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Diversity: A longitudinal study of how student diversity relates to resilience and successful progression in a new generation university

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FINAL REPORT

Diversity: A longitudinal study of how student diversity relates to resilience and successful progression in a new generation university.

Project Team

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**Edith Cowan University
December 2008**

<http://www.chs.ecu.edu.au/org/tlo/projects/CG638/index.php>



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2009

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Finally, the project team is grateful to the Australian Learning and Teaching Council for funding and supporting the project.

2. EXECUTIVE SUMMARY

This project used the voices of diverse cohorts of students to describe their learning journeys as they progressed through the later years of their degree and into the workforce. The project combined quantitative data from a large student sample with qualitative data from a series of case study narratives to document the students' perceptions about their learning experiences, the factors underpinning progression in their studies and their transition into the workplace. The project has attempted to answer the question: *does diversity matter?* Do students of different diversities progress differently, and are there differences in the factors enhancing progression and developing resilience that can be linked directly to diversity? In this project, successful students are those who have completed first year and have progressed to their second or final year of their undergraduate degree.

The rationale for the study arose from:

- the need for institutional policies and practices to better reflect the increased student diversity they serve
- our lack of knowledge about how the behaviours and strategies that diverse students use translate into resilience and progression to graduation and into the workforce
- the importance of understanding the diverse ways those successful students navigate through their learning journey, often in the face of multiple responsibilities and commitments.

Our preliminary analysis of the data indicates *diversity does indeed matter* if you are a NESB student with language difficulties, or with a culture that calls attention to difference. Strategies that students utilise to progress successfully are closely aligned with, or embedded in the immediate learning environment of the student. Any student likely to be marginalised in the learning environment is unable to access these strategies, and successful progression requires that other strategies be identified and utilised, or progression is simply made more difficult.

However, for the great majority of the student participants and the majority of the diversity cohorts, there are far more similarities than there are differences. There are some subtle differences with diversity across these cohorts, but they are differences of emphasis rather than substance, of 'shades of grey' rather than 'black versus white'. Nevertheless, these subtle diversity-related differences can have implications for practice.

The following summarises the main outcomes from the project and the consequent implications for practice.

1. Diverse support networks and the ability to seek help for learning within them are important factors underpinning successful progression and resilience.

- Students particularly value peer support networks. Students in less structured degrees and where there is little or no formal group work as part of the learning environment may struggle to form effective peer support networks.
- Staff need to provide a range of opportunities for students to develop effective peer support networks early in their studies. Given the time demands on students today, these opportunities are best linked to the learning environment itself.

- Developing and initiating help-seeking strategies to support progression is not easy for students. There are both proactive and reluctant help-seekers. Proactive help-seekers show critical learning attributes and reluctant help seekers can show passive learning qualities, with some reluctant help-seekers appearing confused about the exact nature of independent learning and uncertain about the costs and benefits of seeking help.
- Students seek help from staff and their immediate learning community with whom they have developed a working/positive relationship. The students need to feel confident in the helper's interest and ability to assist them.
- Some students are highly apprehensive about seeking help as they are uncertain about whom to approach, where to seek assistance and about issues of confidentiality. Once students know where to find help and whom to approach they start to develop a network of people who can assist them. This network is pivotal to them persisting with their studies and overcoming critical incidents.
- Different student cohorts rely on different combinations of support networks depending on their diversity, multiple responsibilities and commitments.
- NESB students and first generation students may be particularly reliant on effective help-seeking strategies.
- However, international students generally rely more on distant family support and the support of teaching staff, and less on peer support than local students. There are indications that it is more difficult for them to develop effective peer networks.

2. Students' personal goals or career aspirations are overwhelmingly important, and are universal factors underpinning persistence and success.

- Student goals (i.e., what they want and the reasons why they want it) influence the way students approach learning and the way they experience university life.
- Students are motivated by multiple goals that have relevance across many dimensions of their lives. These goals differ in nature and orientation yet they often target the same intended outcome.
- • Students study for a variety of reasons, some of which are related to career, learning and/or personal development. A significant student behaviour is how they use their goals to focus on possible and future opportunities for them.
- The setting of goals motivates students to persist with their studies and in many cases gives them the resilience to overcome barriers to academic success.
- For younger students, even those without family responsibilities, conflicts with 'being a student' and goal clarification (possibly encouraged by/resulting from dissatisfaction with their selected course of study) are catalysts for considering withdrawal.
- Staff are generally unaware of the importance of students' goal commitments and self-determination to progress. Staff are more likely to identify factors within the learning environment and directly within their control as more important. However, their perceptions are not entirely misplaced as the outcomes related to the learning environment indicate.

3. The immediate learning environment links together, and operationalises, many of the factors enhancing progression.

- The development of individual relationships with teaching staff, centred within the learning environment, enhances progression for successful students. These relationships make help-seeking less daunting and more strategic, and encourage academic achievement.
- Effective engagement with the learning environment is a common feature among successful students. Engagement is enhanced by interactivity, perceived relevancy of content to goals, and enthusiastic, approachable staff.
- The learning environment can play a central role in facilitating the development of a sense of community. By providing catalysts for frequent and consistent interaction in formal and informal settings, the learning environment stimulates the development of communities that can lead to a sense of belonging and that promote persistence.
- Older-aged students (with or without child-minding responsibilities) and students working very long hours in the paid workforce rely on a significant degree of flexibility within the learning environment to ensure progression.
- Students who are marginalised from the learning environment (e.g., by language or disability) have far less opportunity to utilise some of the strategies that other students find essential for success and persistence, and for developing a sense of belonging.

4. The graduating institution and employers both have roles to play in assisting the transition of graduates into the workplace.

- Student confidence in moving into the workforce is enhanced by closer links with industry and interactions with a workplace during their undergraduate years.
- A positive work environment characterised by encouragement and guidance, allowance for a 'settling in' period as well as adequate resources to assist graduates is essential for successful workplace transition.
- Students in non-professional, generalist degrees such as Arts would benefit from the embedding of some kind of workplace experience and strategic career advice. This would enhance the transition into the workplace.

The following summarises some of the implications for practice emerging from the outcomes.

- Having an empirical understanding of students' goals provides valuable insights into how they persist and succeed with their studies. We need to explore classroom strategies for assisting students to develop, reflect on, and achieve their goals.
- The ways in which teaching staff present themselves to students early in a teaching unit is critical for students initiating effective working relationships that enhance both academic endeavour and successful progression. The same staff-student relationship can determine the ease with which students initiate and utilise help-seeking behaviours.
- Some students' notion of an independent learner have encouraged them to develop as critical learners whilst other students have interpreted the idea of independent learning as being reflected in passive or solitary learning practices. Clearly, the precise nature of an independent learner needs to be explored with new students within their learning environments.

- Learning environments that are interactive and challenging are central to the development of formal and informal communities that create a sense of belonging. This sense of belonging is important for progression and the development of coping strategies to promote resilience.
- Learning environments that embed authentic industry experience and/or knowledge into the degree program enhance the transition into the workplace.
- Obtaining relevant career information and guidance prior to graduating as well as some type of 'closure' at the end of their degrees is important to students for a successful transition into the workplace.

3. OVERVIEW OF THE PROJECT

3.1 Introduction

This project describes the journey of diverse cohorts of students as they progressed through the later years of their degree and into the workforce. It focuses on the students' narratives describing the institutional environment and the factors underpinning progression in their studies and their transition into the workplace. This study has provided insights into the contemporary 'whole of university life' experiences of the students. It provides a rich collection of individual student perceptions and coping strategies from which emerging themes and patterns have been extracted, and models developed to inform institutional practices to support resilience. The study particularly addresses two ALTC priorities:

- Research and development focussing on issues of emerging and continuing importance, and
- Strategic approaches to teaching and learning that address the increasing diversity of the student body.

3.2 Aims of the project

This project aimed to identify the extent to which diverse student cohorts demonstrate commonalities and differences with regard to resilience and effective progression. We hoped that the outcomes would help develop better policies and practices which positively support the multiple student experiences characteristic of today's universities. In order to do this we conducted a longitudinal study of successful students' perceptions and behaviours. The study followed two groups of students, each group across two years: one group from their penultimate year to their final year; a second group from the final year through to their first year in the workforce.

The specific aims of the project were to:

1. Document students' perceptions, behaviours, and decision-making through their course.
2. Identify students' perceptions about their skills, knowledge and expectations as they enter and experience the workforce.
3. Identify the extent to which these diverse student cohorts demonstrate commonalities and differences with regard to resilience and effective progression.
4. Identify strategies universities can use to encourage persistence and to develop resilience in students throughout their course of study and into their first year of employment.
5. Provide a better knowledge base for university teachers to understand and respond to the needs of such diverse student groups.
6. Enhance teaching and learning through a participatory model of dissemination.

3.3 The Project Team

The Project Team members were:

- Associate Professor Adrienne Kinnear, Faculty of Computing, Health and Science, Edith Cowan University (Project Leader)
- Dr Mary Boyce, Senior Lecturer and Course Coordinator, Natural Sciences, Faculty of Computing, Health and Science, Edith Cowan University (Researcher)
- Ms Heather Sparrow, Quality Improvement Manager, Learning and Teaching, Faculty of Education and Arts, Edith Cowan University (Researcher)
- Ms Sharon Middleton, Graduate Research Assistant, Faculty of Computing, Health and Science, Edith Cowan University (Project Coordinator)
- Dr Marguerite Cullity, Research Officer/Learning Adviser, Faculty of Education and Arts, Edith Cowan University (Interviewer/Researcher).

For more details about the project team, see

<http://www.chs.ecu.edu.au/org/tlo/projects/CG638/index.php>

3.4 The Advisory Committee

The members of the Project Advisory Committee were:

- Professor Sue Stoney, Head of the Centre for Learning & Teaching, Edith Cowan University
- Dr Glenda Jackson, Director of Student Services, Edith Cowan University
- Associate Professor Lynne Cohen, Associate Dean (Teaching & Learning), Faculty of Computing, Health and Science, ECU
- Professor Bruce Shortland-Jones (2007 only) Director, Learning Support Network, Curtin University
- Ms Alison Bunker, Academic Staff Development Officer, Centre for Learning & Teaching, Edith Cowan University
- Ms Sally Webster (2008 only) Manager, Student Equity & Diversity, Curtin University.

3.5 The significance of the project

The rationale for the study arose from:

- the need for institutional policies and practices to better reflect the increased student diversity they serve
- our lack of knowledge about how the behaviours and strategies that diverse students use translate into resilience and progression to graduation and into the workforce
- the importance of understanding the diverse ways those successful students navigate through their learning journey, often in the face of multiple responsibilities and commitments.

Increased access and widening participation with consequent increased student diversity has been a feature of higher education generally over the past three decades. Many universities are currently struggling to meet the different needs of these diverse groups of students. At the same time, student perceptions of their learning journey reveal that universities may not value diversity sufficiently when it comes to institutional policies and practices (Leathwood & O'Connell, 2003). Our study purposefully selected a set of diverse student cohorts within a tertiary institution, cohorts which are common to many institutions in their identifying characteristics, but for which we lack detailed 'stories' of the student experience(s).

While we know some of the factors that affect student persistence in the first year of tertiary study, we know very little of their relevance to the post first-year student moving towards graduation or to the student moving into the workforce. As a result we lack information on which to base indicators of the process of student progression (Robinson, 2004). Our study focussed on this information gap, monitoring students progressing through the final two years of the undergraduate degree and into the workforce.

There are few studies that present complex qualitative data or provide rich case studies that inform us about students' perceptions of their course experience over time (Scott, 2005). However, those that have been completed demonstrate clearly the power of individual student stories to explicate perceptions (Bowser, Danaher, & Somasundaram, 2005) and identify coping strategies and emerging themes that, in turn, inform institutional policy and practice (Leathwood & O'Connell, 2003; Moreau, & Leathwood, 2006; Long & Hayden, 2001). Our study examined student progression through the students' narratives of their learning experiences. Previous studies have interrogated institutional statistics and practices. This project moved beyond this focus and examined issues from the point of view of *successful* students – those who were likely to have developed resilience in the face of complex responsibilities and multiple demands on their time and attention.

4. THE PROJECT DESIGN AND METHODOLOGY

4.1 Components and timelines

Our experiences during the first year of the project informed our methodology, which was continually evaluated and modified as necessary for the success of the project. The project had several main components (Table 1).

