descriptive statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Consultative	73	1.57	3.86	2.4814	.45207
Cooperative	78	1.00	4.00	2.4017	.72147
Organised	79	1.00	3.50	2.2025	.58022
Valid N (listwise)	69				

Appendix G: Data tables: Exit Surveys

G1. The University of Newcastle

Table G1.1
Notime

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of no importance at all	18	21.4	28.1	28.1
	2.00	4	4.8	6.3	34.4
	3.00	19	22.6	29.7	64.1
	4.00	23	27.4	35.9	100.0
	Total	64	76.2	100.0	
Missing	System	20	23.8		
Total		84	100.0		

Table G1.2
Nomoney

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of no importance at all	34	40.5	54.0	54.0
	2.00	13	15.5	20.6	74.6
	3.00	6	7.1	9.5	84.1
	4.00	10	11.9	15.9	100.0
	Total	63	75.0	100.0	
Missing	System	21	25.0		
Total		84	100.0		

Table G1.3
Medicalprob

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of no importance at all	46	54.8	74.2	74.2
	2.00	1	1.2	1.6	75.8
	3.00	3	3.6	4.8	80.6
	4.00	12	14.3	19.4	100.0
	Total	62	73.8	100.0	
Missing	System	22	26.2		
Total		84	100.0		

Table G1.4

Familyprob

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of no importance at all	38	45.2	59.4	59.4
	2.00	7	8.3	10.9	70.3
	3.00	9	10.7	14.1	84.4
	4.00	10	11.9	15.6	100.0
	Total	64	76.2	100.0	
Missing	System	20	23.8		
Total		84	100.0		

Table G1.5

travelprob

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of no importance at all	41	48.8	75.9	75.9
	2.00	6	7.1	11.1	87.0
	3.00	3	3.6	5.6	92.6
	4.00	4	4.8	7.4	100.0
	Total	54	64.3	100.0	
Missing	System	30	35.7		
Total		84	100.0		

Table G1.6

skillsprob

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of no importance at all	35	41.7	55.6	55.6
	2.00	13	15.5	20.6	76.2
	3.00	8	9.5	12.7	88.9
	4.00	7	8.3	11.1	100.0
	Total	63	75.0	100.0	
Missing	System	21	25.0		
Total		84	100.0		

Table G1.7

infoinadequate

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of no importance at all	41	48.8	65.1	65.1
	2.00	13	15.5	20.6	85.7
	3.00	6	7.1	9.5	95.2
	4.00	3	3.6	4.8	100.0
	Total	63	75.0	100.0	
Missing	System	21	25.0		
Total		84	100.0		

Table G1.8

priorprob

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of no importance at all	44	52.4	71.0	71.0
	2.00	6	7.1	9.7	80.6
	3.00	11	13.1	17.7	98.4
	4.00	1	1.2	1.6	100.0
	Total	62	73.8	100.0	
Missing	System	22	26.2		
Total		84	100.0		

Table G1.9

diststudyprob

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of no importance at all	34	40.5	70.8	70.8
	2.00	4	4.8	8.3	79.2
	3.00	5	6.0	10.4	89.6
	4.00	5	6.0	10.4	100.0
	Total	48	57.1	100.0	
Missing	System	36	42.9		
Total		84	100.0		

Table G1.10

Particevent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	57	67.9	78.1	78.1
	No	16	19.0	21.9	100.0
	Total	73	86.9	100.0	
Missing	System	11	13.1		
Total		84	100.0		

Table G1.11

newjob

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.I took on a new job	8	9.5	88.9	88.9
	2.00	1	1.2	11.1	100.0
	Total	9	10.7	100.0	
Missing	System	75	89.3		
Total		84	100.0		

Table G1.12

Workmore

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	12	14.3	100.0	100.0
Missing	System	72	85.7		
Total		84	100.0		

Table G1.13

Illness

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	1	1.2	7.7	7.7
	3.00	12	14.3	92.3	100.0
	Total	13	15.5	100.0	
Missing	System	71	84.5		
Total		84	100.0		

Table G1.14

childcare

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4.00	2	2.4	100.0	100.0
Missing	System	82	97.6		
Total		84	100.0		

Table G1.15

assignment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5.I panicked when the time to submit the first assignment go	1	1.2	20.0	20.0
	5.00	4	4.8	80.0	100.0
	Total	5	6.0	100.0	
Missing	System	79	94.0		
Total		84	100.0		

Table G1.16

assresults

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6.00	4	4.8	100.0	100.0
Missing	System	80	95.2		
Total		84	100.0		

Table G1.17

other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7.Other	1	1.2	4.8	4.8
	7.00	20	23.8	95.2	100.0
	Total	21	25.0	100.0	
Missing	System	63	75.0		
Total		84	100.0		

Table G1.18

weekleft

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Week 1	10	11.9	17.2	17.2
	Week 2	5	6.0	8.6	25.9
	Week 3	4	4.8	6.9	32.8
	Week 4	7	8.3	12.1	44.8
	Week 5	4	4.8	6.9	51.7
	Week 6	6	7.1	10.3	62.1
	Week 7	4	4.8	6.9	69.0
	Week 8	2	2.4	3.4	72.4
	Week 9	3	3.6	5.2	77.6
	Week 10	1	1.2	1.7	79.3
	Week 11	1	1.2	1.7	81.0
	Week 12	4	4.8	6.9	87.9
	Week 13	3	3.6	5.2	93.1
	After Week 13	4	4.8	6.9	100.0
	Total	58	69.0	100.0	
Missing	System	26	31.0		
Total		84	100.0		

Table G1.19

Infcontent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not well informed	7	8.3	10.6	10.6
	Fairly well informed	20	23.8	30.3	40.9
	Well informed	23	27.4	34.8	75.8
	Very well informed	16	19.0	24.2	100.0
	Total	66	78.6	100.0	
Missing	System	18	21.4		
Total		84	100.0		

Table G1.20

Acadhelp

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Impossible	1	1.2	1.7	1.7
	Difficult	16	19.0	27.6	29.3
	Fairly easy	22	26.2	37.9	67.2
	No problems	19	22.6	32.8	100.0
	Total	58	69.0	100.0	
Missing	System	26	31.0		
Total		84	100.0		

Table G1.21

Pershelp

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Impossible	4	4.8	7.0	7.0
	Difficult	19	22.6	33.3	40.4
	Fairly easy	17	20.2	29.8	70.2
	No problems	17	20.2	29.8	100.0
	Total	57	67.9	100.0	
Missing	System	27	32.1		
Total		84	100.0		

Table G1.22

Financehelp

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Impossible	5	6.0	9.3	9.3
	Difficult	10	11.9	18.5	27.8
	Fairly easy	16	19.0	29.6	57.4
	No problems	23	27.4	42.6	100.0
	Total	54	64.3	100.0	
Missing	System	30	35.7		
Total		84	100.0		

Table G1.23

Careerhelp

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Impossible	1	1.2	1.9	1.9
	Difficult	9	10.7	17.0	18.9
	Fairly easy	20	23.8	37.7	56.6
	No problems	23	27.4	43.4	100.0
	Total	53	63.1	100.0	
Missing	System	31	36.9		
Total		84	100.0		

Table G1.24

Progprep

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all prepared	12	14.3	19.4	19.4
	Somewhat prepared	27	32.1	43.5	62.9
	Sufficiently well prepared	20	23.8	32.3	95.2
	Very well prepared	3	3.6	4.8	100.0
	Total	62	73.8	100.0	
Missing	System	22	26.2		
Total		84	100.0		

Table G1.25

Workharder

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	41	48.8	73.2	73.2
	No	7	8.3	12.5	85.7
	About the same	8	9.5	14.3	100.0
	Total	56	66.7	100.0	
Missing	System	28	33.3		
Total		84	100.0		

Table G1.26

Secuse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	27	32.1	50.9	50.9
	2.00	15	17.9	28.3	79.2
	3.00	1	1.2	1.9	81.1
	4.00	10	11.9	18.9	100.0
	Total	53	63.1	100.0	
Missing	System	31	36.9		
Total		84	100.0		

Table G1.27

secqual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	10	11.9	62.5	62.5
	3.00	6	7.1	37.5	100.0
	Total	16	19.0	100.0	
Missing	System	68	81.0		
Total		84	100.0		

Table G1.28

adminuse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	6	7.1	10.7	10.7
	2.00	14	16.7	25.0	35.7
	3.00	10	11.9	17.9	53.6
	4.00	26	31.0	46.4	100.0
	Total	56	66.7	100.0	
Missing	System	28	33.3		
Total		84	100.0		

Table G1.29

adminqual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	17	20.2	47.2	47.2
	3.00	17	20.2	47.2	94.4
	4.00	2	2.4	5.6	100.0
	Total	36	42.9	100.0	
Missing	System	48	57.1		
Total		84	100.0		

Table G1.30

mentoruse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	15	17.9	26.8	26.8
	2.00	36	42.9	64.3	91.1
	4.00	5	6.0	8.9	100.0
	Total	56	66.7	100.0	
Missing	System	28	33.3		
Total		84	100.0		

Table G1.31

mentorqual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quality of service: POOG1.	2	2.4	14.3	14.3
	2.00	8	9.5	57.1	71.4
	3.00	4	4.8	28.6	100.0
	Total	14	16.7	100.0	
Missing	System	70	83.3		
Total		84	100.0		

Table G1.32

coorduse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	7	8.3	13.0	13.0
	2.00	27	32.1	50.0	63.0
	3.00	8	9.5	14.8	77.8
	4.00	12	14.3	22.2	100.0
	Total	54	64.3	100.0	
Missing	System	30	35.7		
Total		84	100.0		

Table G1.33

coordqual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quality of service: POOR.	3	3.6	11.1	11.1
	2.00	12	14.3	44.4	55.6
	3.00	12	14.3	44.4	100.0
	Total	27	32.1	100.0	
Missing	System	57	67.9		
Total		84	100.0		

Table G1.34

libraryuse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	2	2.4	3.9	3.9
	2.00	19	22.6	37.3	41.2
	3.00	4	4.8	7.8	49.0
	4.00	26	31.0	51.0	100.0
	Total	51	60.7	100.0	
Missing	System	33	39.3		
Total		84	100.0		

Table G1.35

libraryqual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	13	15.5	37.1	37.1
	3.00	21	25.0	60.0	97.1
	4.00	1	1.2	2.9	100.0
	Total	35	41.7	100.0	
Missing	System	49	58.3		
Total		84	100.0		

Table G1.36

accomuse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	11	13.1	23.4	23.4
	2.00	34	40.5	72.3	95.7
	4.00	2	2.4	4.3	100.0
	Total	47	56.0	100.0	
Missing	System	37	44.0		
Total		84	100.0		

Table G1.37

accomqual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quality of service: POOR	1	1.2	12.5	12.5
	2.00	6	7.1	75.0	87.5
	3.00	1	1.2	12.5	100.0
	Total	8	9.5	100.0	
Missing	System	76	90.5		
Total		84	100.0		

Table G1.38

loansuse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	15	17.9	31.9	31.9
	2.00	30	35.7	63.8	95.7
	4.00	2	2.4	4.3	100.0
	Total	47	56.0	100.0	
Missing	System	37	44.0		
Total		84	100.0		

Table G1.39

loansqual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quality of service: POOR	1	1.2	12.5	12.5
	2.00	6	7.1	75.0	87.5
	3.00	1	1.2	12.5	100.0
	Total	8	9.5	100.0	
Missing	System	76	90.5		
Total		84	100.0		

Table G1.40

Learnsuppuse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	10	11.9	19.2	19.2
	2.00	29	34.5	55.8	75.0
	3.00	1	1.2	1.9	76.9
	4.00	12	14.3	23.1	100.0
	Total	52	61.9	100.0	
Missing	System	32	38.1		
Total		84	100.0		

Table G1.41

Learnsuppqual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quality of service: POOR	1	1.2	5.3	5.3
	2.00	9	10.7	47.4	52.6
	3.00	9	10.7	47.4	100.0
	Total	19	22.6	100.0	
Missing	System	65	77.4		
Total		84	100.0		

Table G1.42

Counselluse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	9	10.7	17.0	17.0
	2.00	40	47.6	75.5	92.5
	4.00	4	4.8	7.5	100.0
	Total	53	63.1	100.0	
Missing	System	31	36.9		
Total		84	100.0		

Table G1.43

Chaplainuse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	15	17.9	30.0	30.0
	2.00	33	39.3	66.0	96.0
	4.00	2	2.4	4.0	100.0
	Total	50	59.5	100.0	
Missing	System	34	40.5		
Total		84	100.0		

Table G1.44

Chaplainqual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	6	7.1	85.7	85.7
	3.00	1	1.2	14.3	100.0
	Total	7	8.3	100.0	
Missing	System	77	91.7		
Total		84	100.0		

Table G1.45

Careeruse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	9	10.7	17.6	17.6
	2.00	38	45.2	74.5	92.2
	3.00	1	1.2	2.0	94.1
	4.00	3	3.6	5.9	100.0
	Total	51	60.7	100.0	
Missing	System	33	39.3		
Total		84	100.0		