1. An initial student survey was used to collect necessary demographic student data. It was also used to obtain student perspectives on success and progression that would inform the approaches used for the subsequent focus groups and interviews, and to identify students willing to be part of the two-year project.
2. Selection and finalisation of case-study participants involved contacting survey participants who volunteered to take part in the study. At the same time we endeavoured to ensure a broad range of diversities across the participants.
3. The first round of narratives were collected through student focus groups and interviews. Depending on the cohort, either focus groups or individual interviews were organised across three city campuses, Mount Lawley, Churchlands and Joondalup. These interviews generated narratives of our penultimate-year and final-year cohorts.
4. The second round of narratives were collected through student and graduate interviews. Beginning in the second year of the project, this process involved following up all of the students who had participated in the previous year, and individually interviewing all those who were willing to continue to participate. This process generated narratives of a second final year cohort and a cohort of graduates who had either entered the workplace, or (for a small number) who had continued with some form of post-graduate study.
5. Staff participatory dissemination involved several different strategies. Thirty three staff were involved in the first year of the study during the survey phase, and in the second year we initiated some deliberate strategies to involve other ECU staff in the project, though in a much more limited way than originally planned.
6. Dissemination activities began in the first year of the project, with the first set of outcomes, and they have continued in various ways throughout the life of the project.

Table 1. The main project components and the actual completion time-lines.

Project component	Year 1				Year 2			
	Jan	Apr	July	Dec	Jan	Apr	July	Nov
Student survey								
Finalisation of cohorts								
Student Focus groups								
Student Interviews-round 1								
Staff participation								
Student interviews-round 2								
Graduate interviews								
Dissemination activities								
Project evaluation								

4.2 The student survey

The first component of the project was a three-page questionnaire that was distributed to undergraduate students who were in their penultimate or final year of their degree. The questionnaire served a number of research purposes.

- It was the vehicle for the collection of student demographic and diversity data essential to the later stages of the project.
- It identified student volunteers who were willing to participate in the longitudinal study.
- It provided valuable, initial student perceptions regarding their success and progression at university and informed the second stage of the project, the focus group discussions and interviews.

The full questionnaire is provided in Appendix 1. The first part of the questionnaire was quantitative and focussed on the collection of demographic data such as discipline, age, enrolment and student type, and various family background and spoken language details. The second qualitative section asked students three open-ended questions.

- 1a. Identify up to five factors that have helped you progress this far in your studies.
 - b. How has each of these contributed to your progress?
2. Have you ever considered withdrawing from your studies?
3. If yes, list up to three most important reasons why you considered withdrawing and the reasons why you decided to stay?

Finally, students were asked to indicate their willingness to be contacted with a view to their participation in the two-year study. The final layout of the questionnaire was determined by the need for digital scanning of the student responses, both quantitative and qualitative.

The survey involved the collaboration of 33 staff across four campuses and students representing 12 disciplines. All ethics requirements were met in advance of survey distribution. Staff involvement in the project was deliberately sought at this early stage. Members of the research team personally contacted relevant staff to introduce them to the project, and arranged their co-operation to jointly assist with the distribution of the questionnaires in March, 2007 to the students in their classrooms. Completion of the questionnaire was voluntary. The response rate was very high with 1353 students responding.

The demographics, diversity characteristics and study disciplines of the students who completed the survey are presented in Tables 2 & 3. Of the 1353 students who completed the questionnaire, 993 were females (73.4%) and 360 were males (26.6%). This is a similar profile to the general ECU population and reflects the range of disciplines included in the study, with Nursing and Education being predominantly female disciplines. There was a greater number of final year students (n=822 or 61%) than 2nd year students (n=502 or 37%).

Table 2. Demographics of students who participated in the questionnaire (N=1353).

Demographic characteristic	% of students (N)			
	<=20yrs	21-30yrs	31-40yrs	>40
Age	32 (428)	52 (693)	9 (116)	7 (93)
Type of study	Full-time 92 (1240)	Part-time 8 (106)		
Entry pathway to ECU	TER 50 (654)	STAT 15 (207)	TAFE 13 (170)	Other 22 (270)
Mother's highest education	Primary 7 (93)	Secondary 44 (587)	TAFE 23 (309)	University 26 (344)
Father's highest education	Primary 8 (113)	Secondary 36 (494)	TAFE 25 (325)	University 29 (390)
Hours in paid employment (per week)	<=5 19 (249)	6-10 12 (156)	11-20 43 (568)	>20 26 (339)

All the major diversity groups that were originally identified as important for the project were represented in the initial survey (Table 3). Of particular note are the relatively high proportions of mature-aged students and those who represent the first of their family to enter university. On the other hand, the low proportion of international students who completed the questionnaire was disappointing. As has been shown in other studies, the majority of students in the sample work substantial hours in paid employment (Table 2).

Questionnaire responses were digitally scanned, using Cardiff Teleform software, into an Excel database for easy export into SPSS (Version 14) for analysis. Each of the digitised qualitative responses was manually verified for accuracy, a time-consuming but essential verification process. The qualitative student responses were numerically coded into themes that emerged from the data. These themes were first identified following analyses of a sample of questionnaires and then the coding was verified for consistency by each member of the research team coding 100 responses and comparing the results. A consistency of 96% was obtained between the five coders. The themes and their numerical codes are provided in Appendix 2. Only the first three responses to the first open-ended question were used in the analysis. The total response rate decreased sharply, and the presence of non-sensible responses tended to increase, after the first three responses. The full data set was coded and entered into SPSS by May, 2007.

Table 3. Diversity of students who participated in the questionnaire (N=1353).

Diversity group	% students¹ (N)
International	5 (68)
Indigenous	1 (17)
Mature age ²	68 (902)
First generation ³	44 (587)
With parental responsibilities	16 (209)
With a self-reported disability	2 (24)
Academic discipline:	
Media and Communications	15 (201)
Social Sciences/Psych/Social Work	10 (130)
Computing	2 (30)
Arts (English/History/Politics)	11 (146)
Business	7 (97)
Nursing	14 (187)
Biology/Chemistry	5 (75)
Education	23 (310)
Sports Science	13 (177)

1. The total percentage will exceed 100% as students could have multiple descriptors.

2. Mature age in this table = students >21 years of age.

3. First generation = first in immediate family to attend university.

Crosstab routines (SPSS v14) were run on the multiple response data to compare the response frequencies of each theme; that is, the percentage (based on the total number) of responses that was coded to each of the themes identified in the tables above, taking into account the first three responses of each student. This enabled us to rank the themes according to their response frequencies – an indication of ‘level of importance’ across the student sample being analysed. This approach was used for:

- the first three factors identified as assisting progression
- the three reasons prompting consideration of withdrawal
- the reasons for persistence following consideration of withdrawal.β

The rankings were analysed for the total student data set, and by student diversity and discipline. The survey outcomes provided us with a rich data set of stand-alone emergent themes underlying student persistence and resilience as well as assisting us to construct open-ended questions for the focus groups and interviews that followed.

4.3 Student discussion groups and interviews 2007

4.3.1 Organising the cohorts

Of the 1353 students who responded to the survey, 581 volunteered to participate in the two-year study. This sample became the focus for selecting the diversity cohorts for the project. Contacting and obtaining commitment from the students was a major challenge and time-consuming. Given that we anticipated organising 6-8 focus groups of 10-15 students, our aim was to have a minimum of 60-100 students committed to the project while allowing for attrition over the two years. The strategy used was as follows:

Step 1. The following were identified as distinct 'diversity groups' important to separate out for contact:

- international students
- Indigenous students
- self-reported disability students.

Step 2. The remaining students were grouped by year and home campus to maximise the probability of participation and because the focus groups would need to be campus-based.

- Churchlands discipline cohort (2nd years)
- Churchlands discipline cohort (Final year)
- Mt Lawley discipline cohort (2nd years)
- Mt Lawley discipline cohort (Final year)
- Joondalup discipline cohort (2nd year)
- Joondalup discipline cohort (Final year).

Students were contacted first by a repeated email and then by individual phone calls. It is worth noting that almost all the 581 students needed to be contacted in order to obtain a suitable minimum number of participants and there was no option for us to be selective. Despite this, the end result was that 64 students across a range of courses and backgrounds formed the original 2007 cohorts for the study¹. All of these cohorts were finalised by mid-year, 2007 and in time for the start of semester 2 in July, 2007 (Table 4).

4.3.2 A community Blackboard site

Towards the end of 2007, with each student's permission, a Blackboard community site was set up to communicate with the project participants. Immediately following the completion of the discussions and interviews, and to try to promote involvement with the community site, it was used to organise a 'student diary' task. The students were asked to complete a week long diary of their activities and reflections on their student life. This strategy was unsuccessful, and despite continued efforts, only three students completed this task. Thereafter the site was used only for efficient email

¹ An additional 7 students were added in the second year of the project to give a total of 71 students. All are included in Table 4.

access to the project students. The project website was to supersede the community site as a way of informing students about the project outcomes and activities. All the 2007 participants received a formal letter of thanks for participating in the 2007 discussion groups or interviews. A final email in 2007 also reminded them of their potential 2008 project involvement.

4.3.3 Discussion groups and interviews

Once the participants had been identified, students were emailed to organise a one-hour focus group discussion at their respective home campus. Those few students with a self-reported disability were given the option of a personal interview rather than participating in a group discussion. Two of the three students accepted the offer of an individual interview.

Table 4. Diversity and number of student cohorts that participated in the two-year project.

Diversity group	Number of students					
	Penultimate to final year		Final year to the workplace		Total	Total
	2007	2008	2007	2008	2007	2008
International	5	4	7	3	12	7
Indigenous	6	2	0	2	7	4
Mature age	16	16	31	17	47	33
First generation	12	12	17	10	29	22
With parental responsibilities	16	16	13	10	29	26
With a self-reported disability	2	2	1	1	3	3
Academic Discipline:						
Media & Communications	5	3	3	1	8	4
Social Sciences/Psychology	4	2	5	4	9	6
Computing	1	1	0	0	1	1
Arts	4	1	4	2	8	3
Business	3	3	1	0	4	3
Nursing	9	7	13	6	22	13
Biology/Chem	3	3	1	1	4	4
Education	2	2	6	3	6	5
Sports Sciences	1	1	1	1	2	2

¹ Note that total numbers in each year column exceed the actual total number across the cohorts because of multiple descriptors for each student.

The organization of discussion groups brought its own challenges. Firstly, we had very little success at persuading international students to participate in group discussions. After seeking appropriate advice from relevant ECU International personnel, we offered these students an individual interview and 12 students participated. Similarly the response from Indigenous students was very poor, with only one student willing to participate in a group discussion. Contact was

initiated with staff at the School of Indigenous Australian Studies, Kurongkurl Katitjin. After some 'false starts' and miscommunication with staff over the next months, it was early in 2008 before arrangements were finalised for two Kurongkurl Katitjin staff members to join the project team and individually contact and interview the enclave's students. The staff themselves were Indigenous and hence culturally attuned, they were well known by the Indigenous students and they welcomed the opportunity to be part of the project. Unfortunately, three weeks into this process, one of the staff left the University and the workload of the remaining staff member precluded further involvement. Five Indigenous students had been interviewed at this stage. The project research officer contacted and interviewed three more Indigenous students as well as a second follow-up interview with an existing participant. Two Indigenous students provided responses to the full set of 2007 and 2008 interview questions.

For the majority of the participants, two lunch-hour discussion groups of one hour at each of three campuses were organised for varying numbers of students, one for each group of penultimate and final year students. The discussion groups varied in size from four to twelve students. Interviews that were organised on the Churchlands campus consisted of students from the Nursing discipline only.²

The same set of open-ended questions was asked of the students in both group discussions and interviews (Appendix 4). The questions were designed to initiate discussion about 'being a successful student' and probe for factors that enhanced and hindered success at university. To meet ethics requirements, students were advised in writing of the aims and background of the project, the voluntary nature of their participation and the requirements for anonymity. Their written permission was obtained for the taping of the session. All discussions and interviews were taped using a digital recorder, then transcribed and formatted for importing into NVivo (v7). Detailed field notes of each discussion and interview were also compiled and imported into NVivo. In addition, a second team member documented the individual student speakers during the group discussion so that all discussion could be appropriately attributed. A total of 64 students participated in the group discussions and interviews in 2007.

Preliminary analyses of the transcripts identified a number of important, common themes in the students' narratives, and raised new issues concerning their progression, success and resilience. These informed our questions for the student interviews in 2008.

² This year, 2007, was the final year of existence for this campus as it was in the process of being phased out. Only Nursing and a small proportion of business students remained in this final year. The School of Nursing re-established at the Joondalup campus in time for the 2008 academic year.

4.4 The project cohorts 2008

4.4.1 The penultimate to final year students.

At the commencement of the 2008 academic year, we contacted the 2007 participants still studying at ECU (i.e., those now in their final year). The strategies of initial emails and, where necessary, follow-up phone calls, were used. However, it soon became clear that, with the different study timetables across the 12 disciplines, it was impossible to organise mutually agreed focus group times. The only option was to conduct individual interviews, as was planned for the graduate participants. Hence, all narrative data in 2008 was collected via individual interviews. This resulted in considerably more extensive and personal narrative data, but substantially increased the workload associated with the qualitative data analysis.

Of the 30 penultimate students who participated in the project in 2007, 22 agreed to participate in 2008. The interview was structured around 4 open-ended themes, all of which had emerged from the 2007 narratives as underpinning successful progression (Appendix 5):

1. Belonging to a community
2. Development of goals and career aspirations
3. Help-seeking behaviour
4. What must a University provide?

Individual students were interviewed on their home campus for approximately one hour and they were also asked to complete an interview summary sheet. As before, all interviews were taped, transcribed and formatted for importing into NVivo. All students were provided with a book voucher for their participation and time, a gesture that was universally well-received.

4.4.2 The graduates

In May, 2008, we began the process of locating and contacting the graduate students who had participated as final-year students in 2007. As expected, participant attrition was highest in this cohort, and of 34 final-year students who participated in 2007, 18 agreed to participate in an interview in 2008. Each graduate was interviewed at a place of her/his choosing for approximately 1 hour and they were also asked to complete an interview summary sheet.

The graduate interview questions were based on student narratives that emanated from the 2007 interviews. The participants represented one of three contexts at the time of the interview: graduates who were employed full-time in the workforce, graduates not currently employed by choice, or graduates enrolled in full-time further study, either as postgraduate or Honours students. In anticipation of this, the interviews were structured slightly differently for the different contexts (see Appendices 6 & 7) and were designed to elicit factors that enhanced successful transition from university. All interviews were taped, transcribed and formatted for importing into NVivo and the graduates were provided with a book voucher for their travel, participation and time.

4.5 Staff participation

We began the project with a clearly defined objective to actively involve staff in the data collection and analysis, as the research progressed. The aim was to use this staff participation as one of the dissemination vehicles for the project, a 'participatory dissemination model', and by so doing, to give staff first-hand experience with the students' narratives in ways that would inform and enhance their teaching and learning. The strategies identified at the outset were:

- direct involvement of the teaching staff in the collection of questionnaire data, as an introduction to the project
- later involvement in at least one focus group discussion with students (in the second year, once the student cohorts were established)
- feedback to the involved staff, of the projects outcomes at regular intervals via a project newsletter. The newsletter would also be used to reach a broader audience beyond ECU, as the project progressed
- feedback from the staff themselves on the project outcomes at appropriate stages, through discussion groups and/or interviews.

For reasons outlined later, not all of these strategies were implemented. The following describes the strategies we were able to utilise during the project.

At the commencement of first semester, 2007, teaching staff across a variety of faculties and schools were individually approached to assist with the distribution of the questionnaire in their classrooms. This provided the first opportunity to acquaint staff with the project objectives and rationale. With few exceptions, staff were very willing to participate in this way. In some instances, staff themselves both distributed and made arrangements for the return of surveys when this could not be achieved fully within a single teaching period. This contributed significantly to the sample size.

Once the first set of clear questionnaire outcomes on students' perceptions was available early in 2008, staff involved in the questionnaire distribution were given the opportunity to preview the outcomes and discuss them with a member of the research team. Because of the time demands on staff, they were given the option of participating in a discussion group or an individual interview. 20 staff responded and a discussion group of 5 staff was held on one campus and on the other, individual interviews were organised with 2 staff. All of these interactions were taped. The staff responses (some of them were surprised by the students' perceptions) prompted us to survey staff on themes similar to those presented to the students. This was also a useful strategy to maintain the visibility of the project.

The staff survey on perceptions of student success and persistence was distributed by email (and some by hand) to all staff in two faculties (Appendix 8). In April, 2008, an email was sent to all faculty staff asking them to participate in the survey, and 50 staff responded. The survey was based on ideas explored in the student questionnaire, and staff were asked to identify and comment on:

1. Three factors they thought helped students progress in their study.
2. The most important reasons why students consider withdrawing from their course.
3. The three most important factors contributing to students' persistence despite their considered withdrawal.

Staff respondents represented about 7% of the academic staff cohort. Responses were coded into the same themes as those of the students so that direct comparisons could be made between the two sets of perceptions. Immediately after the survey, we disseminated the comparisons of perceptions to all staff via the first project newsletter.

5. PROJECT FINDINGS – PART ONE

5.1 Introduction

The findings are presented as two separate components. The first (sections 5.2 and 5.3) describes the quantitative results and outcomes of the student and staff surveys and their relation to the project objectives. The second component (Project findings – part 2) describes the major themes that have emerged from the student narratives, how they informed us about the factors that influenced student progress, and, together with the survey data, the implications they have for teaching practice. A focus of this project was the student diversity, and to what extent this underpins the varied journeys students take as they progress through their degree and into the workplace. Section 6.7 addresses this focus specifically and asks the question: does diversity matter? Many of the factors that we have identified through the narratives do not operate in simple isolated ways. Rather, they are interrelated and operate in interconnected and complex ways, often varying with individual students. The ways in which these interrelationships and connectedness operate have implications for learning and teaching. In section 6.8 we show this complexity by the use of models generated from the qualitative analyses.

5.2 The survey: Students' perceptions of success and persistence

5.2.1 To what main factors do students attribute their successful progression?

Table 5 shows factors that assisted students' successful progression through their studies, and the frequency of each factor (as a percentage) in the first three responses from each student. Three factors were most consistently identified by the students, Support, Course-related issues and Self-characteristics, with Goals and career aspirations identified by a smaller yet significant number of students.

Support generally is well recognised as an important retention factor for first-year students and particularly peer support through such avenues as peer mentoring and study groups. The successful students we surveyed relied heavily on one or more support networks that were developed either inside or outside the University. This support came from one or more of five main sources – family, staff, peers, parents and friends, in that order of citation frequency. The support provided by family was varied, and included partners or spouses, children or other close family members; for example, as stated by some students: *Family – encouragement to continue; Family – financial and moral support*. Parental support could be financial (*Support from parents – payment of my fees*) or other kinds of specified or unspecified support such as *living at home*, emotional support, such as *encouragement or motivation*, or just unspecified support. Student peers and staff were each identified in about 10% of responses. Female students cited support factors more often than males (44% frequency compared with 39%) and they particularly cited family or peers as their source. Family support, commonly mentioned by females included child-minding, roles in household, emotional support, encouragement and helping out. Peer support was varied and included such themes as 'encouragement', 'learning' and 'social'.

Table 5. Student-identified factors assisting course progression. Values are the frequency of each response as a percentage of the total number of responses.

Factor assisting progression	Percentage occurrence
Support (from specific people such as financial motivation, assignments, living at home, encouragement, childcare, learning assistance):	43
- Parents	7
- Friends	5
- Family	12
- Peers	9
- Staff	10
Course-related issues (e.g., interesting content, learning/ environments, flexibility, online resources, good tutors).	11
Self-characteristics (e.g., time management, organization, motivated, determined, hours spent studying).	21
Goals/career aspirations (e.g., determination to obtain a degree, desire to be a teacher, want to have a well-paid job)	8
Employment-related (e.g., non-financial such as supportive employer, flexible work hours)	4
Scholarships	1
Previous study	2
Financial support (e.g., non-parental such as able to delay HECS, paid work)	3

Just over one fifth of the students' responses identified one or more self-characteristics as important in assisting their progression (i.e., time management, personal motivation, determination, and ability to balance). Study habits and personal interest in the course were also coded to this factor. Once again there were gender differences, with male students citing self-characteristics more often than females (26% compared with 19%). We have already observed that female students were more likely to cite support more often than males. We then analysed the self-characteristics that students perceived as important in more detail and two themes dominated the responses:

- a. Determination: *to keep going, keep trying, wanting to get far in life, to finish, stick with it, not to fail, want to better myself.*
- b. Motivation: *gained entry, to earn big money, self-motivation, good results, to succeed, to attend classes, to work in industry, passion to be a ...*

In a deeper analysis of the students' study habits, time management was the dominant theme. The students listed the following: *working towards goals, assignments on time, balancing work/study/uni/children, organising workloads, allows time for work and play, competing things, juggling unit, work, study.* Organisation was also commonly reported, though responses were often closely related to time management: *got things done on time, knowing when everything is done, scheduling time well, prioritise, and keep on schedule.* The third most frequently cited responses assisting progression, after support and self-characteristics, were those coded to Course/ECU related factors. Almost half of the

responses (40%) referred to university resources (Table 6), and the great majority of these were references to Blackboard/online resources and the library. These learning services provide efficiencies of access to information and it is not surprising that these students (who combine work, study and/or sometimes substantial family responsibilities), identified them as important for their successful progression.

Table 6. Student-identified course/ECU factors that were cited most frequently as assisting progression.

Course/ECU related factors	Frequency N(%)
Interactions/resources from teaching staff	89 (26%)
University resources	139 (40%)
Library(33)	
Blackboard/online resources (64)	
Counselling/student support (9)	
Flexibility	48 (12%)
Interest in the course	34 (9%)
Practicum experiences	19 (5%)
Total citations	346

Detailed analysis of the factor, Interactions and resources from teaching staff, revealed a broad range of comments covering almost all possibilities, with no particular theme dominating (e.g., group work, relevant/interesting units, designated readings, lecture notes/lectures, practical learning, small tuts/ engaging tuts, demonstration, interesting assignments, pre-buddy class, clear concise outlines, course books/resources, unit structure/materials, and assignment rubrics). These responses were coded and summarised as interactivity and engagement, and clarity of learning expectations.

Further analysis of the factor of Flexibility revealed two dominant themes - after hours classes and the option to study part-time. These were seen as important because they enabled the students to combine work and study effectively.

5.2.2 What are the factors that prompt consideration of withdrawal from study?

A surprisingly high percentage of these progressing students (40%) had considered withdrawing from their studies at some point in their course. For the 500 students in their penultimate year we know that this consideration would have occurred during their first year at university. The reasons the student gave for considering withdrawal were varied and broadly distributed across a number of themes (Table 7). The list includes factors which are well-known to underlie attrition in first year. The most frequent themes were extrinsic to the University itself with financial issues ranked as the most cited. These included responses such as *money – I need to work a lot to pay for my fees and financial hardship*.

The personal and family issues cited were wide ranging. Over 10% of the responses identified a desire to be something other than a full-time student (we call this life choice conflicts) such as *desire to gain different life experiences; travel; don't like Uni life – prefer to work; could make money now – easier way of life*. Students tended to cite university-related issues such as courses, services, resources and staff less often, though dissatisfaction with actual courses formed 6% of the responses.

Table 7. Student-identified reasons for considering course withdrawal. Values are the frequency of each response as a percentage of the total number of responses.

Reason for withdrawal	Percentage occurrence (N=499)
Financial	19
Personal and family issues	13
Life choice conflicts with being a student	12
Life balance	9
Changes in goals, career aspirations	7
Stress	7
Dissatisfaction with course/units	6
ECU-related issues	5
Workload (Study)	4
Lack of academic success	4
Teaching staff	2
Lack of support	2
Job prospects	1

5.2.3 What factors encourage persistence in the face of withdrawal considerations?

The importance of students' personal goals or career aspirations in persisting with study despite considering withdrawal was a striking outcome of the study (Table 8). This theme dominated the responses and no other theme approached the frequency of citation of this one. Students commonly commented about their need to complete a degree (*achieve a degree; graduation; want to finish my degree*) or have a better future or specific career (*want to achieve my goal; the future will be better; long term goals*). Across both the disciplines and the different diversity groups there was considerable consistency in the responses given for persisting in a course, and the same two themes (goals/career aspirations and personal attributes) led the rankings for all cohorts but one. The exception was the cohort of students with self-reported disabilities who had, as their second-ranked factor for persisting, their interactions with the teaching staff. Across all the disciplines and diversity groups, personal goals/career aspirations remained uppermost.

Table 8. Student-identified reasons for persisting with study after considering withdrawal. Values are the frequency of each response as a percentage of the total number of responses.

Reasons for continuing	Percentage occurrence
Goals, career aspirations	42
Personal attributes	10
Support (other than financial)	7
Self-management/coping skills	7
Come too far to quit	4
Course flexibility	3
Interest in the course/discipline	3
Financial support	3

5.2.4 Did the students' perceptions change with the discipline of study?

The student cohorts represented 12 disciplines (Table 4) from the key areas of science, arts and business. We analysed the qualitative responses by discipline to see if this rather blunt instrument would reveal any differences in the culture of the learning environments and we used this information to inform our later discussions with students.