Table G1.46

Careerqual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quality of service: POOR	1	1.2	9.1	9.1
	2.00	8	9.5	72.7	81.8
	3.00	2	2.4	18.2	100.0
	Total	11	13.1	100.0	
Missing	System	73	86.9		
Total		84	100.0		

Table G1.47

Healthuse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	10	11.9	18.9	18.9
	2.00	40	47.6	75.5	94.3
	4.00	3	3.6	5.7	100.0
	Total	53	63.1	100.0	
Missing	System	31	36.9		
Total		84	100.0		

Table G1.48

Healthqual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quality of service: POOR	1	1.2	9.1	9.1
	2.00	7	8.3	63.6	72.7
	3.00	3	3.6	27.3	100.0
	Total	11	13.1	100.0	
Missing	System	73	86.9		
Total		84	100.0		

Table G1.49

Distsuppuse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	12	14.3	35.3	35.3
	2.00	15	17.9	44.1	79.4
	3.00	2	2.4	5.9	85.3
	4.00	5	6.0	14.7	100.0
	Total	34	40.5	100.0	
Missing	System	50	59.5		
Total		84	100.0		

Table G1.50

Distsuppqual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quality of service: POOR	1	1.2	10.0	10.0
	2.00	6	7.1	60.0	70.0
	3.00	2	2.4	20.0	90.0
	4.00	1	1.2	10.0	100.0
	Total	10	11.9	100.0	
Missing	System	74	88.1		
Total		84	100.0		

Table G1.51

Questions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	12	14.3	26.1	26.1
	Sometimes	24	28.6	52.2	78.3
	Often	5	6.0	10.9	89.1
	Very often	5	6.0	10.9	100.0
	Total	46	54.8	100.0	
Missing	System	38	45.2		
Total		84	100.0		

Table G1.52

advice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	15	17.9	26.8	26.8
	Sometimes	30	35.7	53.6	80.4
	Often	9	10.7	16.1	96.4
	Very often	2	2.4	3.6	100.0
	Total	56	66.7	100.0	
Missing	System	28	33.3		
Total		84	100.0		

Table G1.53

libraryresc

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	13	15.5	23.6	23.6
	Sometimes	18	21.4	32.7	56.4
	Often	13	15.5	23.6	80.0
	Very often	11	13.1	20.0	100.0
	Total	55	65.5	100.0	
Missing	System	29	34.5		
Total		84	100.0		

Table G1.54

contentdiff

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	7	8.3	13.0	13.0
	Sometimes	17	20.2	31.5	44.4
	Often	20	23.8	37.0	81.5
	Very often	10	11.9	18.5	100.0
	Total	54	64.3	100.0	
Missing	System	30	35.7		
Total		84	100.0		

Table G1.55

workplace

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	15	17.9	27.3	27.3
	Sometimes	19	22.6	34.5	61.8
	Often	14	16.7	25.5	87.3
	Very often	7	8.3	12.7	100.0
	Total	55	65.5	100.0	
Missing	System	29	34.5		
Total		84	100.0		

Table G1.56

noreading

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	26	31.0	57.8	57.8
	Sometimes	15	17.9	33.3	91.1
	Often	3	3.6	6.7	97.8
	Very often	1	1.2	2.2	100.0
	Total	45	53.6	100.0	
Missing	System	39	46.4		
Total		84	100.0		

Table G1.57

nostudy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	31	36.9	72.1	72.1
	Sometimes	10	11.9	23.3	95.3
	Often	2	2.4	4.7	100.0
	Total	43	51.2	100.0	
Missing	System	41	48.8		
Total		84	100.0		

Table G1.58

uptodate

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	15	17.9	27.3	27.3
	Sometimes	16	19.0	29.1	56.4
	Often	11	13.1	20.0	76.4
	Very often	13	15.5	23.6	100.0
	Total	55	65.5	100.0	
Missing	System	29	34.5		
Total		84	100.0		

Table G1.59

coopclass

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	22	26.2	48.9	48.9
	Sometimes	12	14.3	26.7	75.6
	Often	10	11.9	22.2	97.8
	Very often	1	1.2	2.2	100.0
	Total	45	53.6	100.0	
Missing	System	39	46.4		
Total		84	100.0		

Table G1.60

coopoutside

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	37	44.0	68.5	68.5
	Sometimes	10	11.9	18.5	87.0
	Often	6	7.1	11.1	98.1
	Very often	1	1.2	1.9	100.0
	Total	54	64.3	100.0	
Missing	System	30	35.7		
Total		84	100.0		

Table G1.61

electmedium

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	18	21.4	34.6	34.6
	Sometimes	15	17.9	28.8	63.5
	Often	8	9.5	15.4	78.8
	Very often	11	13.1	21.2	100.0
	Total	52	61.9	100.0	
Missing	System	32	38.1		
Total		84	100.0		

Table G1.62

studyplan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	20	23.8	36.4	36.4
	Sometimes	19	22.6	34.5	70.9
	Often	13	15.5	23.6	94.5
	Very often	3	3.6	5.5	100.0
	Total	55	65.5	100.0	
Missing	System	29	34.5		
Total		84	100.0		

Table G1.63

emailstaff

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	9	10.7	16.4	16.4
	Sometimes	29	34.5	52.7	69.1
	Often	16	19.0	29.1	98.2
	Very often	1	1.2	1.8	100.0
	Total	55	65.5	100.0	
Missing	System	29	34.5		
Total		84	100.0		

Table G1.64

discusswk

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	14	16.7	25.9	25.9
	Sometimes	26	31.0	48.1	74.1
	Often	12	14.3	22.2	96.3
	Very often	2	2.4	3.7	100.0
	Total	54	64.3	100.0	
Missing	System	30	35.7		
Total		84	100.0		

Table G1.65

discusscareer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	39	46.4	72.2	72.2
	Sometimes	12	14.3	22.2	94.4
	Often	2	2.4	3.7	98.1
	Very often	1	1.2	1.9	100.0
	Total	54	64.3	100.0	
Missing	System	30	35.7		
Total		84	100.0		

Table G1.66

promptfeedbk

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	12	14.3	22.6	22.6
	Sometimes	27	32.1	50.9	73.6
	Often	9	10.7	17.0	90.6
	Very often	5	6.0	9.4	100.0
	Total	53	63.1	100.0	
Missing	System	31	36.9		
Total		84	100.0		

Table G1.67

wkexpect

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	14	16.7	26.9	26.9
	Sometimes	17	20.2	32.7	59.6
	Often	13	15.5	25.0	84.6
	Very often	8	9.5	15.4	100.0
	Total	52	61.9	100.0	
Missing	System	32	38.1		
Total		84	100.0		

Table G1.68

skipteach

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	26	31.0	59.1	59.1
	Sometimes	14	16.7	31.8	90.9
	Often	3	3.6	6.8	97.7
	Very often	1	1.2	2.3	100.0
	Total	44	52.4	100.0	
Missing	System	40	47.6		
Total		84	100.0		

Table G1.69

readonline

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	2	2.4	3.6	3.6
	Sometimes	10	11.9	18.2	21.8
	Often	18	21.4	32.7	54.5
	Very often	25	29.8	45.5	100.0
	Total	55	65.5	100.0	
Missing	System	29	34.5		
Total		84	100.0		

Table G1.70

notes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	21	25.0	47.7	47.7
	Sometimes	14	16.7	31.8	79.5
	Often	6	7.1	13.6	93.2
	Very often	3	3.6	6.8	100.0
	Total	44	52.4	100.0	
Missing	System	40	47.6		
Total		84	100.0		

Table G1.71

relatstuds

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Unfriendly, unsupportive, sense of alienation	7	8.3	13.5	13.5
	2.00	1	1.2	1.9	15.4
	3.00	1	1.2	1.9	17.3
	4.00	4	4.8	7.7	25.0
	5.00	11	13.1	21.2	46.2
	6.00	3	3.6	5.8	51.9
	7.00	10	11.9	19.2	71.2
	8.00	8	9.5	15.4	86.5
	10.00	7	8.3	13.5	100.0
	Total	52	61.9	100.0	
Missing	System	32	38.1		
Total		84	100.0		

Table G1.72

relatacad

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Unfriendly, unsupportive, sense of alienation	2	2.4	3.8	3.8
	2.00	2	2.4	3.8	7.5
	3.00	3	3.6	5.7	13.2
	4.00	2	2.4	3.8	17.0
	5.00	12	14.3	22.6	39.6
	6.00	2	2.4	3.8	43.4
	7.00	5	6.0	9.4	52.8
	8.00	17	20.2	32.1	84.9
	9.00	3	3.6	5.7	90.6
	10.00	5	6.0	9.4	100.0
	Total	53	63.1	100.0	
Missing	System	31	36.9		
Total		84	100.0		

Table G1.73

relatadmin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Unfriendly, unsupportive, sense of alienation	3	3.6	5.7	5.7
	3.00	3	3.6	5.7	11.3
	4.00	6	7.1	11.3	22.6
	5.00	13	15.5	24.5	47.2
	6.00	4	4.8	7.5	54.7
	7.00	6	7.1	11.3	66.0
	8.00	6	7.1	11.3	77.4
	9.00	6	7.1	11.3	88.7
	10.00	6	7.1	11.3	100.0
	Total	53	63.1	100.0	
Missing	System	31	36.9		
Total		84	100.0		

Table G1.74

acadadvice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	4	4.8	6.7	6.7
	Fair	12	14.3	20.0	26.7
	Good	28	33.3	46.7	73.3
	Excellent	16	19.0	26.7	100.0
	Total	60	71.4	100.0	
Missing	System	24	28.6		
Total		84	100.0		

Table G1.75

educexper

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	2	2.4	3.4	3.4
	Fair	18	21.4	30.5	33.9
	Good	27	32.1	45.8	79.7
	Excellent	12	14.3	20.3	100.0
	Total	59	70.2	100.0	
Missing	System	25	29.8		
Total		84	100.0		

Table G1.76

Attendorient

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	41	48.8	63.1	63.1
	No	24	28.6	36.9	100.0
	Total	65	77.4	100.0	
Missing	System	19	22.6		
Total		84	100.0		

Table G1.77

helpfulorient

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all helpful	1	1.2	2.4	2.4
	Somewhat helpful	21	25.0	51.2	53.7
	Vey helpful	19	22.6	46.3	100.0
	Total	41	48.8	100.0	
Missing	System	43	51.2		
Total		84	100.0		

Table G1.78

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Consultative	28	1.00	3.29	2.0459	.55404
Cooperative	31	1.00	3.33	1.7849	.70736
Organised	37	1.00	3.00	2.2568	.59654
Engagement	28	1.05	2.74	2.0113	.44218
Valid N (listwise)	28				

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Table G2.1

notime

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of no importance at all	4	20.0	21.1	21.1
	2.00	4	20.0	21.1	42.1
	3.00	5	25.0	26.3	68.4
	4.00	6	30.0	31.6	100.0
	Total	19	95.0	100.0	
Missing	System	1	5.0		
Total		20	100.0		

Table G2.2

nomoney

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of no importance at all	12	60.0	66.7	66.7
	2.00	2	10.0	11.1	77.8
	3.00	2	10.0	11.1	88.9
	4.00	2	10.0	11.1	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

Table G2.3

medicalprob

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of no importance at all	8	40.0	42.1	42.1
	2.00	1	5.0	5.3	47.4
	3.00	4	20.0	21.1	68.4
	4.00	6	30.0	31.6	100.0
	Total	19	95.0	100.0	
Missing	System	1	5.0		
Total		20	100.0		

Table G2.4

familyprob

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of no importance at all	6	30.0	31.6	31.6
	2.00	1	5.0	5.3	36.8
	3.00	6	30.0	31.6	68.4
	4.00	6	30.0	31.6	100.0
	Total	19	95.0	100.0	
Missing	System	1	5.0		
Total		20	100.0		

Table G2.5

travelprob

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of no importance at all	13	65.0	92.9	92.9
	3.00	1	5.0	7.1	100.0
	Total	14	70.0	100.0	
Missing	System	6	30.0		
Total		20	100.0		

Table G2.6

skillsprob

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of no importance at all	7	35.0	38.9	38.9
	2.00	6	30.0	33.3	72.2
	3.00	4	20.0	22.2	94.4
	4.00	1	5.0	5.6	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

Table G2.7

Infoinadequate

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of no importance at all	9	45.0	50.0	50.0
	2.00	3	15.0	16.7	66.7
	3.00	3	15.0	16.7	83.3
	4.00	3	15.0	16.7	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

Table G2.8

priorprob

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of no importance at all	11	55.0	61.1	61.1
	2.00	5	25.0	27.8	88.9
	4.00	2	10.0	11.1	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

Table G2.9

diststudyprob

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of no importance at all	6	30.0	33.3	33.3
	2.00	5	25.0	27.8	61.1
	3.00	5	25.0	27.8	88.9
	4.00	2	10.0	11.1	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

Table G2.10

lifeskills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not true for me	5	25.0	25.0	25.0
	Not very true for me	1	5.0	5.0	30.0
	Fairly true for me	8	40.0	40.0	70.0
	Absolutely true for me	6	30.0	30.0	100.0
	Total	20	100.0	100.0	

Table G2.11

particevent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	19	95.0	95.0	95.0
	No	1	5.0	5.0	100.0
	Total	20	100.0	100.0	

Table G2.12

newjob

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.I took on a new job	3	15.0	100.0	100.0
Missing	System	17	85.0		
Total		20	100.0		

Table G2.13

workmore

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.My hours at work were increased	7	35.0	100.0	100.0
Missing	System	13	65.0		
Total		20	100.0		

Table G2.14

illness

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.I fell ill, or a family member fell ill	7	35.0	100.0	100.0
Missing	System	13	65.0		
Total		20	100.0		

Table G2.15

childcare

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4.The arrangements I had made for child care turned out to b	3	15.0	100.0	100.0
Missing	System	17	85.0		
Total		20	100.0		

Table G2.16

assignment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5.I panicked when the time to submit the first assignment go	5	25.0	100.0	100.0
Missing	System	15	75.0		
Total		20	100.0		

Table G2.17

assresults

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6.I received the first assignment back and was disappointed	3	15.0	100.0	100.0
Missing	System	17	85.0		
Total		20	100.0		

Table G2.18

Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7.Other	6	30.0	100.0	100.0
Missing	System	14	70.0		
Total		20	100.0		

Table G2.19

weekleft

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Week 4	4	20.0	20.0	20.0
	Week 5	3	15.0	15.0	35.0
	Week 6	5	25.0	25.0	60.0
	Week 7	3	15.0	15.0	75.0
	Week 9	1	5.0	5.0	80.0
	Week 10	3	15.0	15.0	95.0
	After Week 13	1	5.0	5.0	100.0
	Total	20	100.0	100.0	

Table G2.20

Reenrol

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	12	60.0	60.0	60.0
	No	1	5.0	5.0	65.0
	Maybe	7	35.0	35.0	100.0
	Total	20	100.0	100.0	

Table G2.22

goaljob

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1. New job	4	20.0	100.0	100.0
Missing	System	16	80.0		
Total		20	100.0		

Table G2.23

goalstudy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2. Further study or training at a different institution	5	25.0	100.0	100.0
Missing	System	15	75.0		
Total		20	100.0		

Table G2.24

goalprevocc

		Frequency	Percent
Missing	System	20	100.0

Table G2.25

goalother

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4. Other	11	55.0	100.0	100.0
Missing	System	9	45.0		
Total		20	100.0		

Table G2.26

infcontent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not well informed	4	20.0	20.0	20.0
	Fairly well informed	8	40.0	40.0	60.0
	Well informed	3	15.0	15.0	75.0
	Very well informed	5	25.0	25.0	100.0
	Total	20	100.0	100.0	

Table G2.27

acadhelp

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Impossible	1	5.0	5.0	5.0
	Difficult	5	25.0	25.0	30.0
	Fairly easy	8	40.0	40.0	70.0
	No problems	6	30.0	30.0	100.0
	Total	20	100.0	100.0	

Table G2.28

pershelp

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Impossible	1	5.0	5.0	5.0
	Difficult	7	35.0	35.0	40.0
	Fairly easy	7	35.0	35.0	75.0
	No problems	5	25.0	25.0	100.0
	Total	20	100.0	100.0	

Table G2.29

financehelp

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Difficult	6	30.0	37.5	37.5
	Fairly easy	2	10.0	12.5	50.0
	No problems	8	40.0	50.0	100.0
	Total	16	80.0	100.0	
Missing	System	4	20.0		
Total		20	100.0		

Table G2.30

careerhelp

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Impossible	1	5.0	6.7	6.7
	Difficult	1	5.0	6.7	13.3
	Fairly easy	4	20.0	26.7	40.0
	No problems	9	45.0	60.0	100.0
	Total	15	75.0	100.0	
Missing	System	5	25.0		
Total		20	100.0		

Table G2.31

otherhelp

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20	100.0	100.0	100.0

Table G2.32

progprep[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all prepared	3	15.0	15.0	15.0
	Somewhat prepared	9	45.0	45.0	60.0
	Sufficiently well prepared	7	35.0	35.0	95.0
	Very well prpared	1	5.0	5.0	100.0
	Total	20	100.0	100.0	

a. Institution = University of New England

Table G2.33

coursediff[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	More difficult	8	40.0	42.1	42.1
	Less difficult	6	30.0	31.6	73.7
	About the same	5	25.0	26.3	100.0
	Total	19	95.0	100.0	
Missing	System	1	5.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.34

workharder[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	12	60.0	63.2	63.2
	No	5	25.0	26.3	89.5
	About the same	2	10.0	10.5	100.0
	Total	19	95.0	100.0	
Missing	System	1	5.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.35

furtherinfo[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		11	55.0	55.0	55.0
	A more helpful guide on using the online system. I felt like a deer in headlights when I started	1	5.0	5.0	60.0
	As a mature age student I found it a bit difficult navigating around the different subjects and finding the topic notes. I haven't had any secular education since left High school some 35 years ago, So I found the math quite difficult, but what i did of the course I found exciting and useful.	1	5.0	5.0	65.0
	As stated at a previous question	1	5.0	5.0	70.0
	centerlink information - is it approved for centerline funding and for the course details to be updated with centerlink	1	5.0	5.0	75.0
	I have decided to move to Armidale in Feb 2012 to start full studying	1	5.0	5.0	80.0
	I think less information about the plague (plagiarism). More information could have been given to justify the university's current stand on critical thinking. It seems a bit political to me. However I'm a cynic that questions everything.	1	5.0	5.0	85.0

	If I had more experience with study and accounting, I certainly would have been better prepared.	1	5.0	5.0	90.0
	Information on how exactly essays and assignments should be completed, in what structure does the university want it written in and more feeedback on submitted work to see if it was correct	1	5.0	5.0	95.0
	More information in regards to withdrawing and re-enrolling.	1	5.0	5.0	100.0
	Total	20	100.0	100.0	

a. Institution = University of New England

Table G2.36

secuse[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	10	50.0	62.5	62.5
	2.00	5	25.0	31.3	93.8
	3.00	1	5.0	6.3	100.0
	Total	16	80.0	100.0	
Missing	System	4	20.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.37

secqual[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.00	2	10.0	100.0	100.0
Missing	System	18	90.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.38

adminuse[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	1	5.0	7.1	7.1
	2.00	3	15.0	21.4	28.6
	3.00	4	20.0	28.6	57.1
	4.00	6	30.0	42.9	100.0
	Total	14	70.0	100.0	
Missing	System	6	30.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.39

adminqual[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	4	20.0	40.0	40.0
	3.00	6	30.0	60.0	100.0
	Total	10	50.0	100.0	
Missing	System	10	50.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.40

mentoruse[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	7	35.0	50.0	50.0
	2.00	7	35.0	50.0	100.0
	Total	14	70.0	100.0	
Missing	System	6	30.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.41

mentorqual[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	2	10.0	66.7	66.7
	3.00	1	5.0	33.3	100.0
	Total	3	15.0	100.0	
Missing	System	17	85.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.42

coorduse[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	1	5.0	7.1	7.1
	2.00	2	10.0	14.3	21.4
	3.00	3	15.0	21.4	42.9
	4.00	8	40.0	57.1	100.0
	Total	14	70.0	100.0	
Missing	System	6	30.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.43

coordqual[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quality of service: POOR	1	5.0	10.0	10.0
	2.00	3	15.0	30.0	40.0
	3.00	6	30.0	60.0	100.0
	Total	10	50.0	100.0	
Missing	System	10	50.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.44

libraryuse[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	6	30.0	50.0	50.0
	3.00	3	15.0	25.0	75.0
	4.00	3	15.0	25.0	100.0
	Total	12	60.0	100.0	
Missing	System	8	40.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.45

libraryqual[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	6	30.0	75.0	75.0
	3.00	2	10.0	25.0	100.0
	Total	8	40.0	100.0	
Missing	System	12	60.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.46

accomuse[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	2	10.0	13.3	13.3
	2.00	11	55.0	73.3	86.7
	3.00	1	5.0	6.7	93.3
	4.00	1	5.0	6.7	100.0
	Total	15	75.0	100.0	
Missing	System	5	25.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.47

accomqual[a]

		Frequency	Percent
Missing	System	20	100.0

a. Institution = University of New England

Table G2.48

loansuse[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	8	40.0	50.0	50.0
	2.00	7	35.0	43.8	93.8
	3.00	1	5.0	6.3	100.0
	Total	16	80.0	100.0	
Missing	System	4	20.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.49

loansqual[a]

		Frequency	Percent
Missing	System	20	100.0

a. Institution = University of New England

Table G2.50

learnsuppuse[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	7	35.0	41.2	41.2
	2.00	6	30.0	35.3	76.5
	3.00	1	5.0	5.9	82.4
	4.00	3	15.0	17.6	100.0
	Total	17	85.0	100.0	
Missing	System	3	15.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.51

learnsuppqual[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	1	5.0	50.0	50.0
	3.00	1	5.0	50.0	100.0
	Total	2	10.0	100.0	
Missing	System	18	90.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.52

counselluse[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	7	35.0	41.2	41.2
	2.00	9	45.0	52.9	94.1
	3.00	1	5.0	5.9	100.0
	Total	17	85.0	100.0	
Missing	System	3	15.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.53

counsellquall[a]

		Frequency	Percent
Missing	System	20	100.0

a. Institution = University of New England

Table G2.54

chaplainuse[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	13	65.0	76.5	76.5
	2.00	4	20.0	23.5	100.0
	Total	17	85.0	100.0	
Missing	System	3	15.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.55

chaplainqual[a]

		Frequency	Percent
Missing	System	20	100.0

a. Institution = University of New England

Table G2.56

careeruse[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	6	30.0	40.0	40.0
	2.00	9	45.0	60.0	100.0
	Total	15	75.0	100.0	
Missing	System	5	25.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.57

careerqual[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.00	1	5.0	100.0	100.0
Missing	System	19	95.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.58

healthuse[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	13	65.0	76.5	76.5
	2.00	3	15.0	17.6	94.1
	3.00	1	5.0	5.9	100.0
	Total	17	85.0	100.0	
Missing	System	3	15.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.59

healthqual[a]

		Frequency	Percent
Missing	System	20	100.0

a. Institution = University of New England

Table G2.60

distsuppuse[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	9	45.0	60.0	60.0
	2.00	3	15.0	20.0	80.0
	4.00	3	15.0	20.0	100.0
	Total	15	75.0	100.0	
Missing	System	5	25.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.61

distsuppqual[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Quality of service: POOR	1	5.0	20.0	20.0
	2.00	2	10.0	40.0	60.0
	3.00	2	10.0	40.0	100.0
	Total	5	25.0	100.0	
Missing	System	15	75.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.62

discussdecis[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	9	45.0	45.0	45.0
	No	11	55.0	55.0	100.0
	Total	20	100.0	100.0	

a. Institution = University of New England

Table G2.63

reasondiscuss[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		14	70.0	70.0	70.0
	I started to think the FND101 course was a joke. I really couldn't take it seriously.	1	5.0	5.0	75.0
	I was not sure what sure i could	1	5.0	5.0	80.0
	I was trying to do it all. Be super mum and career mum, and student mum at the same time that my son had a mental breakdown. And something had to give. The census date was there and I felt like I had no other choice. My son needed to be looked after, and cared for. And I can always start again with uni. So I choose my son.	1	5.0	5.0	85.0
	I wasn't sure who to email or contact about my situation	1	5.0	5.0	90.0
	There was no one i could find to talk to	1	5.0	5.0	95.0
	Time.	1	5.0	5.0	100.0
	Total	20	100.0	100.0	

a. Institution = University of New England

Table G2.64

servicecomments[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		13	65.0	65.0	65.0
	?	1	5.0	5.0	70.0
	Being a external student be living in the same town as the uni felt very isolating. And when you did ask for help no one really knew where to send you. As you didn't fall into a defined group	1	5.0	5.0	75.0
	Have recommended UNE to other people.	1	5.0	5.0	80.0
	I fell quite ill at the end of March and felt I had to drop out of the semester. I would have liked the option of staying and catching up but don't think it was available. I hope to return to UNE soon if I am able to	1	5.0	5.0	85.0
	No	1	5.0	5.0	90.0
	No. The time frame (six weeks) was not long enough to comment on services.	1	5.0	5.0	95.0
	The pathways foundation unit was easy and a good way to learn the required skills. It was afm101 which i found difficult	1	5.0	5.0	100.0
	Total	20	100.0	100.0	

a. Institution = University of New England

Table G2.65

questions[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	3	15.0	100.0	100.0
Missing	System	17	85.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.66

advice[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	1	5.0	5.6	5.6
	Sometimes	14	70.0	77.8	83.3
	Often	1	5.0	5.6	88.9
	Very often	2	10.0	11.1	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.67

libraryresc[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	6	30.0	35.3	35.3
	Sometimes	6	30.0	35.3	70.6
	Often	4	20.0	23.5	94.1
	Very often	1	5.0	5.9	100.0
	Total	17	85.0	100.0	
Missing	System	3	15.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.68