5.2.4.1 Factors assisting progression

The frequency with which support was cited as a factor assisting progression varied considerably with discipline cohort. It ranged from a low of 30% of total (Arts cohorts) to a high of 49-50% (Social Science and Education cohorts). Often, lower frequencies of Support citations were associated with higher frequencies of Self-characteristics citations. For example, students in Arts, Biology and Media Studies had lower support/higher self response frequencies. Students in Social Science, Nursing, Sports Science and Education had higher support/lower self response frequencies. This may reflect the gender effect we mentioned earlier; females are more likely to rely on support than self-characteristics for successful progression, and females dominate the Nursing and Education cohorts. Probably for the same reasons students in Nursing and Education disciplines relied on family support twice as frequently as students in other disciplines.

There was considerable variation in the degree to which peers were cited as factors aiding progression, from rather low frequencies of 3–5% in Media, Arts and Business cohorts to higher frequencies of 12–14% in Social science (including Psychology), Computing and Nursing cohorts. The Business cohort, in which 33% of the students were international onshore students, tended to have a different support profile with parental support higher in frequency than in the other disciplines.

5.2.4.2 Factors prompting consideration of withdrawal

The percentage of students who had considered withdrawal was highest in Arts and Humanities disciplines (42-49%) and lowest in Business and Sports Science (24% - 27%). Again, gender effects may be influencing these trends. As we mention below, parents (usually females in our sample) were more likely to consider withdrawal. There were suggestions of staff issues contributing to withdrawal consideration, with Nursing and Computing students citing teaching staff as a reason for considering withdrawal, much more often than other students (6% cf 1-2%).

5.2.4.3 Reasons for persisting after withdrawal considerations

Discipline had little effect on the factors underlying persistence, though Nursing and Education students (predominantly female, and often parents) cited Other support frequently.

In summary, the similarities between discipline cohorts, in the factors underpinning progression and persistence, are far more apparent than any specific differences. Where differences are seen, they appear to reflect gender or age effects, rather than being associated with specific disciplines of study.

5.2.5 Did the students' perceptions change with the diversity of the cohort?

We were particularly interested in any differences in student perceptions across the main diversity groups. Analysis of the most common responses by diversity group indicated that

there were differences in the response patterns, but they tended to be subtle, reflecting differences in the relative importance of factors *intrinsic* to the students themselves (i.e., personal characteristics and goals/career aspirations), indicative of self reliance, and the *extrinsic* factors of support and course-related features. Also, within the support factors themselves, different groups of students showed different profiles of support sources, indicating shifts in the importance of particular support sources (e.g., less responses related to family support and more related to peer support). This section presents a summary of the responses of the different diversity cohorts.

5.2.5.1 International onshore students

For these students, support from other people (particularly peers and friends) appeared to be less important for assisting progression (response frequencies of 36 cf 44% for local students). They cited self-characteristics more frequently (31% cf 20%) and this showed in the greater number of references to 'study habits', indicating increased self-reliance for continued progression.

Very few international students had ever considered withdrawing from their course (15%), and for those that had, personal/family reasons were cited 2-3 times more frequently than by local students. ECU-related issues were also relatively common (14%). For reasons for persisting, while the international students cited factors which were similar to local students, the frequencies are quite different. Goals and career aspirations were still the most significant factors motivating them to persist, but they were cited only half as much as local students, and personal attributes (15 cf 10%) and teaching staff (8%) were cited more frequently by international students. They, more than other students, tended to cite 'no choice' as reasons for persisting.

Summary: International students are more self-reliant than local students. This may be a response to their difficulty with developing peer support networks early in their studies. Without the opportunity to establish local support networks, they rely more on teaching staff than local students for successful progression and persistence. Similarly, negative ECU-related issues then become more important for effecting considerations of withdrawal.

5.2.5.2 Students with parental responsibilities

Students with parental responsibilities had an intrinsic-extrinsic profile for factors assisting progression that was similar to the total sample population. There was no difference in the percentages nominating Support generally, but parents identified immediate family (18 cf 11%) and peers more (12 cf 9%), and their own parents much less (2 cf 8%). The importance of family for these students is not unexpected, and particularly the importance of partner/spouse assistance. Students with parental responsibilities were far more likely to have considered withdrawal (54%).

Perhaps not unexpectedly, life balance and study workload issues were cited more frequently as prompting these withdrawal considerations (*juggling kids and home – university not supportive; too many other competing responsibilities; too much workload from all lecturers*).

As a result, Life balance factors figured more highly in these students than in those without such responsibilities. For reasons for persisting, they gave a very similar factor profile to non-parents, though Personal attributes and other support had somewhat higher frequencies, and Goals/career aspirations lower.

Summary: The outcomes for this cohort were not unexpected. Students with parental responsibilities rely greatly on immediate family for support. With less time to spend on campus, they rely less on on-campus resources for their learning. The balancing and juggling they need to do influences consideration of withdrawal, but determination/motivation helps them to persist.

5.2.5.3 Indigenous students

Outcomes from the responses of this cohort need to be interpreted with caution, because of the relatively small numbers in the sample (17, 1% of the sample population). However, there were clear differences in the responses of the Indigenous students. Firstly, these students cited support factors less frequently than non-Indigenous students for assisting their progression (32% cf 43%). Course/ECU-related factors were also cited less frequently (2% cf 11%). Even given the small student number, it was significant that university resources were never cited. Conversely, these students indicated a much greater reliance on their own personal characteristics and goals/career aspirations in order to progress academically (43% cf 28%). No other diversity group cited factors relating to their own goals this frequently for assisting progression (16% cf 7%). Within the Self factor, personal attributes were listed twice as frequently as other students. Not surprisingly, more Indigenous students rely on scholarships as a factor for successful progression (9%).

For consideration of reasons for withdrawal, no clear factors emerged from the relatively small number of responses. Life balance issues and issues related to the University prompted these students to consider withdrawing. This latter theme and the fact that support from others, including staff, was much less frequently cited as assisting academic progress, is worth further investigation given that the University has dedicated physical space with staff resources for this student cohort.

Summary: These responses need careful interpretation. These Indigenous students who responded could be said to reflect a degree of 'self-sufficiency' in their progression in that intrinsic personal factors appear to be more important to their successful progression. They do not appear to acknowledge support within the University as important to their success as readily as non-Indigenous students. Alternatively, they may not be accessing the support or resource frameworks as effectively.

5.2.5.4 First-generation university students

ECU has a relatively large percentage of students who represent the first of their immediate family to attend university. In our sample, this cohort represented 44% of the respondents. For factors assisting their progression, and reasons for considering withdrawal, these students had the same profile of responses as the general student sample, and we could find very little difference at all between their responses and those of other students.

5.2.5.5 Students with a self-reported disability

These results are similar to those reported by international students; that is, students with a self-reported disability indicated a greater importance on self-reliance, and much less reliance on friends and peers for assisting their progression. Course-related issues were also cited more than twice as frequently by these students. When withdrawal was considered, family/personal issues were cited ahead of financial issues.

5.2.5.6 Mode of study: Part-time or full-time

Our sample contained only a relatively small number of part-time students (106). This cohort was not a particular focus of the study, and the smaller numbers likely reflect the manner in which we accessed the students – largely through day-time classes between 8.30 and 16.30. Only a small number of classes were accessed ‘after hours’.

There were differences between these two cohorts, in citation frequency of factors assisting progression. As might be expected for students who may not directly access the campus as often, the traditional support factors of family and peers were cited less by part-time students (37% cf 43%) but teaching staff retained their importance (11 cf 9% for full-time students). The Course/ECU-related issue of flexibility was very important for successful progression for this cohort (22% cf 4%), as were factors associated with their employment in the workforce (18% cf 6%).

For reasons for considering withdrawal, the same four issues dominated consideration of withdrawal as for full-time students (financial, life balance, conflicts with study, personal/family) but with different frequencies. Financial factors were less important for the part-time students (12.5 cf 19%). This might be expected if they are participating in the workforce to a greater extent. Life balance factors assumed more importance (17% cf 8%), and associated with this, a higher percentage of part-time students (50% cf 37%) had considered withdrawing from their course at some stage. Study flexibility was an important factor contributing to part-time students’ persistence with study.

Summary: Part-time students still rely as much as, if not more than, full-time students on the interaction with teaching staff for successful progression, and the flexibility offered around study is important both for their progression and for persistence in the course. While financial considerations are not paramount for them, life balance issues and conflicts with study are factors that promote them to consider withdrawal. Given the high percentage of part-time students that have considered withdrawing from their course, empathetic teachers and flexibility are likely to be very important for them.

5.2.5.7 Home language

Within this cohort there were both local and international onshore students from a non-English speaking background (NESB). Given the likely cultural differences in learning between these two groups, the local cohort was analysed separately.

Compared with other students, local NESB students cited family a little more frequently for support (16% cf 12%). They also tended to identify Course/ECU-related factors more frequently (14 cf 11%). Further analysis of this last factor revealed that they cited interactions with teaching staff (35%) and University resources (BlackBoard and/or library – 27%) much more often than those students whose home language is English. The greater reliance on teaching staff for assisting progression was also seen with international NESB students and, for this cohort, aspects of employment (e.g., employer assistance with English, and with assignments) were cited more than twice as frequently as assisting progression.

Summary: Regardless of whether they are local students or coming onshore to study, interactions with teaching staff are particularly important for NESB students. For international NESB students, empathetic employers may also be important factors assisting their study.

5.2.5.8 Age-related responses

Students' ages ranged from <20 to 40+ years. The spread of ages enabled a detailed analysis of progression and persistence factors by four age classes (Table 2). The great majority of the students were aged <31 years, but over 200 students were older than this. Only one-third of the student sample was likely to have been school leavers in their first year of study. Using citation frequency as a measure of relative importance of a factor to a particular age cohort, we found definite age-related trends reflected in the data.

For factors that assisted progression:

- the citing of Support generally declined with age, from 47% in the youngest age cohort to only 29% in the oldest
- friends and parents in particular, were more important sources of support for the younger students
- peer support was recognised as important regardless of age
- analysis of the mature-age students, with parents removed from the cohorts, did not reveal any differences from the full cohorts
- students in the upper age cohorts tended to do better academically than younger students
- as the age of the student increased, goals and aspirations were less important factors underlying progression, and personal attributes such as 'determination' and 'study habits - time management' became more important.

When factors prompting withdrawal and persistence were analysed:

- more students in the older age cohorts considered withdrawal and were far more likely to identify Personal and family issues, Workload, and Life balance factors as the reasons.
- the younger students were far more likely to cite Changes in goals, and Course dissatisfaction as reasons for considering withdrawal.

As mentioned previously, goals and career aspirations remained the most important factors underlying persistence, but the citation frequency of this factor was highest in the younger age cohorts. The younger students identified study conflicts (such as a desire to travel) and dissatisfaction with aspects of their course as reasons for considering withdrawal, and their goals and career aspirations as reasons for persisting. Older students tended to cite personal attributes such as *determination* and *managing/coping skills* more often.

Summary: Younger students use parents and friends more in their support networks, and they tend to attribute their successful progression more to their goals and career aspirations and less to self-characteristics. For these students, changing of goals and course dissatisfaction (possible interrelated) leads to consideration of withdrawal, with reconsideration of goals important for persistence. Older students rely less on support from parents and friends, nor do they rank goals as highly for assisting progression. It is possible that their goals and aspirations are well-established and present early in adult life, and they do not figure as consciously in assisting progression. However, their intrinsic personal attributes of determination and personal resources such as time management are important. For these students, the differences with their younger counterparts seem to be defined by their multiple responsibilities, and these responsibilities produce workload and life balance

issues which lead them to consider withdrawal. It is their goals, personal attributes and ability to manage university life that assists them to persist. The significance of interactions and resources from teaching staff remain important regardless of student age.

5.2.5.9 Hours in paid employment

Students at this university are quite likely to come from non-professional family backgrounds and they are likely to be admitted to university via a non-TER route (N=654 students). They also work substantial hours in paid employment on a weekly basis (Table 2) and this is likely to hinder their ability to form support networks inside the University and to interact with the teaching staff.

When we investigated the response patterns of students by their hours of work, we found that once the paid hours exceeded 5 per week, course/ECU-related factors increased in frequency of citation to above 10%. For students working >25 hours per week, the financial benefits related to employment became more important for assisting progression.

As students worked more hours per week, the percentage who considered withdrawal increased from around 30% (5 hours) to 45% (21-25 hours), and 51% (>25 hours). Students working >25 hours cited *life balance* and *course dissatisfaction* 2-3 times more frequently than other students as reasons for considering withdrawal. There are only two small differences when we analysed the reasons for persistence. Students working >25 hours tended to cite *study flexibility* and *work aspects (flexibility of hours, supportive employer)* more frequently than other students as helping them to persist with study.