contentdiff[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	2	10.0	11.1	11.1
	Sometimes	9	45.0	50.0	61.1
	Often	6	30.0	33.3	94.4
	Very often	1	5.0	5.6	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.69

workplace[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	6	30.0	33.3	33.3
	Sometimes	4	20.0	22.2	55.6
	Often	7	35.0	38.9	94.4
	Very often	1	5.0	5.6	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.70

noreading[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	4	20.0	80.0	80.0
	Very often	1	5.0	20.0	100.0
	Total	5	25.0	100.0	
Missing	System	15	75.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.71

nostudy[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	11	55.0	61.1	61.1
	Sometimes	6	30.0	33.3	94.4
	Often	1	5.0	5.6	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.72

uptodate[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	2	10.0	11.1	11.1
	Sometimes	2	10.0	11.1	22.2
	Often	9	45.0	50.0	72.2
	Very often	5	25.0	27.8	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.73

coopclass[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	5	25.0	83.3	83.3
	Sometimes	1	5.0	16.7	100.0
	Total	6	30.0	100.0	
Missing	System	14	70.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.74

coopoutside[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	11	55.0	61.1	61.1
	Sometimes	4	20.0	22.2	83.3
	Often	3	15.0	16.7	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.75

electmedium[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	3	15.0	15.8	15.8
	Sometimes	7	35.0	36.8	52.6
	Often	5	25.0	26.3	78.9
	Very often	4	20.0	21.1	100.0
	Total	19	95.0	100.0	
Missing	System	1	5.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.76

studyplan[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	3	15.0	16.7	16.7
	Sometimes	7	35.0	38.9	55.6
	Often	7	35.0	38.9	94.4
	Very often	1	5.0	5.6	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.77

emailstaff[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	3	15.0	16.7	16.7
	Sometimes	7	35.0	38.9	55.6
	Often	5	25.0	27.8	83.3
	Very often	3	15.0	16.7	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.78

discusswk[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	5	25.0	27.8	27.8
	Sometimes	9	45.0	50.0	77.8
	Often	3	15.0	16.7	94.4
	Very often	1	5.0	5.6	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.79

discusscareer[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	14	70.0	77.8	77.8
	Sometimes	3	15.0	16.7	94.4
	Very often	1	5.0	5.6	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.80

promptfeedbk[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	7	35.0	38.9	38.9
	Sometimes	5	25.0	27.8	66.7
	Often	5	25.0	27.8	94.4
	Very often	1	5.0	5.6	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.81

wkexpect[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	3	15.0	16.7	16.7
	Sometimes	8	40.0	44.4	61.1
	Often	3	15.0	16.7	77.8
	Very often	4	20.0	22.2	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.82

skipteach[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	3	15.0	75.0	75.0
	Sometimes	1	5.0	25.0	100.0
	Total	4	20.0	100.0	
Missing	System	16	80.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.83

readonline[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	1	5.0	5.6	5.6
	Sometimes	2	10.0	11.1	16.7
	Often	7	35.0	38.9	55.6
	Very often	8	40.0	44.4	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.84

notes[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	3	15.0	75.0	75.0
	Sometimes	1	5.0	25.0	100.0
	Total	4	20.0	100.0	
Missing	System	16	80.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.85

relatstuds[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Unfriendly, unsupportive, sense of alienation	3	15.0	16.7	16.7
	2.00	1	5.0	5.6	22.2
	4.00	4	20.0	22.2	44.4
	5.00	4	20.0	22.2	66.7
	7.00	2	10.0	11.1	77.8
	8.00	2	10.0	11.1	88.9
	9.00	2	10.0	11.1	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.86

relatacad[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Unfriendly, unsupportive, sense of alienation	2	10.0	11.8	11.8
	2.00	1	5.0	5.9	17.6
	3.00	3	15.0	17.6	35.3
	4.00	1	5.0	5.9	41.2
	5.00	4	20.0	23.5	64.7
	6.00	1	5.0	5.9	70.6
	7.00	1	5.0	5.9	76.5
	8.00	1	5.0	5.9	82.4
	9.00	2	10.0	11.8	94.1
	10.00	1	5.0	5.9	100.0
	Total	17	85.0	100.0	
Missing	System	3	15.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.87

relatadmin[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Unfriendly, unsupportive, sense of alienation	2	10.0	11.8	11.8
	2.00	1	5.0	5.9	17.6
	3.00	2	10.0	11.8	29.4
	4.00	1	5.0	5.9	35.3
	5.00	4	20.0	23.5	58.8
	6.00	1	5.0	5.9	64.7
	7.00	2	10.0	11.8	76.5
	8.00	2	10.0	11.8	88.2
	9.00	1	5.0	5.9	94.1
	10.00	1	5.0	5.9	100.0
	Total	17	85.0	100.0	
Missing	System	3	15.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.88

relatsupport[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Unfriendly, unsupportive, sense of alienation	1	5.0	6.3	6.3
	2.00	2	10.0	12.5	18.8
	4.00	2	10.0	12.5	31.3
	5.00	3	15.0	18.8	50.0
	6.00	2	10.0	12.5	62.5
	7.00	1	5.0	6.3	68.8
	8.00	1	5.0	6.3	75.0
	9.00	3	15.0	18.8	93.8
	10.00	1	5.0	6.3	100.0
	Total	16	80.0	100.0	
Missing	System	4	20.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.89

acadadvice[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	3	15.0	15.8	15.8
	Fair	6	30.0	31.6	47.4
	Good	4	20.0	21.1	68.4
	Excellent	6	30.0	31.6	100.0
	Total	19	95.0	100.0	
Missing	System	1	5.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.90

educexper[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	3	15.0	16.7	16.7
	Fair	5	25.0	27.8	44.4
	Good	6	30.0	33.3	77.8
	Excellent	4	20.0	22.2	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.91

attendorient[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1	5.0	5.3	5.3
	No	11	55.0	57.9	63.2
	No Orientation available	7	35.0	36.8	100.0
	Total	19	95.0	100.0	
Missing	System	1	5.0		
Total		20	100.0		

a. Institution = University of New England

Table G2.92

helpfulorient[a]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all helpful	1	5.0	50.0	50.0
	Somewhat helpful	1	5.0	50.0	100.0
	Total	2	10.0	100.0	
Missing	System	18	90.0		
Total		20	100.0		

a. Institution = University of New England

Appendix H: Data tables: Student approaches to learning

For all tables, non-persisting students are shown as 1.00, while persisting is shown as 2.00

Tables S1 and S2
UoN, UniSA and USQ: SPQ divided by Institution and Age Group

Institution 2: UoN
Institution 4: UniSA
Institution 5: USQ

Note: Means and standard deviations for each group are shown first, followed by the t-test results.

Table H1
UoN, UniSA and USQ: SPQ divided by Institution and Age Group: Means and standard deviations

Institution	AGE		Deepmotive	deepstrat	surfmotive	Surfstrat	achievemot	achievestrat
2.00	1.00 <20	Mean	2.6358	2.8243	2.0353	2.2713	2.9318	2.8125
		N	564	559	550	550	560	559
		Std. Deviation	.74676	.56946	.57042	.48242	.48857	.59465
	2.00 20-30	Mean	2.8722	3.0454	1.9007	2.1885	2.8826	2.9536
		N	565	555	542	558	552	556
		Std. Deviation	.56332	.52224	.53668	.51506	.46573	.59373
	3.00 31-40	Mean	2.8836	3.0655	1.8663	2.0550	2.6877	2.9643
		N	165	168	163	160	162	168
		Std. Deviation	.53423	.52643	.56615	.47897	.52275	.61179
	4.00 41-50	Mean	2.9622	3.0384	1.9892	2.1270	2.4740	2.9753
		N	74	73	74	74	73	73
		Std. Deviation	.51357	.40778	.51911	.53026	.55528	.50875
	5.00 >50	Mean	3.0300	3.0526	2.1176	2.0105	2.7111	3.0316
		N	20	19	17	19	18	19
		Std. Deviation	.60271	.57674	.57035	.61273	.55824	.59726
	Total	Mean	2.7846	2.9576	1.9591	2.2004	2.8555	2.8998
		N	1388	1374	1346	1361	1365	1375
		Std. Deviation	.65103	.54852	.55761	.50483	.50195	.59586
4.00	1.00	Mean	2.6485	2.7397	2.1841	2.4677	2.8969	2.8179
		N	66	63	63	65	64	67
		Std. Deviation	.61074	.60176	.56145	.50159	.58227	.67306
	2.00	Mean	2.8839	2.9839	1.9695	2.3097	2.9161	2.8833
		N	62	62	59	62	62	60
		Std. Deviation	.61409	.56603	.51704	.56993	.57208	.60985
	3.00	Mean	2.8667	2.6909	2.1000	2.2545	2.6667	2.8800
		N	12	11	10	11	12	10
		Std. Deviation	.48492	.27370	.35590	.43901	.49970	.57504
	4.00	Mean	3.2800	3.4400	1.8500	2.0000	2.9200	3.1600
		N	5	5	4	4	5	5
		Std. Deviation	.41473	.35777	.30000	.43205	.67231	.35777
	5.00	Mean	3.2000	3.3500	1.8500	2.2000	2.8000	3.3000
		N	4	4	4	3	4	4
	Total	Mean	2.7947	2.8795	2.0652	2.3644	2.8811	2.8707
		N	150	146	141	146	148	147
		Std. Deviation	.61040	.57941	.52996	.52716	.56657	.63324
5.00	1.00	Mean	2.5886	2.7235	2.0867	2.3000	2.9529	2.8667
		N	35	34	30	34	34	33

		Std. Deviation	.59398	.63631	.53738	.50990	.48507	.56936
	2.00	Mean	2.9163	2.8585	1.8205	2.2093	2.7950	2.9700
		N	43	41	39	43	40	40
		Std. Deviation	.50187	.49648	.55969	.50512	.55003	.55387
	3.00	Mean	2.8929	2.8929	2.0769	2.2963	2.8222	2.9111
		N	28	28	26	27	27	27
		Std. Deviation	.46022	.42681	.51249	.45866	.52134	.48145
	4.00	Mean	2.6421	2.6842	2.0842	2.1263	2.5579	2.8316
		N	19	19	19	19	19	19
		Std. Deviation	.49252	.46340	.63356	.50425	.41408	.45345
	5.00	Mean	2.8154	3.0833	1.9333	1.9333	2.6000	2.8833
		N	13	12	12	12	12	12
		Std. Deviation	.63488	.41304	.39389	.31140	.39080	.52886
	Total	Mean	2.7812	2.8269	1.9873	2.2133	2.7894	2.9038
		N	138	134	126	135	132	131
		Std. Deviation	.54244	.51725	.54830	.48819	.50784	.52233

Table H2

UoN, UniSA and USQ: SPQ divided by Institution and Age Group: **T-test results**

Institution	AGE			Mean	Std. Deviation	t	df	p
2.00	1.00	Pair 1	deepmotive - deepstrat	-.19526	.63365	-7.213	547	.000
		Pair 2	Surfmotive - surfstrat	-.23308	.55026	-9.770	531	.000
		Pair 3	achievemot - achievestrat	.12587	.57145	5.142	544	.000
	2.00	Pair 1	deepmotive - deepstrat	-.17556	.41582	-9.811	539	.000
		Pair 2	Surfmotive - surfstrat	-.29263	.51386	-13.098	528	.000
		Pair 3	achievemot - achievestrat	-.06330	.60835	-2.404	533	.017
	3.00	Pair 1	deepmotive - deepstrat	-.18395	.31836	-7.354	161	.000
		Pair 2	Surfmotive - surfstrat	-.17532	.52360	-4.155	153	.000
		Pair 3	achievemot - achievestrat	-.27296	.58350	-5.899	158	.000
	4.00	Pair 1	deepmotive - deepstrat	-.09167	.40412	-1.925	71	.058
		Pair 2	Surfmotive - surfstrat	-.14521	.51989	-2.386	72	.020
		Pair 3	achievemot - achievestrat	-.47606	.53170	-7.544	70	.000
	5.00	Pair 1	deepmotive - deepstrat	-.04211	.33717	-.544	18	.593
		Pair 2	Surfmotive - surfstrat	.00000	.40000	.000	16	1.000
		Pair 3	achievemot - achievestrat	-.33333	.47029	-3.007	17	.008
4.00	1.00	Pair 1	deepmotive - deepstrat	-.07541	.37088	-1.588	60	.118
		Pair 2	surfmotive - surfstrat	-.29355	.59032	-3.915	61	.000
		Pair 3	achievemot - achievestrat	.08125	.48300	1.346	63	.183
	2.00	Pair 1	deepmotive - deepstrat	-.07000	.39286	-1.380	59	.173
		Pair 2	surfmotive - surfstrat	-.29123	.54389	-4.043	56	.000
		Pair 3	achievemot - achievestrat	.03390	.57314	.454	58	.651
	3.00	Pair 1	deepmotive - deepstrat	.07273	.32586	.740	10	.476
		Pair 2	surfmotive - surfstrat	-.02222	.56075	-.119	8	.908
		Pair 3	achievemot - achievestrat	-.20000	.55777	-1.134	9	.286
	4.00	Pair 1	deepmotive - deepstrat	-.16000	.38471	-.930	4	.405
		Pair 2	surfmotive - surfstrat	-.20000	.72111	-.480	2	.678
		Pair 3	achievemot - achievestrat	-.24000	.47749	-1.124	4	.324
	5.00	Pair 1	deepmotive - deepstrat	-.15000	.19149	-1.567	3	.215
		Pair 2	surfmotive - surfstrat	-.26667	.30551	-1.512	2	.270
		Pair 3	achievemot - achievestrat	-.50000	.41633	-2.402	3	.096
5.00	1.00	Pair 1	deepmotive - deepstrat	-.12941	.42321	-1.783	33	.084
		Pair 2	surfmotive - surfstrat	-.22000	.44053	-2.735	29	.011
		Pair 3	achievemot - achievestrat	.06875	.58057	.670	31	.508
	2.00	Pair 1	deepmotive - deepstrat	.04390	.34789	.808	40	.424
		Pair 2	surfmotive - surfstrat	-.34872	.47399	-4.594	38	.000
		Pair 3	achievemot - achievestrat	-.16316	.67039	-1.500	37	.142

3.00	Pair 1	deepmotive - deepstrat	.00000	.35277	.000	27	1.000
	Pair 2	surfmotive - surfstrat	-.21538	.39969	-2.748	25	.011
	Pair 3	achievemot - achievestrat	-.10769	.52530	-1.045	25	.306
4.00	Pair 1	deepmotive - deepstrat	-.04211	.38632	-.475	18	.640
	Pair 2	surfmotive - surfstrat	-.04211	.67521	-.272	18	.789
	Pair 3	achievemot - achievestrat	-.27368	.55060	-2.167	18	.044
5.00	Pair 1	deepmotive - deepstrat	-.18333	.37618	-1.688	11	.119
	Pair 2	surfmotive - surfstrat	.00000	.42640	.000	11	1.000
	Pair 3	achievemot - achievestrat	-.28333	.44687	-2.196	11	.050

Table H3

UNE: SPQ: Differences in Motives and Strategies by Age Groups

Dependent Variable	(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	**Sig.**
DEEPMOTIVE	Under 20 years of age	20 - 30	-.14091	.18829	**.456**
		31 - 40	-.18333	.18829	**.333**
		41 - 50	-.32917	.21330	**.126**
		Over 50	-.64167*	.25495	**.013**
	20 - 30	Under 20 years of age	.14091	.18829	**.456**
		31 - 40	-.04242	.13751	**.758**
		41 - 50	-.18826	.17016	**.271**
		Over 50	-.50076*	.22012	**.025**
	31 - 40	Under 20 years of age	.18333	.18829	**.333**
		20 - 30	.04242	.13751	**.758**
		41 - 50	-.14583	.17016	**.394**
		Over 50	-.45833*	.22012	**.040**
	41 - 50	Under 20 years of age	.32917	.21330	**.126**
		20 - 30	.18826	.17016	**.271**
		31 - 40	.14583	.17016	**.394**
		Over 50	-.31250	.24186	**.199**
	Over 50	Under 20 years of age	.64167*	.25495	**.013**
		20 - 30	.50076*	.22012	**.025**
		31 - 40	.45833*	.22012	**.040**
		41 - 50	.31250	.24186	**.199**
DEEPSTRAT	Under 20 years of age	20 - 30	-.18817	.16252	**.250**
		31 - 40	-.29804	.16051	**.066**
		41 - 50	-.33333*	.18255	**.071**
		Over 50	-.50833*	.21818	**.022**
	20 - 30	Under 20 years of age	.18817	.16252	**.250**
		31 - 40	-.10987	.11871	**.357**
		41 - 50	-.14516	.14715	**.326**
		Over 50	-.32016	.18956	**.094**
	31 - 40	Under 20 years of age	.29804	.16051	**.066**
		20 - 30	.10987	.11871	**.357**
		41 - 50	-.03529	.14492	**.808**
		Over 50	-.21029	.18784	**.266**
	41 - 50	Under 20 years of age	.33333	.18255	**.071**
		20 - 30	.14516	.14715	**.326**
		31 - 40	.03529	.14492	**.808**
		Over 50	-.17500	.20699	**.400**
	Over 50	Under 20 years of age	.50833*	.21818	**.022**
		20 - 30	.32016	.18956	**.094**
		31 - 40	.21029	.18784	**.266**
		41 - 50	.17500	.20699	**.400**
SURFMOT	Under 20 years of age	20 - 30	.06042	.15301	**.694**
		31 - 40	.10909	.15238	**.476**
		41 - 50	.24167	.17262	**.165**

		Over 50	.31667	.20632	**.128**
		Under 20 years of age	-.06042	.15301	**.694**
	20 - 30	31 - 40	.04867	.11215	**.665**
		41 - 50	.18125	.13841	**.193**
		Over 50	.25625	.17868	**.155**
		Under 20 years of age	-.10909	.15238	**.476**
	31 - 40	20 - 30	-.04867	.11215	**.665**
		41 - 50	.13258	.13771	**.338**
		Over 50	.20758	.17814	**.247**
		Under 20 years of age	-.24167	.17262	**.165**
	41 - 50	20 - 30	-.18125	.13841	**.193**
		31 - 40	-.13258	.13771	**.338**
		Over 50	.07500	.19574	**.702**
		Under 20 years of age	-.31667	.20632	**.128**
	Over 50	20 - 30	-.25625	.17868	**.155**
		31 - 40	-.20758	.17814	**.247**
		41 - 50	-.07500	.19574	**.702**
		20 - 30	.22292	.16822	**.188**
	Under 20 years of age	31 - 40	.20909	.16752	**.215**
		41 - 50	.36667	.18977	**.056**
		Over 50	.19524	.23634	**.411**
		Under 20 years of age	-.22292	.16822	**.188**
	20 - 30	31 - 40	-.01383	.12329	**.911**
		41 - 50	.14375	.15216	**.347**
		Over 50	-.02768	.20735	**.894**
		Under 20 years of age	-.20909	.16752	**.215**
SURFSTRAT	31 - 40	20 - 30	.01383	.12329	**.911**
		41 - 50	.15758	.15139	**.301**
		Over 50	-.01385	.20679	**.947**
		Under 20 years of age	-.36667	.18977	**.056**
	41 - 50	20 - 30	-.14375	.15216	**.347**
		31 - 40	-.15758	.15139	**.301**
		Over 50	-.17143	.22520	**.448**
		Under 20 years of age	-.19524	.23634	**.411**
	Over 50	20 - 30	.02768	.20735	**.894**
		31 - 40	.01385	.20679	**.947**
		41 - 50	.17143	.22520	**.448**
		20 - 30	-.09242	.14700	**.531**
	Under 20 years of age	31 - 40	.12647	.14643	**.390**
		41 - 50	.17500	.16653	**.296**
		Over 50	.17500	.19905	**.381**
		Under 20 years of age	.09242	.14700	**.531**
	20 - 30	31 - 40	.21889*	.10656	**.043**
		41 - 50	.26742*	.13285	**.047**
		Over 50	.26742	.17186	**.123**
		Under 20 years of age	-.12647	.14643	**.390**
ACHIEVEMOT	31 - 40	20 - 30	-.21889*	.10656	**.043**
		41 - 50	.04853	.13221	**.714**
		Over 50	.04853	.17136	**.778**
		Under 20 years of age	-.17500	.16653	**.296**
	41 - 50	20 - 30	-.26742*	.13285	**.047**
		31 - 40	-.04853	.13221	**.714**
		Over 50	.00000	.18883	**1.000**
		Under 20 years of age	-.17500	.19905	**.381**
	Over 50	20 - 30	-.26742	.17186	**.123**
		31 - 40	-.04853	.17136	**.778**
		41 - 50	.00000	.18883	**1.000**
		20 - 30	-.10398	.18244	**.570**
	Under 20 years of age	31 - 40	-.13743	.18107	**.450**
		41 - 50	-.11273	.20721	**.588**
		Over 50	-.15844	.25238	**.532**
ACHIEVESTRAT		Under 20 years of age	.10398	.18244	**.570**
	20 - 30	31 - 40	-.03346	.12856	**.795**
		41 - 50	-.00875	.16334	**.957**
		Over 50	-.05446	.21781	**.803**
		Under 20 years of age	.13743	.18107	**.450**
	31 - 40	20 - 30	.03346	.12856	**.795**

		41 - 50	.02471	.16180	**.879**
		Over 50	-.02101	.21665	**.923**
		Under 20 years of age	.11273	.20721	**.588**
	41 - 50	20 - 30	.00875	.16334	**.957**
		31 - 40	-.02471	.16180	**.879**
		Over 50	-.04571	.23894	**.849**
		Under 20 years of age	.15844	.25238	**.532**
	Over 50	20 - 30	.05446	.21781	**.803**
		31 - 40	.02101	.21665	**.923**
		41 - 50	.04571	.23894	**.849**
		20 - 30	-.15565	.16333	**.343**
	Under 20 years of age	31 - 40	-.25379	.16195	**.120**
		41 - 50	-.33125	.18346	**.074**
		Over 50	-.57500*	.21928	**.010**
		Under 20 years of age	.15565	.16333	**.343**
	20 - 30	31 - 40	-.09814	.12016	**.416**
		41 - 50	-.17560	.14788	**.238**
		Over 50	-.41935*	.19051	**.030**
		Under 20 years of age	.25379	.16195	**.120**
DEEP	31 - 40	20 - 30	.09814	.12016	**.416**
		41 - 50	-.07746	.14635	**.598**
		Over 50	-.32121	.18932	**.093**
		Under 20 years of age	.33125	.18346	**.074**
	41 - 50	20 - 30	.17560	.14788	**.238**
		31 - 40	.07746	.14635	**.598**
		Over 50	-.24375	.20802	**.244**
		Under 20 years of age	.57500*	.21928	**.010**
	Over 50	20 - 30	.41935*	.19051	**.030**
		31 - 40	.32121	.18932	**.093**
		41 - 50	.24375	.20802	**.244**
		20 - 30	.12634	.13855	**.364**
	Under 20 years of age	31 - 40	.14792	.13794	**.286**
		41 - 50	.30417	.15562	**.054**
		Over 50	.24524	.19381	**.209**
		Under 20 years of age	-.12634	.13855	**.364**
	20 - 30	31 - 40	.02157	.10270	**.834**
		41 - 50	.17782	.12544	**.160**
		Over 50	.11889	.17053	**.487**
		Under 20 years of age	-.14792	.13794	**.286**
SURFACE	31 - 40	20 - 30	-.02157	.10270	**.834**
		41 - 50	.15625	.12478	**.214**
		Over 50	.09732	.17004	**.568**
		Under 20 years of age	-.30417	.15562	**.054**
	41 - 50	20 - 30	-.17782	.12544	**.160**
		31 - 40	-.15625	.12478	**.214**
		Over 50	-.05893	.18467	**.750**
		Under 20 years of age	-.24524	.19381	**.209**
	Over 50	20 - 30	-.11889	.17053	**.487**
		31 - 40	-.09732	.17004	**.568**
		41 - 50	.05893	.18467	**.750**
		20 - 30	-.13750	.13710	**.318**
	Under 20 years of age	31 - 40	-.04412	.13606	**.746**
		41 - 50	-.02000	.15571	**.898**
		Over 50	.00000	.18965	**1.000**
		Under 20 years of age	.13750	.13710	**.318**
	20 - 30	31 - 40	.09338	.09661	**.336**
		41 - 50	.11750	.12274	**.341**
ACHIEVE		Over 50	.13750	.16367	**.403**
		Under 20 years of age	.04412	.13606	**.746**
	31 - 40	20 - 30	-.09338	.09661	**.336**
		41 - 50	.02412	.12158	**.843**
		Over 50	.04412	.16280	**.787**
		Under 20 years of age	.02000	.15571	**.898**
	41 - 50	20 - 30	-.11750	.12274	**.341**

	31 - 40	-.02412	.12158	**.843**
	Over 50	.02000	.17955	**.912**
	Under 20 years of age	.00000	.18965	**1.000**
Over 50	20 - 30	-.13750	.16367	**.403**
	31 - 40	-.04412	.16280	**.787**
	41 - 50	-.02000	.17955	**.912**