That increasing hours of paid employment affects academic success, an effect discussed by other authors (McInnis, 2003c; Moreau & Leathwood, 2006) is shown by our data. Numbers of students gaining high distinctions decreased substantially with increases in paid work hours, from 11% for those working 5 hours or less to 2-3% for those working in excess of 10 hours.

Summary: For students working substantial hours in the paid workforce, the financial benefits negatively underpin successful progression. The increased workload and juggling that this incurs makes it much more likely they will consider withdrawing. The degree of flexibility they can access both within and outside university to continue is important to persistence.

5.2.6 Conclusions

The student survey provided some important insights into the factors that students believe underpin success in their studies, and those that help them persist, when barriers are placed in their way. When student diversity is considered, the picture is more one of similarities rather than any *major* differences in perceptions. Where there are differences, they are subtle ones of emphasis. Nevertheless, even these differences can be important in determining how students navigate the learning and support environments.

5.2.6.1 Importance of diverse support networks

Support generally is well recognised as an important retention factor for first year students and particularly peer support through such avenues as peer mentoring and study groups. The successful students we surveyed rely heavily on one or more support networks, inside and/or outside the University. The frequency with which different support networks are mentioned, and hence their apparent importance in contributing to successful progression,

vary with the diversity of the students. International, Indigenous students, and those with a self-reported disability had response patterns that suggest relatively less reliance on these support networks for successful progression (particularly peer support) and more on self-reliance. For parents and first-generation university students, the reverse was true, with family support and peer networks being particularly important to the former student group.

The three student groups above, who mentioned support networks less frequently (32-36% of responses compared with 44%) have characterising features (e.g., NESB, distance from home and culture, or a self-reported disability) which can marginalise them and, in the case of Indigenous students, also greatly reduce the chances of progressing (McInnis, 2003b; Sawir, Marginson, Duemert, Nyland, & Ramia, 2008). Their reduced reliance on support networks for successful progression may reflect reduced opportunities to develop and maintain such networks. Given the importance of peer networks, whether they are social or learning in their intent, special institutional efforts may be needed to ensure that all students have the same opportunities for social involvement and development of these networks from first year.

5.2.6.2 Consideration of withdrawal

A surprisingly high percentage of these continuing students had considered withdrawing from their studies at some point in their course. For the 500 students in the penultimate year (second year for most of them) this consideration would have occurred during their first year at university. The set of reasons the students gave for considering withdrawal included factors which are well known to underlie attrition in first year and many of the most highly ranked factors are often outside the influence of the University (e.g., financial). There was some variation across the different student diversities in the rankings of the top four factors shown in Table 4, and the response patterns with age were the most distinctive. McInnis (2003b) refers to first year students as belonging to a different 'species' in terms of their very different learning needs and behaviours and this has some resonance in this study. The youngest students (less than or equal to 20 years) frequently cited conflicts with study, course dissatisfaction, and changes to goals or career aspirations; all themes which suggest that they had experienced an earlier phase of goal clarification and renewed commitment to their chosen course of study. Each of these factors was outranked only by financial factors. Yet in the older age groups (>30 years), none of these factors ranked highly and personal/family issues and life balance (including workload issues) were the most frequently cited.

5.2.6.3 The importance of goals in persistence

Across the entire student sample, it is the students' own commitment to, and clear clarification of, personal goals and career futures that overwhelmingly influence them to persist, and this factor remains remarkably consistent across the student cohorts. For the cohort of younger successful students in particular, goal commitment was significant in their decision to persist with study. This decision occurred despite some of them considering withdrawal and despite them considering other more appealing life choices than 'being a student'. There has been little discussion of goal clarification in the context of persistence with tertiary study. These data highlight a need for strategies in first year that assist students with goal identification and clarification.

5.2.6.4 Being a student

One of the reasons that there was more commonality than difference of factors among such diverse cohorts of successful students may be that for these students 'being a student' is one of many aspects of their actual lives they do/ live. They just represent different 'life-

combinations'. As a result there is always the potential for conflict and disengagement, whatever the student type. For the younger students, the necessary hours in the paid workforce, the constant necessity for this financial support, and the need to set aside other options (such as travel) can be discouraging. It is their commitment to their academic or career goals that keeps them persisting. For part-time students, whose financial needs may be met to a greater extent, balancing work and study (and family for some) becomes an important issue and they are more likely to consider withdrawing than the younger students. The flexibility afforded by the university and their employers is important for their persistence. Older students with work and family responsibilities also see life-balance issues as significant for them and, with the maturity of age, rely more on their life-skills of commitment and organization, and family support and goal commitment to persist in their study. It is exactly these kinds of multiple combinations of 'selves', and how they effect and affect persistence and resilience that we investigated through the students' own narratives. The questions for the first discussions were framed with the outcomes from this survey in mind.

5.3 Staff perceptions: How well do they match?

As a result of the outcomes from the student survey, and as a strategy for project dissemination and staff involvement, we developed a staff survey to answer two questions.

- Do staff hold similar perceptions as successful students about factors enhancing success and persistence?
- If there are differences between student and staff perceptions, are they likely to matter?

In this section of the report, we present our comparative analyses of the student and staff responses and provide insights arising from the comparisons.

5.3.1 Comparison 1: Factors that help students progress in their studies

The importance of support networks, so clearly recognised by the students, was also emphasised by the surveyed staff (Table 9). Over a third of staff cited this factor as important to successful student progression and for both groups it was the most cited factor. However, within the theme of 'support', the relative importance of family and peer support to students was underestimated by staff.

Staff, like students, also recognised the importance of students' personal characteristics and there were similarities between the two groups when we looked closer at both groups' responses. Student and staff responses fell into three main categories of characteristics: 'personal attributes', 'time management and organisation', and 'student intrinsic interest in the discipline'. In the first of these groupings, 'personal attributes', there were obvious qualitative differences in the two groups of responses. As we described in the previous section, the students' responses identified almost exclusively, just two attributes - *determination* (to keep going, to finish, to better myself, to get far in life) and *motivation* (to succeed, to work in industry, passion to be a teacher). In contrast, staff responses were not focussed on any particular attribute, and their responses included higher-level academic attributes such as *meta-cognition* and *reflection* (terms not used at all by the students) as well as commitment, motivation, and self-discipline.

The most obvious difference between student and staff response profiles shown in Table 9 was in the frequency with which Course-related issues were identified as factors assisting progression. One-third of staff responses fell within this theme, compared with only 11% of student responses. For staff, this factor was the second most frequently cited for assisting progression, and it was closely followed by the Support factor.

Table 9: Student- and staff-identified factors assisting course progression. Values are the frequency of each response as a percentage of the total number of responses.

Factor assisting progression	Student (N=1353)	Staff (N=50)
Support (from others):	43	36
Friends	5	3
Family	19	7
Peers	9	5
Staff	10	13
Personal-characteristics/behaviours (time management, organization, motivation, determination, hours spent studying).	21	18
Course-related issues (e.g., interesting content, learning/ environments, flexibility, online resources, good tutors).	11	33
Goals/career aspirations (determination to obtain a degree, desire to be a teacher, want to have a well-paid job)	8	3
Employment-related (non-financial such as supportive employer, flexible work hours)	4	1
Scholarships	1	0
Previous study	2	0
Financial support (able to delay HECS, paid work)	3	5
Academic success	0	3
Sense of belonging	0	4

There were also very significant qualitative differences between the two respondent groups within this theme. As we saw previously, for the students, University resources (Blackboard and the library facilities) rated very highly in importance, contributing almost 50% of the responses within the Course-related issues theme. In contrast, these resources made up only 12% of the staff responses and staff identified their own interactions and resources (54%) and constructive and timely feedback (20%) as the major factors. Staff feedback was not identified at all in the students' responses.

While there were these major differences of emphasis in the responses of the two groups, within some of the sub-themes there were similarities in the kinds of factors identified, if not in the frequency of citation. For example, staff recognised that interactive and engaging learning environments, clear unit materials, and interesting content were important aspects of the learning environments for successful progression, and their beliefs compared well with some of the students' perceptions and comments.

A small number of staff responses identified *academic success* and *sense of belonging*, factors not present in students' responses. Expressions such as *sense of belonging* and *connectedness* reflect academic terms that arise out of the tertiary research literature on retention and persistence. They are not terms normally used by students. It is clear that these students value the support of peers and staff (19% of responses are directed to these) and see this kind of support as important for their success; support which has been shown to

enhance the sense of belonging. The absence of the specific terms in the student responses may simply be due to semantics rather than significant perception differences.

In summary, the staff did recognise the importance of support to student progression, but their focus was primarily on the staff themselves (not family), and in contrast to the students, they considered the resources and feedback they provided within the learning context as equally important. When the students did cite resources, their responses were strongly focussed only on those elements which provided flexible access to learning resources.

5.3.2 Comparison 2: Reasons why students consider withdrawing

There was a reasonably good match between the factors that the students identified and those that staff perceived might precipitate consideration of withdrawal (Table 10). The overriding reasons for the students, *financial issues* and *personal or family issues* were also recognised by staff as the primary factors, though with a difference in relative emphasis between the two.

Staff were less inclined to recognise that students have *life choice conflicts* with study, and that the connected factors of juggling multiple responsibilities (*life balance*) and *stress* together might precipitate consideration of withdrawal. Staff were much more inclined to cite some kind of *course dissatisfaction* (including *poor choice*) and *lack of support* as factors likely to cause students to consider withdrawing. Staff particularly focussed on the possible lack of relevance to work and employment as reasons why students might be sufficiently dissatisfied with their course to consider withdrawing from it. In contrast, students paid very little attention to academic difficulties that could impede progression, or to the job-relevance of their courses. They cited either a loss of interest or boredom, or very specific concerns about the course content or structure (e.g., *poor design, no external units, and insufficient practical approach*).

Over 20% of the staff responses concerned two factors that were rarely, or not observed within the students' responses: *inappropriate course choice*, and *personal characteristics* or behaviours of the students themselves. (In this context, these were factors that might impede academic success or progress, and hence prompt students to consider withdrawal (e.g., incompatibility with university, lack of ability, knowledge or skills including language skills). While these factors are entirely reasonable and known to influence first year retention, it is reasonable that they did not figure highly in the responses of this particular student cohort. These students were well into their course and experiencing successful progression. It is unlikely they would cite important knowledge or skill deficits at this stage. Only two students cited inappropriate course choice and both these students had taken action to change their course.

Table 10. Student- and staff-identified reasons for considering withdrawing from a course. Values are the frequency of each response as a percentage of the total number of respondents.

Reason for considering withdrawal	Students (N=499)	Staff (N=50)
Financial	19	14
Personal and family issues	13	19
Life choice conflicts with being a student	12	5
Life balance	9	7
Changes in goals, career aspirations	7	5
Stress	7	3
Dissatisfaction with course/units	6	10
ECU-related issues	5	2
Workload (study)	4	3
Lack of academic success	4	3
Teaching staff	2	1
Lack of support	2	7
Job prospects	1	0
Inappropriate course choice	0	11
Personal characteristics	0	11

In summary, both staff and students recognised two primary factors, financial and personal issues, as potential barriers to persisting with study. An almost equally important issue for students was the notion that there were sometimes more attractive alternatives to 'being a student' and that this idea prompted them to consider withdrawing. This issue was not as well-recognised by staff.

5.3.3 Comparison 3: Reasons why students stay following consideration of withdrawal

Table 11 lists the response frequencies of students and staff to the third question concerning the reasons students persist with their studies even though they considered withdrawing. There are some significant differences in these two response profiles. As we have seen, Goals and/or career aspirations dominated the student responses as underlying persistence, and no other theme approached the frequency of citation of this one. Only 12% of staff responses fell within this theme, though the responses were very similar qualitatively to the student responses in that they were focussed around *goal orientation* and *job or career opportunities*. Staff were much more likely to identify *support* and *interactions and resources from teaching staff* as factors encouraging persistence.

Table 11: Student- and staff-identified reasons for persisting with study after considering withdrawal. Values are the frequency of each response as a percentage of the total number of respondents.

Reasons for continuing	Students (N=499)	Staff (N=50)
Goals, career aspirations	42	14
Personal attributes	10	12
Support (other than financial)	7	33
Self-management/coping skills	7	0
Come too far to quit	4	0
Course flexibility	3	4
Interest in the course/discipline	3	7
Financial support	3	1
Interactions/resources from teaching staff	3	13

Staff mirrored the students' responses in citing *student attributes* (personal attributes for the students) as important for persistence. Within this theme, and also evident in staff responses in other themes, was a consistent identification of support as an important factor likely to contribute to persistence, and in particular, support from University staff. For example, within the *support* factor, staff identified *general support* (29% of responses), *family* and/or *friends/peers* (38%) and specifically *University staff* (34%). By comparison, only a small percentage of the students' responses fell within the support theme and almost exclusively, family and/or friends were the only support sources assisting them across a broad range of issues such as teaching and courses, family issues, juggling commitments, stress and lack of confidence.