Table H4

UNE: Paired Sample t-tests for Motives and Strategies by Age-groups

AGE			Mean	Std. Deviation	Std. Error Mean	t	Df	**Sig. (2-tailed)**
Under 20 years of age	Pair 1	DEEPMOTIVE - DEEPSTRAT	-.08333	.41304	.11924	-.699	11	**.499**
	Pair 2	SURFMOT - SURFSTRAT	-.30000	.39543	.11415	-2.628	11	**.023**
	Pair 3	ACHIEVEMOT - ACHIEVESTRAT	-.25455	.58028	.17496	-1.455	10	**.176**
20 – 30	Pair 1	DEEPMOTIVE - DEEPSTRAT	-.14839	.47880	.08599	-1.726	30	**.095**
	Pair 2	SURFMOT - SURFSTRAT	-.12903	.54540	.09796	-1.317	30	**.198**
	Pair 3	ACHIEVEMOT - ACHIEVESTRAT	-.18750	.49497	.08750	-2.143	31	**.040**
31 – 40	Pair 1	DEEPMOTIVE - DEEPSTRAT	-.22424	.35971	.06262	-3.581	32	**.001**
	Pair 2	SURFMOT - SURFSTRAT	-.20000	.33697	.05957	-3.357	31	**.002**
	Pair 3	ACHIEVEMOT - ACHIEVESTRAT	-.44118	.66566	.11416	-3.865	33	**.000**
41 – 50	Pair 1	DEEPMOTIVE - DEEPSTRAT	-.08750	.26300	.06575	-1.331	15	**.203**
	Pair 2	SURFMOT - SURFSTRAT	-.17500	.63613	.15903	-1.100	15	**.289**
	Pair 3	ACHIEVEMOT - ACHIEVESTRAT	-.44000	.29472	.07610	-5.782	14	**.000**
Over 50	Pair 1	DEEPMOTIVE - DEEPSTRAT	.05000	.27775	.09820	.509	7	**.626**
	Pair 2	SURFMOT - SURFSTRAT	-.40000	.65320	.24689	-1.620	6	**.156**
	Pair 3	ACHIEVEMOT - ACHIEVESTRAT	-.57143	.50897	.19237	-2.970	6	**.025**

Table H5

UoN: Persistence and non-persistence: Means and standard deviations

Group Statistics

	ATTRIT	N	Mean	Std. Deviation	Std. Error Mean
Deep	1.00	485	2.8703	.55121	.02503
	2.00	856	2.8703	.54651	.01868
Surface	1.00	472	2.1066	.48095	.02214
	2.00	833	2.0607	.44325	.01536
Achieving	1.00	478	2.8397	.48431	.02215
	2.00	847	2.8979	.44136	.01517

Table H6

UoN: Persistence and non-persistence: t-test results

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Deep	Equal variances assumed	2.295	.130	-.001	1339	1.000	-.00002	.03116	-.06114	.06110
	Equal variances not assumed			-.001	998.036	1.000	-.00002	.03123	-.06130	.06127
Surface	Equal variances assumed	1.536	.215	1.740	1303	.082	.04582	.02634	-.00585	.09750
	Equal variances not assumed			1.701	913.658	.089	.04582	.02694	-.00705	.09870
Achieving	Equal variances assumed	4.700	.030	-2.222	1323	.026	-.05813	.02616	-.10945	-.00680
	Equal variances not assumed			-2.165	915.505	.031	-.05813	.02685	-.11081	-.00544

Table H7

UoN: Persistence and non-persistence: Groups statistics

Group Statistics

	ATTRIT	N	Mean	Std. Deviation	Std. Error Mean
Deepmotive	1.00	504	2.8016	.59327	.02643
	2.00	881	2.7771	.68222	.02298
deepstrat	1.00	496	2.9411	.59432	.02669
	2.00	878	2.9702	.52109	.01759
surfmotive	1.00	486	2.0045	.61142	.02773
	2.00	860	1.9344	.51904	.01770
surfstrat	1.00	494	2.2182	.51216	.02304
	2.00	864	2.1850	.49965	.01700
achievemot	1.00	494	2.8300	.52899	.02380
	2.00	868	2.8707	.48490	.01646
achievestrat	1.00	494	2.8543	.61921	.02786
	2.00	879	2.9283	.58024	.01957

Table H8

UoN: Independent Sample t-test between Persisting and Non-persisting students

		F	Sig.	t	df	**Sig. (2-tailed)**
Deepmotive	Equal variances assumed	.054	.817	.674	1383	**.500**
	Equal variances not assumed			.700	1169.377	**.484**
Deepstrat	Equal variances assumed	9.322	.002	-.942	1372	**.346**
	Equal variances not assumed			-.908	920.333	**.364**
surfmotive	Equal variances assumed	4.135	.042	2.229	1344	**.026**
	Equal variances not assumed			2.131	878.237	**.033**
surfstrat	Equal variances assumed	.309	.578	1.170	1356	**.242**
	Equal variances not assumed			1.162	1005.451	**.246**
achievemot	Equal variances assumed	3.119	.078	-1.443	1360	**.149**
	Equal variances not assumed			-1.409	953.293	**.159**
achievestrat	Equal variances assumed	3.728	.054	-2.216	1371	**.027**
	Equal variances not assumed			-2.176	967.363	**.030**

Table H9

UNE: Means and SDs of persisting and non-persisting students

Group Statistics

	ATTRIT	N	Mean	Std. Deviation	Std. Error Mean
DEEPMOTIVE	1.00	62	2.8677	.56446	.07169
	2.00	40	2.9250	.58122	.09190
DEEPSTRAT	1.00	62	2.9903	.48374	.06143
	2.00	39	3.0615	.49023	.07850
SURFMOT	1.00	62	1.7548	.45725	.05807
	2.00	39	1.7385	.44992	.07205
SURFSTRAT	1.00	62	1.9806	.52817	.06708
	2.00	38	1.9105	.44283	.07184
ACHIEVEMOT	1.00	63	2.4857	.47480	.05982
	2.00	40	2.5150	.38931	.06156
ACHIEVESTRAT	1.00	60	2.8433	.51564	.06657
	2.00	39	2.8256	.51540	.08253
DEEP	1.00	61	2.9311	.48906	.06262
	2.00	39	2.9949	.49786	.07972
SURFACE	1.00	61	1.8738	.41589	.05325
	2.00	37	1.8405	.40032	.06581
ACHIEVE	1.00	60	2.6600	.41628	.05374
	2.00	39	2.6667	.34514	.05527

Table H10

UNE: Differences between persisting and non-persisting students

Significance is shown in bold. A level less than 0.05 is considered to be significant.

	Independent Samples Test	t	df	Sig. (2-tailed)	Mean Difference
DEEPMOTIVE	Equal variances assumed	-.494	100	**.622**	-.05726
	Equal variances not assumed	-.491	81.588	**.625**	-.05726
DEEPSTRAT	Equal variances assumed	-.717	99	**.475**	-.07122
	Equal variances not assumed	-.714	80.088	**.477**	-.07122
SURFMOT	Equal variances assumed	.176	99	**.860**	.01638
	Equal variances not assumed	.177	81.884	**.860**	.01638
SURFSTRAT	Equal variances assumed	.684	98	**.496**	.07012
	Equal variances not assumed	.713	88.732	**.477**	.07012
ACHIEVEMOT	Equal variances assumed	-.326	101	**.745**	-.02929
	Equal variances not assumed	-.341	94.455	**.734**	-.02929
ACHIEVESTRAT	Equal variances assumed	.167	97	**.868**	.01769
	Equal variances not assumed	.167	81.352	**.868**	.01769
DEEP	Equal variances assumed	-.631	98	**.529**	-.06372
	Equal variances not assumed	-.629	80.053	**.531**	-.06372
SURFACE	Equal variances assumed	.389	96	**.698**	.03323
	Equal variances not assumed	.393	78.404	**.696**	.03323
ACHIEVE	Equal variances assumed	-.083	97	**.934**	-.00667
	Equal variances not assumed	-.086	91.276	**.931**	-.00667

Table H11

UniSA: Differences between persisting and non-persisting students

		t	df	Sig. (2-tailed)	Mean Difference
deepmotive	Equal variances assumed	.204	162	**.839**	.02080
	Equal variances not assumed	.212	99.266	**.832**	.02080
deepstrat	Equal variances assumed	-.082	158	**.934**	-.00800
	Equal variances not assumed	-.081	91.839	**.935**	-.00800
surfmotive	Equal variances assumed	.609	154	**.543**	.05509
	Equal variances not assumed	.595	85.403	**.554**	.05509
surfstrat	Equal variances assumed	-.186	157	**.853**	-.01662
	Equal variances not assumed	-.195	107.187	**.846**	-.01662
achievemot	Equal variances assumed	.342	160	**.733**	.03400
	Equal variances not assumed	.365	110.691	**.716**	.03400
achievestrat	Equal variances assumed	-1.024	159	**.307**	-.10995
	Equal variances not assumed	-1.031	99.226	**.305**	-.10995
deep	Equal variances assumed	.120	154	**.904**	.01144
	Equal variances not assumed	.123	92.185	**.902**	.01144
surface	Equal variances assumed	.233	147	**.816**	.01798
	Equal variances not assumed	.234	89.921	**.816**	.01798
achievement	Equal variances assumed	-.359	155	**.720**	-.03399
	Equal variances not assumed	-.369	99.124	**.713**	-.03399

Table H12

USQ: Differences between persisting and non-persisting students

		t	df	Sig. (2-tailed)	Mean Difference
Deepmotive	Equal variances assumed	-.839	153	**.403**	-.07203
	Equal variances not assumed	-.840	150.596	**.402**	-.07203
Deepstrat	Equal variances assumed	-.726	148	**.469**	-.06060
	Equal variances not assumed	-.725	146.363	**.470**	-.06060
Surfmotive	Equal variances assumed	1.169	141	**.244**	.10501
	Equal variances not assumed	1.168	140.250	**.245**	.10501
Surfstrat	Equal variances assumed	.619	150	**.537**	.05000
	Equal variances not assumed	.619	148.849	**.537**	.05000
Achievemot	Equal variances assumed	-.313	147	**.754**	-.02663
	Equal variances not assumed	-.314	145.884	**.754**	-.02663
Achievestrat	Equal variances assumed	-1.451	145	**.149**	-.12103
	Equal variances not assumed	-1.451	144.991	**.149**	-.12103
Deep	Equal variances assumed	-.910	148	**.364**	-.07187
	Equal variances not assumed	-.909	145.986	**.365**	-.07187
Surface	Equal variances assumed	1.138	141	**.257**	.08577
	Equal variances not assumed	1.138	140.982	**.257**	.08577
Achievement	Equal variances assumed	-1.052	141	**.295**	-.07496
	Equal variances not assumed	-1.052	140.889	**.295**	-.07496

Table H13

ECU: Approaches to Learning: Means and standard deviations

Group Statistics

	ATTRIT	N	Mean	Std. Deviation	Std. Error Mean
DEEPMOT1	1.00	50	2.6360	.56955	.08055
	2.00	251	2.6430	.61193	.03862
DEEPSTRAT1	1.00	50	2.8440	.56754	.08026
	2.00	248	2.8105	.53331	.03387
SURFMOT1	1.00	49	2.1020	.55696	.07957
	2.00	239	1.9975	.53624	.03469
SURFSTRAT1	1.00	52	2.3269	.57262	.07941
	2.00	251	2.3060	.53822	.03397
ACHIEVEMOT1	1.00	52	2.7962	.49068	.06805
	2.00	247	2.8858	.54795	.03487
ACHIEVESTRAT1	1.00	52	2.8731	.56711	.07864
	2.00	251	2.8685	.54940	.03468
DEEP1	1.00	47	2.7255	.55265	.08061
	2.00	242	2.7285	.54519	.03505
SURFACE1	1.00	48	2.2021	.50085	.07229
	2.00	232	2.1526	.46486	.03052
ACHIEVE1	1.00	51	2.8255	.45071	.06311
	2.00	238	2.8664	.44952	.02914

Table H14

ECU: Differences between persisting and non-persisting students

		t	Df	Sig. (2-tailed)
DEEPMOT1	Equal variances assumed	-.075	299	.940
	Equal variances not assumed	-.079	73.366	.938
DEEPSTRAT1	Equal variances assumed	.401	296	.689
	Equal variances not assumed	.385	67.575	.702
SURFMOT1	Equal variances assumed	1.235	286	.218
	Equal variances not assumed	1.205	67.487	.233
SURFSTRAT1	Equal variances assumed	.253	301	.801
	Equal variances not assumed	.243	70.893	.809
ACHIEVEMOT1	Equal variances assumed	-1.091	297	.276
	Equal variances not assumed	-1.173	80.148	.244
ACHIEVESTRAT1	Equal variances assumed	.054	301	.957
	Equal variances not assumed	.053	72.204	.958
DEEP1	Equal variances assumed	-.034	287	.973
	Equal variances not assumed	-.034	64.592	.973
SURFACE1	Equal variances assumed	.663	278	.508
	Equal variances not assumed	.631	64.828	.530
ACHIEVE1	Equal variances assumed	-.589	287	.556
	Equal variances not assumed	-.588	72.889	.558