The centrality of staff support and teaching in the staff responses was also seen in the relatively high frequency of responses citing *interaction/resources from teaching staff* (13% compared with only 3% of student responses). Like the factors identified for progression in Table 9, the most frequent staff responses concerned feedback on academic progress, while the students referred most often to simply *talking with lecturers* to sort out problems such as juggling commitments, workload and course difficulties. Students were also more likely to cite their own coping and management skills as reasons for persisting.

In summary, it is with this question that staff and students' perspectives diverged substantially. The overwhelming importance of the students' own longer-term goals and future aspirations for their persistence with study in the face of potential barriers was not recognised in the staff responses. Instead, the focus in the staff responses was on support and the staff interactions with the students.

5.3.4 Conclusions

The results of this research show that there are potentially-important differences in perspectives between the students and staff about what matters *most* for academic persistence and progression. Today's students lead multiple lives. 'Being a student' is just one of these. The totality of these multiple lives and the responsibilities that accompany them affect progression and persistence. It is this holistic perspective that underlies and colours the responses of the students in this study. For them, 'being a student', when it sits within a multiplicity of other responsibilities and issues, is difficult and prompts doubts about continuing. A commitment to their own future goals and aspirations beyond education provides the strongest incentive for persisting and progressing. Diverse support networks

and flexibility are essential factors underlying academic progression. While the staff responses recognise some of these factors, the staff perspective is generally focussed on the centrality of the learning context (its interactions, support and resources) to progression and persistence. This initial analysis suggests that the students bring a more holistic perspective to their learning context; they are managing their study and learning in the context of their whole life and its multiplicity of selves and they see their persistence and progression within this larger universe. A better understanding of that perspective may provide staff with additional and better opportunities to help students manage their learning within their own universe, rather than ours.

6. PROJECT FINDINGS – PART TWO

6.1 Introduction

Focus group discussions and individual interviews with 71 students provided a substantial qualitative data base of rich narratives that is informing us and providing insights into the students' learning experiences, and the factors that contributed to their success and resilience. At this preliminary stage in the analysis, we have identified five important emergent themes that, we believe, underpin student success and resilience. These are:

- seeking help to persist and succeed at university
- the significance of goals and career aspirations to persistence and resilience
- the importance of diverse support networks
- elements in the learning environment that enhance success
- supporting transition to the workplace.

In this section of the report, we present analytical summaries of how the student narratives give significance to each of these themes and ask whether diversity makes a difference. We also identify the key outcomes from this preliminary analysis and the corresponding implications for practice. A complete list of the (NVivo) themes that have emerged from the narrative data so far is presented in Appendix 9

Each of the themes presented here were analysed by a different member of the research team and some repetition of commentary and outcome is apparent. We have not edited out this repetition, as we believe that it reflects the linkages and complexity of interactions between the themes. It also demonstrates an important element of robustness or consistency in the interpretation of the qualitative data. These themes are not particularly new and all are underpinned by a body of research literature. What is significant about this project is that it provides a unique wealth of insights, through the voices of the students themselves, into how these themes are linked and how they interact to provide successful learning journeys. Later in the report we present some models to describe these interactions.

6.2 Seeking help to persist and succeed at university

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6.2.1 Introduction

Australian universities have a long history of supporting students' academic, social, emotional and equity needs. Student support services are usually in dedicated departments within universities and learning advisory, counselling, health, multi-faith, careers, equity officers, and faculty-specific support officers all aim to advance the student experience by helping them to continue and complete their studies. Annual and bi-annual conferences that address student support issues are evidence of the importance attributed to helping students to succeed at university (e.g., the first year experience, learning and teaching, and duty of care conferences). Students often become aware of the support services available to them during Orientation Week, reading information online, in unit outlines and on flyers, or by word of mouth from peers and lecturers. In addition to these services, academics formally (e.g., appointments and tutorials) and informally (e.g., corridor discussions) advise students about their study.

'Help-seeking' was one of the main themes to emerge from the study's 2007 data. The link between student success and seeking help warranted further investigation and in 2008 this theme was explored with final year (N=22), graduate (N=17) and postgraduate (N=3) interviewees (total N= 42). A snapshot of the interviewees' demographic and study backgrounds is contained in Table 12.

In respect to parents' qualifications, 52 per cent of interviewees' mothers and 54.7 per cent of their fathers obtained a post-secondary or higher education qualification, and within these groupings a little under one-third of mothers (31%) and a little over one-quarter of fathers (26%) had completed undergraduate study. The mothers of the Indigenous students obtained one secondary, one post secondary and two university qualifications; and the fathers of the Indigenous students obtained one secondary, two post secondary and one university qualification. This data is noteworthy as the parents' higher education qualifications mirror the parental education background of students who study at a new generation university. Whilst the low number of Indigenous students does not allow us to compare our findings with the wider group of the university's Indigenous student population, the education background of the Indigenous interviewees' parents may have contributed to the students having the relevant cultural capital and aspirations to attend university and participate in university life.

Table 12: Interviewees' demographic and study backgrounds

Gender	Male (N=11); Female (N=31)					
Age	<21 years (N=10); 21-30 years (N=15) 31-40 years (N=3); 40+ years (N=14)					
Type of study	Full-time (N=38); Part-time (N=4)					
Mode of study	On-campus (N=33); Online or external (N=1); Mixed mode (N=8)					
Discipline are of study	Business (N=2); Education and Arts (N=13); Health Science (N=9); Science (N=6); Social Science (N=9); Combined Arts & Science (N=1); unknown (N=1)					
Entry pathway to ECU	TER (N=13)	STAT (N=11)	TAFE (N=4)	Portfolio (nN=2)	Other (N=11)	Unknown (N=1)
English spoken at home	(N=33)	Indigenous students	(N=4)		Students with a disability	(N=3)
First-in-the-family to study at university	(N=20)	Mother's highest qualification			Father's highest qualification	
		Primary (N=5)			Primary (N=5)	
		Secondary (N=15)			Secondary (N=14)	
		Post secondary (N=9)			Post secondary N=12)	
		University (N=13)			University (N=11)	

(Abbreviations: STAT = Special Tertiary Admissions Test; TAFE = Technical and Further Education; TER = Tertiary Entrance Rank)

Demographic data also show that of the parents whose highest qualification was reached at primary school, two of the parents were born in Australia and the other eight parents were born overseas (e.g., Ireland, Scotland, China, Malaysia). Four of the parents who were born outside of Australia speak a language other than English at home.

Student survey data from 42 respondents revealed their study, job and family responsibilities.

1. A little over 90 per cent of the students were enrolled in full-time study (N=38).
2. Forty students (95%) were working when they completed the survey, with 18 students working between 1 and 10 hours per week; 13 students working between 11 and 20 hours per week; and 9 students working between 21 and 25 hours per week.
3. Sixteen students had parental responsibilities.
4. One student was a carer for a spouse with a disability.

6.2.2 Emergent findings

6.2.2.1 Who sought help?

Thirty interviewees actively sought help with their studies and nine other interviewees mentioned the relevance of help to their academic success or transition to the workplace (N=39). All of these interviewees emphasised its importance in assisting students to succeed. Whilst these students thought positively about obtaining help, 23 (59%) of them also highlighted the personal, academic and/or institutional hurdles they had experienced in receiving appropriate help.

The chapter discusses student perceptions, behaviours and decisions regarding help-seeking, the benefits and costs to students of seeking help, the similarities and differences in their beliefs and behaviours about help seeking, and the strategies the university could consider in advancing its and the students' help seeking ideas and practices. Most of the data discussed in this chapter is taken from interviewee transcripts, accompanying field notes, interview summary sheet comments, and NVivo generated codes. Tabulated information taken from Phase 1 survey data and Phase 2 interviews (N=42) was also discussed.

6.2.2.2 Help-seeking and its link to student success

Help seeking was closely aligned to 30 (71%) of the interviewees' drive to persist with their studies and in some instances it was matched to the resilience they showed in overcoming critical incidents and continuing at university.

Findings showed that:

- the individual student background, attributes, beliefs, behaviours, values, goals and experiences coalesced to create either 'proactive' or 'reluctant' help-seekers
- the student/staff 'relationship' determined whether or not students sought help
- students rarely sought help from unfamiliar or unapproachable staff; they sought assistance from staff or significant others who they believed were willing to help and capable of helping them
- six students believed that 'independent learners' are those who rely on their personal resources (i.e., internal strengths) to struggle through and overcome difficulties
- there was an apparent link between a) students' first language background and their help-seeking behaviours and b) students who were first-in-the-family to study and their need to seek help
- there was, however, no apparent link between other aspects of student demographic background and those who sought help
- the limited number of students with a disability (N=3) and students from an Indigenous background (N=4) who mentioned or sought help is too low for any purposeful analysis to occur; nonetheless, these seven participants have provided some insights into factors that encouraged them to persist and succeed at university.

6.2.2.3 Proactive and reluctant help-seekers

The individual background, attributes, beliefs, behaviours, values, goals and experiences of each interviewee coalesced to create, either, proactive or reluctant help-seekers. Typically, findings show that proactive help-seekers were self-regulated learners who sought a critical and informed understanding of a topic or practice. These students researched where to obtain information and who to speak to about their concerns. Proactive help-seekers commented that they knocked on a door and said: *hey, I need help – someone help me*. They believed that they were at university to learn and that part of their learning was seeking another person's understanding. For them, seeking help was about success not about failure. One student stated:

The failure is in not trying. I've been there and done that. We don't know it all. That's why we're here at university where we're exploring our mind ... and sometimes we need to take a step back and look from another person's perspective and see what's happening within our life and again, to me, recognise what's going on and ask for help.

Reluctant help-seekers, on the other hand, represented passive learners; people who did not want to *bother* staff; those who were shy about seeking help; who waited for others to ask questions; who didn't know where to obtain help; and some of them experienced shame or fear about asking for help. Some students claimed that they struggled and yet remained adamant that struggling on their own is indicative of an 'independent learner' (N=6). For these students, an independent learner is someone who: does not *like asking for help*; does not *like being reliant on others*; likes to maintain his/her privacy; who chooses to *battle and struggle* on his/her own; and/or who feels intimidated about approaching staff. One self-identified independent learner believed that asking lecturers for help is a form of *sucking up* and because of this the student refrained from contacting staff for help.

The notion of being an independent learner was also expressed as *wanting to do my own thing* or *in my own way* by five students. Some of them had organised strategies for dealing with issues; for example, speaking to family or friends, *being left by myself to find my own things* [solutions]; or appreciating the freedom/independence to explore issues on one's own. In the words of one international student: *Yeah, it's kind of very freedom; like we can be very independent.*

Apprehension about seeking help contributed to four of the self-identified independent learners changing from doing their own thing to obtaining help. In two instances, students did not want to pester staff or were *apprehensive about putting the first effort into contacting staff*. All of these students rethought their, then, strategies and realised the importance of seeking help if they were to succeed at university. One of them suggested:

There is a dividing line where you are doing your own thing and then you ask them for support and once you get the support, it's really easy but there is a demarcation line you've got to step over, whereas otherwise you're just a student doing your own thing.

Two other undergraduates received mixed messages about obtaining help at university. In one instance a student was informed by a secondary school teacher that: *when you go to university, you're on you own*. The student commented that she *expected to be thrown into the deep end and sink or swim, almost*. The other student had to rely on her friends to teach her word processing skills as she was told that it was *not our [the university's] responsibility*

to teach her computer literacy skills and that she should *go and do your own course*. This student was determined to persist and succeed with her studies. She related this experience to: *coming up against a mountain, you know you're going to climb it and get over the other side, it's just another mountain*.

There was also a 'cost' factor for three reluctant help-seekers as they questioned whether the time and effort required to seek help would have benefited them. These students recognised their need for help but did not seek it because they were uncertain about *how helpful it would be*. Even though they held this opinion, one reluctant help-seeker indicated that solving problems on her own was *time-consuming* and that she warned potential reluctant help-seekers: *you do waste a lot of time, especially things like the library. I only discovered how to access journals about three years ago!* An international student who became *frustrated* when he received lower than expected marks decided against seeking academic advisory support as he was unsure of the time-related costs and academic benefits of this help. He commented that he wished he had spoken to other international students about the benefits of academic advisory support earlier in his studies.

Proactive help-seekers show critical learning attributes and reluctant help seekers can show passive learning qualities, with some reluctant help-seekers appearing confused about the exact nature of independent learning and uncertain about the costs and benefits of seeking help.

6.2.2.4 The relevance of relationships to seeking help

Eight students (26.6%) sought help from their university peers and/or friends; and twenty-two of them (73%) stated the importance of family support in assisting them to continue with their studies. In particular, Indigenous and international students stressed the significance of family support to their success at university. Whilst family support can be indirectly related to seeking university-related help, family support signifies the relevance of help to student success. It is naïve of university staff to believe that students who do not seek university-based help are reluctant help-seekers. To the contrary, the findings suggest that peers, mentors, friends and family are people with whom they can *relate* and debrief or test their concerns. Family, friends, mentors and peers have offered the students the opportunity to explore and discuss issues in a non-threatening, effective and convenient manner. One student discussed the benefits of seeking help from academic advisers and counsellors, but the student also noted that when students are challenged they seek out their friends for advice: *The first thing they always head to is a friend*. The student continued:

A friend will always help them out because they're relating to each other ... If you're still stuck then you have to seek someone higher.... take a friend with you, that's a good help. We've got third year biological students here that if you're having any trouble in this unit they can help you out because they've already done it.

Relationships with helpers also determined whether or not the interviewees sought help. Findings show that 17 students sought help from staff and 15 of them believed that staff were *approachable*. Data suggests that students are more likely to contact lectures or tutors first (N=17) and then counsellors (N=6), academic skills advisers (N=5), or student services/faculty/school support staff (N=4) where necessary. Implied within this finding is the notion that students seek assistance from staff when they have developed a working relationship with them rather than an expert counsellor or adviser who they may or may not

have met personally. Students indicated that friends or peers offered them a *port of call* if they required help. Nine of the interviews sought help from their friends, peers and/or student mentors (i.e., their university-based learning community). Their learning community assisted them with their studies and how to cope at university; for example, how to contact lecturers, write an essay, or where to seek expert help. Some students indicated that there is a chain of practice when seeking help: i) recognise one's needs; ii) speak to a friend/peer; then, iii) speak to a lecturer or unit coordinator. A student who explained this process also commented on the anxieties of seeking help as it can be *the most nerve wracking thing to do. Knowing that you need help and you don't know where to go.*

Within the university there were two groups of people from which thirty of the students sought help (i.e., university personnel and/or their university learning community). Of paramount importance to these interviewees was the idea that in order for students to seek help they required access to *approachable* people with whom they *felt comfortable* (i.e., the students had confidence in the helper's desire and ability to assist them). If the students believed that they would be sidelined, ridiculed or dismissed they did not seek help, and some of them withdrew from class activities. One student explained:

I asked for some help and I was basically knocked back ... it was the ridicule that went with it. It was in front of everybody and you're made to feel a complete and utter idiot ... we used to have a discussion board and people used to post to it; but we got all these sarcastic comments back [from the lecturer] that people didn't use it and then he wonders why.

Conversely, approachable staff were portrayed as helpful: they *point students in the right direction*, assisted them when they *get stuck*, or *find an answer for you or find someone who does know the answer*. The students highlighted the idea that they needed to *feel comfortable* with the person and confident that staff *want to help you*. Typically, the interviewees indicated that they approached lecturers when they required disciplinary- or assessment-based knowledge. In some instances, students contacted lecturers or counsellors to discuss personal or emotional issues. Nine interviewees noted that they sought 'moral and academic support' from their friends, mentors or peers and 'guidance and knowledge' from staff. In addition twenty-two interviewees sought 'moral and/or financial' help from their parents.

Students seek help from staff and their immediate learning community with whom they have developed a working/positive relationship. The students need to feel confident in the helper's interest and ability to assist them.

6.2.2.5 Dropping in or dropping out

Eighteen of the students considered withdrawing from university (including 8 first generation, 4 International NESB, and 3 Indigenous students). Some of the main reasons they considered withdrawing were: time, money, workload (job and study) and family responsibilities. Factors which encouraged them to continue at university included: career aspirations and financial reward, a chance to fulfil their goals, a desire to succeed academically, and a desire to meet family aspirations. Three students (2 local and 1 international) linked the help that they received from lecturing and counselling staff with their decision to continue rather than withdraw from university. These students reflected on their

initial reasons/goals for attending university, and this re-focussing of their goals appeared to encourage them to persist with their studies. In the words of one international student:

I'd say again, the family support, the self goal and keep thinking of the reason I came here. I didn't want to give up that easily because I didn't understand [course content]. I must seek help rather than just give up, just to withdraw. Although I did think once or twice at that time but finally I think, even before withdrawal, I must seek the help and find out the reason why I didn't understand and so I went to the lecturer and emailed the tutors and asked all sorts of questions and they responded to me in a quick way. So finally, I'm glad that I didn't make that decision to withdraw.

6.2.2.6 Hurdles to overcome when seeking help

University advisers and counsellors advertise their services on the university web-site and billboards, and in unit outlines, and some advisers tandem teach with tutors or deliver guest lectures. These overt actions by staff do not, however, entice some students to seek help as these students require a more personal relationship with staff if they are to seek assistance from them. They need to 'know' the helper.

Seeking help is not an easy task for students. Eighteen interviewees who mentioned or sought help (46% of the group) were apprehensive about asking for assistance. For them, asking for help equated to *a bridge you've got to jump across to get that [help]; overcoming a sense of shame* about seeking help; a belief that staff or friends *might think you're stupid*, or concern about airing domestic issues to strangers, even though they are university staff members who maintain confidentiality of information. An international student who experienced a critical incident was reluctant to seek help as she questioned the confidentiality of university counsellors. Her concerns were based on experiences in her home country where: *your business becomes everyone else's as well*. She suggested that the university should inform international students about staff confidentiality practices as this would encourage them to seek help.

Students' nervousness about seeking help suggests their uncertainty about the empathetic or otherwise nature of staff. At another level, student concerns indicate low self-efficacy about their academic aptitude. The questioning of 'should I, should I not' seek help appears to have distracted some students as they initially struggle on their own, and as one student stated, *waste time* in the process.

Transcripts and field notes revealed that students overcame their concerns about seeking help when they identified an empathetic network of lecturers, tutors, peers, mentors and/or friends. The network may have included only one or two people, but these persons were pivotal in the student persisting with study and overcoming any critical incidences (e.g., unplanned pregnancy, housing issue, death of a relative). Interviewees revealed that they would advise new students *to be proactive in finding out where to get the help; develop a good rapport* with a staff member; *ask a mate*; or *to take a friend* when they go and see a lecturer. The significance of an empathetic network highlights the academic, social and emotional aspects of study for students and how we, as university staff, need to consider students' global well-being when organising structured and unstructured help for them.

There are also practical issues that surround student access to help. Quite simply, some students do not know where to seek help or who to ask. Ten students (5 local and 5 international) spoke about *not knowing where to start to get help*, the type of help available

to them, or how to find out about social events or scholarships. Two of the international students bemoaned the lack of social opportunities available to them. As one of them explained: *we didn't have the information, where to go or where to join in*. The other international student had organised social and cultural events for overseas students. In past years, he had introduced himself to these students during Orientation Week, but the university had recently stopped inviting him to Orientation Week. Whilst the university had assisted the international student organisations with advertising their events, the student noted that Orientation Week *is one of the [main] ways we meet up with new people who come in [to the University]*. Clearly, new international students' opportunities to meet culturally similar students were reduced by the university's actions.

Some students are highly apprehensive about seeking help as they are uncertain about whom to approach, where to seek assistance and issues of confidentiality. Once students know where to find help and whom to approach they start to develop a network of people who can assist them. This network is pivotal to them persisting with their studies and overcoming critical incidents.

6.2.2.7 Links between student demographics and their help-seeking behaviours

A manual cross tabulation of survey information and student transcripts revealed that there is limited evidence to support a link between student characteristics (i.e., demographic and study) and their help-seeking behaviours. The characteristics of student age, entry pathway, fulltime or part-time status, mode of study, average semester mark, Indigenous/non-Indigenous background, and disability/non-disability background are not linked to the interviewees' (N=42) help-seeking practices or beliefs.

Age related results

An age and semester-mark related snapshot of the students who mentioned or sought help (N=39) is illustrated in the tables below.

Table 13: Student age and help-seeking characteristics

Interviewees by age and number who mentioned or sought help (N=39)	Interviewees by age and number who actively sought help (N=30)
<21 years (8) 20.5%	<21 years (6) 75% of the age group
21-30 years (14) 36%	21-30 years (11) 78% of the age group
31-40 years (3) 7.5%	31-40 years (3) 100% of the age group
40+ years (14) 36%	40+ years (10) 71% of the age group

Figures in Table 13 indicate that in most age groups approximately 75% of the students sought help. The data suggests that age does not determine their help-seeking behaviours. In respect to 31-40 year olds, the number of students within this age category is too low to compare meaningfully with other age groupings.

Table 14: The age and average semester marks of students who sought help

Age	Student semester marks (N=30)					
	<50	51-60	61-70	71-80	80+	Unknown
<21 years		1	3	1		1
21-30 years		3	6	1	1	
31-40 years	1		1		1	
40+ years		3	4	2		1
Total No. students	1	7	14	4	2	2

Many of the individual cell counts in Table 14 are too low to indicate whether there is a link between the students' age, semester marks and help-seeking practices. Nonetheless, the results suggest that for all age groupings a little under 50 per cent of the students (46.6%) achieved a semester mark average of between 61-70 per cent. The nature of these descriptive results is limited to this analysis, but it suggests the relevance of exploring whether student help-seeking is directly or indirectly linked to student semester grade averages.

6.2.2.8 First language, and first-in-family links to help-seeking practices

Results suggest that first language is matched to the students' need to seek help, especially for international, non-English speaking background (NESB) students. Similarly, the data shows that a notable proportion of students who were first-in-the-family to study either mentioned the importance of, or actively sought help from, staff, friends, mentors and/or peers.

Nine international students participated in the second phase of the study. Seven of them and two local students spoke a language other than English at home. In regard to their entry qualification into the university, seven international NESB students were admitted via an 'Other' entry pathway (e.g., advanced standing for prior learning, international secondary school results, language test) and the local NESB students were admitted via TER (N=1) and STAT (N=1) results. The two local NESB students and six of the international NESB students sought help to succeed at university. It is worth noting that two of the international students who entered the University via the Other admissions qualification did not seek help, but these students each resided in a country where English is an official language (e.g., Singapore, India). The results suggest a link between first language and help seeking behaviours when a student enters university via the Other admission category and when English is not the official or commonly spoken language of the student's home country.

Six international students (including two who did not seek help) revealed the importance of family support and meeting their own and their parents' expectations and aspirations as factors that encouraged them to succeed academically.

In respect to students who were first-in-the-family to study at university (N=20: 19 non-Indigenous and one Indigenous background; 18 local and two international students),

fourteen of them (13 local and one international students) sought help with their studies. Seeking help aided six of these students to persist with their studies. For example, these students noted that seeking help from university counsellors *helped me to deal with stress*; attending academic skill workshops provided an awareness of the *concrete skills required to improve* academically; and the availability of lectures enabled a student to have questions answered. First-in-the-family students represented a little fewer than 50% of the interviewees (47.6%). Based on these results, it is apparent that family education indicates the need for the university to provide help for students who are first-generation learners. It is relevant to note that the significant proportion of first-generation students within the interviewee sample reflects the parental educational background of the university's undergraduate population.

Student help-seeking behaviours or beliefs are:

- linked to international NESB, and first generation students;***
- not linked to the demographic characteristics of student age, entry pathway, full-time or part-time status, mode of study, average semester mark, Indigenous/non-Indigenous background, and their disability/non-disability background.***

6.2.3 Implications for practice

Help seeking is linked to the interviewees' attitude and behaviours about learning; that is, whether they are proactive or reluctant learners and their ideas about the characteristics of an independent learner. Some students' notion of an independent learner encourages them to develop as critical learners whilst other students match passive learning and/or solitary learning practices to independent learning behaviours. Clearly, the precise nature of an independent learner needs to be explored with new students.

Of paramount importance to student persistence, resilience and success is their immediate and intimate learning community of peers, mentors, friends, and the university staff network. When students seek help they often debrief with peers or friends and then approach staff with whom they have developed a positive and working relationship. The immediate and intimate nature of their learning community and network is based on helpers who are in quick reach and who students feel comfortable to approach for help.

The present cohort of students has multiple responsibilities (i.e., job, family, study) and it would appear that they rationalise their efforts when seeking help. They seek out the help that will, in a time efficient and non-threatening manner, assist them to persist and succeed academically.