Table H15

ECU: SPQ contrasts by age

Key: 1: Under 20 years; 2: 21 – 30; 3: 31 – 40; 4: 41 – 50; 5: over 50

Dependent Variable	(I) AGE	(J) AGE	Mean Difference (I-J)	Std. Error	**Sig.**
DEEPMOT1	1.00	2.00	-.22426*	.06980	**.001**
		3.00	-.34388*	.12922	**.008**
		4.00	-.41412*	.16484	**.012**
		5.00	-.38555	.24636	**.119**
	2.00	1.00	.22426*	.06980	**.001**
		3.00	-.11962	.13230	**.367**
		4.00	-.18986	.16726	**.257**
		5.00	-.16129	.24798	**.516**
	3.00	1.00	.34388*	.12922	**.008**
		2.00	.11962	.13230	**.367**
		4.00	-.07024	.19951	**.725**
		5.00	-.04167	.27078	**.878**
	4.00	1.00	.41412*	.16484	**.012**
		2.00	.18986	.16726	**.257**
		3.00	.07024	.19951	**.725**
		5.00	.02857	.28948	**.921**
	5.00	1.00	.38555	.24636	**.119**
		2.00	.16129	.24798	**.516**
		3.00	.04167	.27078	**.878**
		4.00	-.02857	.28948	**.921**
DEEPSTRAT1	1.00	2.00	-.23334*	.06388	**.000**
		3.00	-.26151*	.12209	**.033**
		4.00	-.36800*	.14984	**.015**
		5.00	-.29657	.20786	**.155**
	2.00	1.00	.23334*	.06388	**.000**

		3.00	-.02817	.12485	**.822**
		4.00	-.13466	.15210	**.377**
		5.00	-.06323	.20950	**.763**
		1.00	.26151*	.12209	**.033**
	3.00	2.00	.02817	.12485	**.822**
		4.00	-.10649	.18428	**.564**
		5.00	-.03506	.23391	**.881**
		1.00	.36800*	.14984	**.015**
	4.00	2.00	.13466	.15210	**.377**
		3.00	.10649	.18428	**.564**
		5.00	.07143	.24952	**.775**
		1.00	.29657	.20786	**.155**
	5.00	2.00	.06323	.20950	**.763**
		3.00	.03506	.23391	**.881**
		4.00	-.07143	.24952	**.775**
		2.00	.17782*	.06308	**.005**
	1.00	3.00	.27976*	.12155	**.022**
		4.00	.17976	.14609	**.219**
		5.00	.10833	.21820	**.620**
		1.00	-.17782*	.06308	**.005**
	2.00	3.00	.10194	.12438	**.413**
		4.00	.00194	.14845	**.990**
		5.00	-.06949	.21978	**.752**
		1.00	-.27976*	.12155	**.022**
SURFMOT1	3.00	2.00	-.10194	.12438	**.413**
		4.00	-.10000	.18120	**.581**
		5.00	-.17143	.24311	**.481**
		1.00	-.17976	.14609	**.219**
	4.00	2.00	-.00194	.14845	**.990**
		3.00	.10000	.18120	**.581**
		5.00	-.07143	.25626	**.781**
		1.00	-.10833	.21820	**.620**
	5.00	2.00	.06949	.21978	**.752**
		3.00	.17143	.24311	**.481**
		4.00	.07143	.25626	**.781**
		2.00	.22380*	.06117	**.000**
	1.00	3.00	.12126	.11361	**.287**
		4.00	.34745*	.14494	**.017**
		5.00	.43793*	.21664	**.044**
		1.00	-.22380*	.06117	**.000**
	2.00	3.00	-.10253	.11628	**.379**
		4.00	.12366	.14705	**.401**
		5.00	.21413	.21806	**.327**
		1.00	-.12126	.11361	**.287**
SURFSTRAT1	3.00	2.00	.10253	.11628	**.379**
		4.00	.22619	.17546	**.198**
		5.00	.31667	.23814	**.185**
		1.00	-.34745*	.14494	**.017**
	4.00	2.00	-.12366	.14705	**.401**
		3.00	-.22619	.17546	**.198**
		5.00	.09048	.25459	**.723**
		1.00	-.43793*	.21664	**.044**
	5.00	2.00	-.21413	.21806	**.327**
		3.00	-.31667	.23814	**.185**
		4.00	-.09048	.25459	**.723**
		2.00	.09694	.06414	**.132**
	1.00	3.00	.13033	.12095	**.282**
		4.00	.29866*	.15136	**.049**
		5.00	.57961*	.22613	**.011**
		1.00	-.09694	.06414	**.132**
ACHIEVEMOT1	2.00	3.00	.03339	.12351	**.787**
		4.00	.20171	.15342	**.189**
		5.00	.48267*	.22751	**.035**
		1.00	-.13033	.12095	**.282**
	3.00	2.00	-.03339	.12351	**.787**
		4.00	.16832	.18453	**.362**
		5.00	.44928	.24955	**.073**

	4.00	1.00	-.29866*	.15136	**.049**
		2.00	-.20171	.15342	**.189**
		3.00	-.16832	.18453	**.362**
		5.00	.28095	.26563	**.291**
	5.00	1.00	-.57961*	.22613	**.011**
		2.00	-.48267*	.22751	**.035**
		3.00	-.44928	.24955	**.073**
		4.00	-.28095	.26563	**.291**
	1.00	2.00	-.10163	.06546	**.121**
		3.00	-.20029	.12128	**.100**
		4.00	-.11503	.16014	**.473**
		5.00	.00805	.21470	**.970**
	2.00	1.00	.10163	.06546	**.121**
		3.00	-.09866	.12420	**.428**
		4.00	-.01340	.16237	**.934**
		5.00	.10968	.21637	**.613**
ACHIEVESTRAT1	3.00	1.00	.20029	.12128	**.100**
		2.00	.09866	.12420	**.428**
		4.00	.08526	.19180	**.657**
		5.00	.20833	.23925	**.384**
	4.00	1.00	.11503	.16014	**.473**
		2.00	.01340	.16237	**.934**
		3.00	-.08526	.19180	**.657**
		5.00	.12308	.26111	**.638**
	5.00	1.00	-.00805	.21470	**.970**
		2.00	-.10968	.21637	**.613**
		3.00	-.20833	.23925	**.384**
		4.00	-.12308	.26111	**.638**
	1.00	2.00	-.22699*	.06459	**.001**
		3.00	-.27059*	.12170	**.027**
		4.00	-.38812*	.14928	**.010**
		5.00	-.36908	.22290	**.099**
	2.00	1.00	.22699*	.06459	**.001**
		3.00	-.04361	.12456	**.727**
		4.00	-.16114	.15162	**.289**
		5.00	-.14209	.22448	**.527**
DEEP1	3.00	1.00	.27059*	.12170	**.027**
		2.00	.04361	.12456	**.727**
		4.00	-.11753	.18338	**.522**
		5.00	-.09848	.24704	**.690**
	4.00	1.00	.38812*	.14928	**.010**
		2.00	.16114	.15162	**.289**
		3.00	.11753	.18338	**.522**
		5.00	.01905	.26173	**.942**
	5.00	1.00	.36908	.22290	**.099**
		2.00	.14209	.22448	**.527**
		3.00	.09848	.24704	**.690**
		4.00	-.01905	.26173	**.942**
	1.00	2.00	.19098*	.05496	**.001**
		3.00	.23757*	.10454	**.024**
		4.00	.25899*	.12557	**.040**
		5.00	.15185	.20467	**.459**
	2.00	1.00	-.19098*	.05496	**.001**
		3.00	.04658	.10697	**.664**
		4.00	.06801	.12759	**.594**
		5.00	-.03913	.20592	**.849**
SURFACE1	3.00	1.00	-.23757*	.10454	**.024**
		2.00	-.04658	.10697	**.664**
		4.00	.02143	.15553	**.891**
		5.00	-.08571	.22430	**.703**
	4.00	1.00	-.25899*	.12557	**.040**
		2.00	-.06801	.12759	**.594**
		3.00	-.02143	.15553	**.891**
		5.00	-.10714	.23484	**.649**
	5.00	1.00	-.15185	.20467	**.459**
		2.00	.03913	.20592	**.849**
		3.00	.08571	.22430	**.703**

		4.00	.10714	.23484	**.649**
		2.00	.00193	.05546	**.972**
	1.00	3.00	-.02651	.10280	**.797**
		4.00	.14071	.13302	**.291**
		5.00	.27276	.19190	**.156**
		1.00	-.00193	.05546	**.972**
	2.00	3.00	-.02844	.10509	**.787**
		4.00	.13878	.13480	**.304**
		5.00	.27083	.19313	**.162**
		1.00	.02651	.10280	**.797**
ACHIEVE1	3.00	2.00	.02844	.10509	**.787**
		4.00	.16722	.16020	**.297**
		5.00	.29928	.21164	**.158**
		1.00	-.14071	.13302	**.291**
	4.00	2.00	-.13878	.13480	**.304**
		3.00	-.16722	.16020	**.297**
		5.00	.13205	.22786	**.563**
		1.00	-.27276	.19190	**.156**
	5.00	2.00	-.27083	.19313	**.162**
		3.00	-.29928	.21164	**.158**
		4.00	-.13205	.22786	**.563**

Table H16

ECU: Mean Motives and Strategies by Age

Paired Samples Statistics

AGE			Mean	N	Std. Deviation	Std. Error Mean
1.00	Pair 1	DEEPMOT1	2.5120	166	.59836	.04644
		DEEPSTRAT1	2.6831	166	.55406	.04300
	Pair 2	SURFMOT1	2.1111	162	.52656	.04137
		SURFSTRAT1	2.3926	162	.48781	.03833
	Pair 3	ACHIEVEMOT1	2.9049	164	.57063	.04456
		ACHIEVESTRAT1	2.8073	164	.54980	.04293
2.00	Pair 1	DEEPMOT1	2.7288	118	.57141	.05260
		DEEPSTRAT1	2.9203	118	.48013	.04420
	Pair 2	SURFMOT1	1.9391	115	.51652	.04817
		SURFSTRAT1	2.1826	115	.52084	.04857
	Pair 3	ACHIEVEMOT1	2.8167	120	.46206	.04218
		ACHIEVESTRAT1	2.8917	120	.54257	.04953
3.00	Pair 1	DEEPMOT1	2.8000	22	.73030	.15570
		DEEPSTRAT1	2.9364	22	.71016	.15141
	Pair 2	SURFMOT1	1.8286	21	.44849	.09787
		SURFSTRAT1	2.2000	21	.60663	.13238
	Pair 3	ACHIEVEMOT1	2.7826	23	.68996	.14387
		ACHIEVESTRAT1	2.9826	23	.66309	.13826
4.00	Pair 1	DEEPMOT1	2.9286	14	.66382	.17741
		DEEPSTRAT1	3.0429	14	.51547	.13777

	Pair 2	SURFMOT1	1.9286	14	.64023	.17111
		SURFSTRAT1	2.0571	14	.50492	.13495
	Pair 3	ACHIEVEMOT1	2.5077	13	.44434	.12324
		ACHIEVESTRAT1	2.9231	13	.44376	.12308
	Pair 1	DEEPMOT1	2.9000	6	.32863	.13416
		DEEPSTRAT1	3.0333	6	.38816	.15846
5.00	Pair 2	SURFMOT1	2.0800	5	.75631	.33823
		SURFSTRAT1	2.1200	5	.60992	.27276
	Pair 3	ACHIEVEMOT1	2.3333	6	.70048	.28597
		ACHIEVESTRAT1	2.8333	6	.46332	.18915

a. The correlation and t cannot be computed because there are no valid pairs.

Table H17

ECU: SPQ by age: t-test results

			Mean	Std. Deviation	t	df	Sig (2 tailed)
1.00	Pair 1	DEEPMOT1 - DEEPSTRAT1	-.17108	.40438	-5.451	165	**.000**
	Pair 2	SURFMOT1 - SURFSTRAT1	-.28148	.52918	-6.770	161	**.000**
	Pair 3	ACHIEVEMOT1 - ACHIEVESTRAT1	.09756	.63690	1.962	163	**.052**
2.00	Pair 1	DEEPMOT1 - DEEPSTRAT1	-.19153	.33629	-6.187	117	**.000**
	Pair 2	SURFMOT1 - SURFSTRAT1	-.24348	.49686	-5.255	114	**.000**
	Pair 3	ACHIEVEMOT1 - ACHIEVESTRAT1	-.07500	.53204	-1.544	119	**.125**
3.00	Pair 1	DEEPMOT1 - DEEPSTRAT1	-.13636	.30480	-2.098	21	**.048**
	Pair 2	SURFMOT1 - SURFSTRAT1	-.37143	.54143	-3.144	20	**.005**
	Pair 3	ACHIEVEMOT1 - ACHIEVESTRAT1	-.20000	.51874	-1.849	22	**.078**
4.00	Pair 1	DEEPMOT1 - DEEPSTRAT1	-.11429	.41298	-1.035	13	**.319**
	Pair 2	SURFMOT1 - SURFSTRAT1	-.12857	.46148	-1.042	13	**.316**
	Pair 3	ACHIEVEMOT1 - ACHIEVESTRAT1	-.41538	.38697	-3.870	12	**.002**
5.00	Pair 1	DEEPMOT1 - DEEPSTRAT1	-.13333	.32660	-1.000	5	**.363**
	Pair 2	SURFMOT1 - SURFSTRAT1	-.04000	.43359	-.206	4	**.847**
	Pair 3	ACHIEVEMOT1 - ACHIEVESTRAT1	-.50000	.48580	-2.521	5	**.053**

Table H18

UoN: Means and SDs for SPQ between S1 & S2 students

Paired Samples Statistics

SEMESTER			Mean	N	Std. Deviation	Std. Error Mean
1	Pair 1	DEEPMOT	2.7767	574	.57226	.02389
		DEEPMOT2	2.6404	574	.59542	.02485
	Pair 2	DEEPSTRAT	2.9822	573	.52320	.02186
		DEEPSTRAT2	2.7058	573	.54290	.02268
	Pair 3	SURFMOT	1.9532	564	.51168	.02155
		SURFMOT2	2.1883	564	.56938	.02398
	Pair 4	SURFSTRAT	2.2021	562	.49539	.02090
		SURFSTRAT2	2.3036	562	.53112	.02240
	Pair 5	ACHIEVEMOT	2.8511	564	.48941	.02061
		ACHIEVEMOT2	2.8582	564	.47877	.02016
	Pair 6	ACHIEVESTRAT	2.9315	569	.57581	.02414
		ACHIEVESTRAT2	2.7195	569	.64124	.02688
	Pair 7	DEEP	2.8813	552	.51337	.02185
		DEEP2	2.6678	552	.53159	.02263
	Pair 8	SURF	2.0774	536	.43983	.01900
		SURF2	2.2429	536	.47650	.02058
	Pair 9	ACHIEVE	2.8902	540	.44342	.01908
		ACHIEVE2	2.7880	540	.47675	.02052
2	Pair 1	DEEPMOT	2.9021	235	.52959	.03455
		DEEPMOT2	2.8187	235	.50703	.03308
	Pair 2	DEEPSTRAT	3.0962	237	.47997	.03118
		DEEPSTRAT2	2.8532	237	.45216	.02937
	Pair 3	SURFMOT	1.9661	224	.55408	.03702
		SURFMOT2	2.1732	224	.54797	.03661
	Pair 4	SURFSTRAT	2.2347	225	.52919	.03528
		SURFSTRAT2	2.2844	225	.51459	.03431
	Pair 5	ACHIEVEMOT	2.8796	221	.52863	.03556
		ACHIEVEMOT2	2.8670	221	.46850	.03151
	Pair 6	ACHIEVESTRAT	2.9780	236	.55859	.03636
		ACHIEVESTRAT2	2.7907	236	.57678	.03755
	Pair 7	DEEP	3.0009	225	.46704	.03114
		DEEP2	2.8307	225	.44047	.02936
	Pair 8	SURF	2.0981	210	.49145	.03391
		SURF2	2.2352	210	.47623	.03286

Pair 9	ACHIEVE	2.9384	216	.45038	.03064
	ACHIEVE2	2.8296	216	.42662	.02903

Table H19

UoN: Paired Sample t-tests SPQ UoN divided by Semester

			Mean Diff	Std Dev	t	df	**Sig. (2-tailed)**
1	Pair 1	DEEPMOT - DEEPMOT2	.13624	.52582	6.207	573	**.000**
	Pair 2	DEEPSTRAT - DEEPSTRAT2	.27644	.51653	12.811	572	**.000**
	Pair 3	SURFMOT - SURFMOT2	-.23511	.57216	-9.759	563	**.000**
	Pair 4	SURFSTRAT - SURFSTRAT2	-.10142	.52001	-4.624	561	**.000**
	Pair 5	ACHIEVEMOT - ACHIEVEMOT2	-.00709	.49890	-.338	563	**.736**
	Pair 6	ACHIEVESTRAT - ACHIEVESTRAT2	.21195	.60351	8.377	568	**.000**
	Pair 7	DEEP - DEEP2	.21359	.46251	10.850	551	**.000**
	Pair 8	SURF - SURF2	-.16549	.44215	-8.665	535	**.000**
	Pair 9	ACHIEVE - ACHIEVE2	.10222	.45985	5.166	539	**.000**
2	Pair 1	DEEPMOT - DEEPMOT2	.08340	.53062	2.410	234	**.017**
	Pair 2	DEEPSTRAT - DEEPSTRAT2	.24304	.46868	7.983	236	**.000**
	Pair 3	SURFMOT - SURFMOT2	-.20714	.48875	-6.343	223	**.000**
	Pair 4	SURFSTRAT - SURFSTRAT2	-.04978	.54348	-1.374	224	**.171**
	Pair 5	ACHIEVEMOT - ACHIEVEMOT2	.01267	.46262	.407	220	**.684**
	Pair 6	ACHIEVESTRAT - ACHIEVESTRAT2	.18729	.53983	5.330	235	**.000**
	Pair 7	DEEP - DEEP2	.17022	.43234	5.906	224	**.000**
	Pair 8	SURF - SURF2	-.13714	.43490	-4.570	209	**.000**
	Pair 9	ACHIEVE - ACHIEVE2	.10880	.40768	3.922	215	**.000**

Table H20

ECU: Means and standard deviations across Q1 and Q3

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	DEEPMOT1	2.6329	73	.64292	.07525
	DEEPMOT2	2.5342	73	.51967	.06082
Pair 2	DEEPSTRAT1	2.7775	71	.52974	.06287
	DEEPSTRAT2	2.6113	71	.53333	.06329
Pair 3	SURFMOT1	1.9859	71	.49607	.05887
	SURFMOT2	2.0563	71	.50504	.05994
Pair 4	SURFSTRAT1	2.4116	69	.55718	.06708
	SURFSTRAT2	2.2029	69	.53851	.06483
Pair 5	ACHIEVEMOT1	2.9343	67	.68701	.08393
	ACHIEVEMOT2	2.8776	67	.52910	.06464
Pair 6	ACHIEVESTRAT1	2.8466	73	.54520	.06381
	ACHIEVESTRAT2	2.7452	73	.53360	.06245
Pair 7	DEEP1	2.7015	68	.54867	.06654
	DEEP2	2.5750	68	.50026	.06067
Pair 8	SURFACE1	2.1922	64	.47985	.05998
	SURF2	2.1359	64	.46132	.05766
Pair 9	ACHIEVE1	2.8813	64	.48432	.06054
	ACHIEVE2	2.8031	64	.40590	.05074

Table H21

ECU: Paired Sample t-test Q1-Q3

		Mean	Std. Deviation	t	df	**Sig. (2 tailed)**
Pair 1	DEEPMOT1 - DEEPMOT2	.09863	.61655	1.367	72	**.176**
Pair 2	DEEPSTRAT1 - DEEPSTRAT2	.16620	.52805	2.652	70	**.010**
Pair 3	SURFMOT1 - SURFMOT2	-.07042	.49925	-1.189	70	**.239**
Pair 4	SURFSTRAT1 - SURFSTRAT2	.20870	.50925	3.404	68	**.001**
Pair 5	ACHIEVEMOT1 - ACHIEVEMOT2	.05672	.72931	.637	66	**.527**
Pair 6	ACHIEVESTRAT1 - ACHIEVESTRAT2	.10137	.58606	1.478	72	**.144**
Pair 7	DEEP1 - DEEP2	.12647	.50033	2.084	67	**.041**
Pair 8	SURFACE1 - SURF2	.05625	.43200	1.042	63	**.302**
Pair 9	ACHIEVE1 - ACHIEVE2	.07813	.50442	1.239	63	**.220**

Appendix J: Selected data tables: Concluding Questionnaire

J.1 The University of Newcastle

Table J1.1
UoN: Support services: Departmental secretary

Secuse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	513	26.6	61.9	61.9
	2	258	13.4	31.1	93.0
	3	13	.7	1.6	94.6
	4	45	2.3	5.4	100.0
	Total	829	42.9	100.0	
Missing	System	1103	57.1		
Total		1932	100.0		

Table J1.2
UoN: Support services: Student mentors

Mentoruse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	98	5.1	11.7	11.7
	2	661	34.2	78.8	90.5
	3	35	1.8	4.2	94.6
	4	45	2.3	5.4	100.0
	Total	839	43.4	100.0	
Missing	System	1093	56.6		
Total		1932	100.0		

Table J1.3

UoN: Support services: Program Coordinator

Coorduse

		Frequency	Percent	Valid Percent	Cumulative Percent
	1	57	3.0	6.8	6.8
	2	466	24.1	55.9	62.7
Valid	3	102	5.3	12.2	74.9
	4	209	10.8	25.1	100.0
	Total	834	43.2	100.0	
Missing	System	1098	56.8		
Total		1932	100.0		

Table J1.4

UoN: Support services: Learning support

Learnsuppuse

		Frequency	Percent	Valid Percent	Cumulative Percent
	1	32	1.7	3.8	3.8
	2	553	28.6	65.3	69.1
Valid	3	74	3.8	8.7	77.8
	4	188	9.7	22.2	100.0
	Total	847	43.8	100.0	
Missing	System	1085	56.2		
Total		1932	100.0		

Table J1.5

UoN: Support services: Student counsellor

counselluse

		Frequency	Percent	Valid Percent	Cumulative Percent
	1	41	2.1	4.8	4.8
	2	739	38.3	87.2	92.1
Valid	3	21	1.1	2.5	94.6
	4	46	2.4	5.4	100.0
	Total	847	43.8	100.0	
Missing	System	1085	56.2		
Total		1932	100.0		

Table J1.6

UoN: Support services: Health

Healthuse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	173	9.0	20.6	20.6
	2	630	32.6	75.0	95.6
	3	16	.8	1.9	97.5
	4	21	1.1	2.5	100.0
	Total	840	43.5	100.0	
Missing	System	1092	56.5		
Total		1932	100.0		

J.2 University of New England

(Note: None of these has IDs or Q1)

Table J2.1

UNE: Support services: Departmental secretary

Departmental secretaries' office

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	45	73.8	75.0	75.0
	2.00	15	24.6	25.0	100.0
	Total	60	98.4	100.0	
Missing	System	1	1.6		
Total		61	100.0		

Table J2.2

UNE: Support services: Student mentors

Student mentors

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	14	23.0	25.9	25.9
	2.00	35	57.4	64.8	90.7
	3.00	3	4.9	5.6	96.3
	4.00	2	3.3	3.7	100.0
	Total	54	88.5	100.0	
Missing	System	7	11.5		
Total		61	100.0		

Table J2.3

UNE: Support services: Program Coordinator

Program Coordinator

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	5	8.2	11.6	11.6
	2.00	17	27.9	39.5	51.2
	3.00	1	1.6	2.3	53.5
	4.00	20	32.8	46.5	100.0
	Total	43	70.5	100.0	
Missing	System	18	29.5		
Total		61	100.0		

Table J2.4

UNE: Support services: Learning support

Learning support

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	8	13.1	14.5	14.5
	2.00	36	59.0	65.5	80.0
	3.00	4	6.6	7.3	87.3
	4.00	7	11.5	12.7	100.0
	Total	55	90.2	100.0	
Missing	System	6	9.8		
Total		61	100.0		

Table J2.5

UNE: Support services: Student counsellor

Counselling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	15	24.6	25.4	25.4
	2.00	44	72.1	74.6	100.0
	Total	59	96.7	100.0	
Missing	System	2	3.3		
Total		61	100.0		

Table J2.6

UNE: Support services: Health

Health service

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not aware of service	31	50.8	52.5	52.5
	2.00	28	45.9	47.5	100.0
	Total	59	96.7	100.0	
Missing	System	2	3.3		
Total		61	100.0		

J.3 Edith Cowan University

Table J3.1

ECU: Support services: Departmental secretary

Secuse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	47	19.0	59.5	59.5
	2	29	11.7	36.7	96.2
	3	1	.4	1.3	97.5
	4	2	.8	2.5	100.0
	Total	79	32.0	100.0	
Missing	System	168	68.0		
Total		247	100.0		

Table J3.2

ECU: Support services: Student mentors

Mentoruse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	12	4.9	15.2	15.2
	2	59	23.9	74.7	89.9
	3	2	.8	2.5	92.4
	4	6	2.4	7.6	100.0
	Total	79	32.0	100.0	
Missing	System	168	68.0		
Total		247	100.0		

Table J3.3

ECU: Support services: Program Coordinator

Coorduse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	9	3.6	11.3	11.3
	2	47	19.0	58.8	70.0
	3	9	3.6	11.3	81.3
	4	15	6.1	18.8	100.0
	Total	80	32.4	100.0	
Missing	System	167	67.6		
Total		247	100.0		

Table J3.4

ECU: Support services: Learning support

learnsuppuse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	9	3.6	11.4	11.4
	2	48	19.4	60.8	72.2
	3	5	2.0	6.3	78.5
	4	17	6.9	21.5	100.0
	Total	79	32.0	100.0	
Missing	System	168	68.0		
Total		247	100.0		

Table J3.5

ECU: Support services: Student counsellor

counselluse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	11	4.5	13.9	13.9
	2	67	27.1	84.8	98.7
	3	1	.4	1.3	100.0
	Total	79	32.0	100.0	
Missing	System	168	68.0		
Total		247	100.0		

Table J3.6

ECU: Support services: Health

Healthuse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	23	9.3	29.1	29.1
	2	50	20.2	63.3	92.4
	3	3	1.2	3.8	96.2
	4	3	1.2	3.8	100.0
	Total	79	32.0	100.0	
Missing	System	168	68.0		
Total		247	100.0		