6.3 The role of personal goals in student persistence and success

Authors: Heather Sparrow and Marguerite Cullity

6.3.1 Introduction

Undergraduate access and participation has increased dramatically in Australian universities over the last 15 years, and a wider diversity of students is now undertaking higher education. Nonetheless, too many students with academic potential do not succeed, but rather struggle, fail or simply withdraw. There is a growing literature about undergraduate attrition and retention; however, the reasons that some students have the qualities to persist and succeed at university, despite barriers and problems, remain under-researched. This chapter discusses one of the most striking findings of our study - if students relate and prioritise their goals to their participation at university they are much more likely to manage difficulties and overcome barriers to success.

The data discussed in this chapter highlights the important role of university student goals in encouraging and assisting them to persist with their studies, overcome difficulties they may experience and succeed academically.

The significance of goals to the student participants' success at university was revealed in this project's 2007 data and warranted further examination in 2008. The initial data analysis signalled the high importance of goals if the students were to continue and succeed with their studies. The notion of student 'goals and aspirations' was one of the key issues explored with the interviewees in 2008 and included students who had progressed to their final year of study, ex-students who graduated in early 2008, and students who had started post-graduate study.

6.3.2 Emergent findings

The narratives collected from interviews and focus groups confirmed our survey data and showed that:

- Students' personal goals were pivotal in encouraging them to persist with their studies.
- Most students believed that their goals have a powerful influence not just on resilience but also over their approach to learning, their reactions to their lecturers, and their interaction with the learning environment.
- Most students were able to articulate their goals and expressed them as 'wants' rather than 'goals' or 'aspirations'.
- Students' beliefs were rooted in the idea that their goals are inextricably linked to their level of motivation and study behaviours and intended outcomes.

If a student's goals are a priority, the student is more likely to manage difficulties and overcome barriers to success. These beliefs are commonly expressed by students of all disciplines and demographic backgrounds.

6.3.2.1 The role of personal goals to student persistence

A significant survey finding was the critical role that personal goals have in relation to student persistence. These goals included career, learning, self-development, self-satisfaction, self-efficacy, and financial reasons. Students consistently named their personal goals as being responsible for their persistence.

6.3.2.2 The role of goals in providing a clear direction

Clearly defined goals assisted the students to change their approach to their learning. They achieved this by focussing on their goals and then by placing their energies into their study, sacrificing social events to complete work, and using their goals to motivate and stimulate them. In some instances the students also used their goals as a trigger to seek help with their work. This was especially the case when they realised that without help they would not achieve their goal(s). Goal setting, for instance provided a student with a *longer term vision*, a means to overcome the *little pot holes along the way and... keeping the long term goal in mind*. Similarly organising their goals and the attainment of them gave students the knowledge that they are *heading in the right direction*, provided them with a purpose to study, and encouraged them to timetable their social, domestic and study duties. A student stated:

I mean, if it takes an extra whole weekend where you can't go out and you've just got to study, then just do it. You have to sacrifice yourself sometimes ... because this is for your future in the end.

Having a goal though was not the only factor in students' successful engagement with university study. Students have multiple lives and for most of them study is only one strand amongst other aspects of their lives. Many students spoke about the importance of the alignment of their goals with other dimensions of life: *the right thing at the right time* was a common idea. Successful engagement seems to depend on the way study fits into the jigsaw of a student's whole life experience, as shown in the comment below:

I knew exactly what I wanted to do from Year 10, I was just like that's what I want to do but I just felt I'm not ready to go to Uni.

Students benefited from organising their goals into manageable chunks or setting themselves simple, achievable short-term goals. The students perceived their short-term goals as *getting [them] through each semester*; one semester at a time. Short-term goals helped them work progressively towards longer-term or more complex goals.

Student goals (i.e., what they want and the reasons why they want it) influence the way students approach learning and the way they experience university life.

6.3.2.3 How multiple goals can focus students' study

It was common for students to have multiple goal orientations and types; for example, long-term and short-term; and/or achievement, mastery or self-improvement goals. Students may have had long-term career goals, but they may also have wanted to be high achievers or prove their worth; for instance, to *be a nurse and the proving to myself that I'm actually not*

too stupid, I can actually do it; or as another student said: to complete a degree but with no less than a High Distinction.

Multiple goals can work together in a common direction, or alternatively in contrast or conflict with each other. Some students were strategic in using long-term and short-term goals to motivate themselves. Long-term goals helped one student to *stay* at university and persist with study, whilst the short-term goals assisted the student to take *a step at a time, this assignment, this exam*. The student commented that without short-term goals, long-term goals *can be overwhelming and I think you can lose track of what you have to do this week. It's a whole spectrum of short and long term goals*. Conflict arose for some students when they studied a core (i.e., compulsory unit) that they were not interested in. One student motivated himself to complete a unit and obtain his long-term career goal by competing for the top assignment marks.

Students expressed their goals in a hierarchy of importance, and for many students this hierarchy enabled them to set parameters around the way they used their time and energy and made decisions. These actions allowed them to take some control over their learning. Students have to juggle many different life demands, needs and interests. Clarity of thinking about goals assisted many students in balancing one goal against another, and sometimes in making difficult decisions about the value of their study, the approach they took to it, and the kind of study experience that best suited their circumstances. This was a challenging experience for some students. For example, one student withdrew from study to attend to a domestic health crisis, and when the student re-enrolled she did so without a sense of failure. Other students withdrew from the social aspects of university life without fear of losing their friendship group. In the case of one mature-age student, the student highlighted the importance of prioritising life events: *you prioritise what you want to do first, the important stuff first*.

Students were motivated by multiple goals that had relevance across many dimensions of their lives. These goals differed in nature and orientation yet they often targeted the same intended outcome.

6.3.2.4 Achieving goals is evidence of one's capabilities

For many students, goals expressed a need to prove themselves; sometimes against others, sometimes against themselves, and sometimes to prove others' judgements of their capacities wrong. A student stated: *[my goals] were very simple. To try to see whether I could do university full-time, and I had no idea whether I am even university material, so they were very simple*. Our university is a new generation university where many students are the first-in-the-family to participate in higher education, and they have often achieved entry via alternative pathways (e.g., STAT test, portfolio, TAFE). For these students, attending university and achieving some academic success can in itself be regarded as a real achievement against the odds.

The need to demonstrate or improve self-esteem and self-worth clearly underpinned some students' goals. In most cases this was expressed as an aspiration to achieve a deeply held value, to affirm a sense of self, or avoid negatives such as sense of failure. The notion of 'wanting to prove myself' was stressed by these students as they revealed a desire to prove themselves to *younger students*, to their families, and in one case to herself in spite of her physical disability. The potentially inhibiting factors of age, low self-efficacy, negative family comments, *fear of failure*, and *it's my last chance* were revealed by the students. One

student captured the students' motives 'to prove' themselves academically and the anxiety that sometimes surrounded their decisions to study:

I'm a fear of failure person! I quit uni the first time and when I went back to uni, it was of my own volition, it was my choice and it was something that I'd chosen to do. I'm one of those people, if I decide to do something, I will stick by my guns and do it and so quite frequently the goal was just to get the assignment in, just to get through and pass the exam.

In other cases, student goals were closely linked to the ways significant others viewed them. Some students' study goals were clearly aligned with family values, beliefs and aspirations. This was particularly evident in the case of several international students whose families had invested in their children's study and career opportunities or where the parent believed that the student would develop personally and vocationally from an international study experience. For example, one student stressed the importance of *giving something back to my parents ... they worked so hard for me I wanted to work hard for them as well*. Another international student revealed the personal growth importance his mother placed on him obtaining an international learning experience. He explained that this experience had made him consider his life goals: *think about who I am and what's actually going on in my life*.

6.3.2.5 The variety within students' career and personal goals

Students spoke extensively about their career goals, but they often sought different outcomes to each other. Some interviewees, for example, stated their intrinsic interest in their chosen career and they noted that career-related study would: *open the door to a better life style; create more enjoyment; provide a better life-balance or better security; provide a chance to contribute to society; or an opportunity to join a particular community*. It was evident that students with apparently similar work goals had different motives and purposes to each other.

Not all students had clear or specific career goals. Some of them were seeking experiences that would please them in the here and now or satisfy their passions and desires. Despite the apparent dominance of economic goals, some students revealed a deeply held desire to *extend [my] knowledge and learning* because of an intrinsic 'love of learning'. In the words of one student: *I love learning, I absolutely love it*. Other students highlighted the importance of achieving for reasons of self-development and/or authorship of one's life. Study was for one student a rudder that enabled the student to steer life's journey. The student stated:

the main goal is actually to become a host, so money is important, power is important, but my main focus is to become like a host, so my life belongs to me and I can do whatever I want with my life.

Students study for a variety of reasons some of which are related to career, learning and/or personal development. A significant student behaviour is how they use these goals to focus on possible and future opportunities for them.

6.3.2.6 The relevance of deeply held goals to student success

The expression 'I want', was often presented with great conviction and passion: *I want to go do this, go do that and I absolutely love it and It's awesome*. Students spoke with emotion about the things they wanted from their university study and experience. The term 'want' was accompanied by a conviction that they had identified an appropriate goal and a determination to achieve it. The students observed that people who did not have strong personal goals, and/or who did not know what they wanted, were likely to lack direction and commitment, and that they were unlikely to engage with either their studies or university life. This assumption was not explored in this study, but it reveals a student-based insight into factors that may contribute to student withdrawal from study.

Conversely, strongly held personal goals appear to have kept students motivated and provided them with the persistence and resilience to work through problems and overcome difficulties. These students, for instance, were determined to complete their studies regardless of the obstacles they experienced. Their efforts to overcome hurdles are indicative of their resilience. Of paramount importance to them was the opportunity to achieve a long-held goal; the main *reason* for them studying at university. The students spoke about *sticking it out* (i.e., persisting) as *there is a light at the end of the tunnel* that will lead to attainment of their goals. A student claimed that *having clear goals makes it a lot easier to succeed at uni*.

The strength of a student's want, was important regardless of the type of goal. For example, the simple desire to be a particular kind of person, to retain integrity of character was sufficient to drive some students: *I'm the kind of person who succeeds, who doesn't give up*.

While a lack of goals could contribute to problems of motivation and direction for some students, particularly school leavers, a primary goal of university could be simply about maturing as independent learners who are endeavouring to organise goals and interests, identify career paths, discover like-minded friends and peers, shape their personal development, and focus their adult lives. Where students were aware of these actions as part of their goal(s), it gave shape and purpose to their university experience. They perceived university not as directionless and time-wasting but as a valuable time and space for personal growth. Enhancement of self-efficacy, self-determination, and self-knowledge were particularly important goals for students who did not hold strong, tangible targets such as a specific career or providing a role model for others. This observation was commonly made by mature-aged students and often in the context of reflecting on earlier study experiences where they had failed to complete a course. Finding something they *wanted* was the stimulus to reconnect with university as this student reflection shows:

I think it's going away from uni and having that goal and wanting it and coming back ... I knew this was where I wanted to be and I knew this was the right thing for me to be doing right now in my life. So I think that's really helped.

The setting of personal goals motivates students to persist with their studies and in many cases gives them the resilience to overcome barriers to academic success.

6.3.2.7 Personal satisfaction and achievement of goals sought by mature-age students

Mature-aged females were in the majority thus reflecting both the university demographic and the greater number of this group who participated in the study. It was evident that several mature-aged women participated for personal satisfaction and achievement reasons. In the words of one student:

I'm not doing it for the family. My husband, he studied for a while and now he's doing exactly what he wants to do and the kids are up and running....I want to achieve this because I want it so much basically.

Student comments also indicated that their goals extended beyond the individual and the study experience to include their children and their schooling experiences. These parents did not want their university study to compromise their children's lives. For one parent her *priority is my kids*. Many of the mature-aged and other students were frequently motivated by the goal of role-modelling success through education. This was especially the case for Indigenous students. One Indigenous student explained:

It's taken me a while to find out what I wanted to study but I've found something that I like and it makes me want to go to uni to learn what I'm learning ... and probably wanting to be a role model in other avenues of sport has helped me as well ... Young Indigenous kids in particular, to show them that there are more avenues than just being that top AFL [Australian Football League] player and stuff like that.

6.3.2.8 Insights regarding the changing nature of goals

Student goals were dynamic and many students described how their goals had changed in response to their learning experiences as well as events in other aspects of their lives. Student goals interacted with the complex dimensions of students' own characteristics and the many dimensions of their lives beyond study. For example, a student may be driven to succeed by a need to prove their ability in competition with others, and/or through studying strategically to gain high grades. But as they feel more confident about themselves, grades may become less important and they may find an intrinsic interest in their discipline or long-term career goal that leads them to them engaging deeply but with far less focus on grades. Student priorities clearly shifted and changed, and the relative power of the things each individual *wanted* played a significant role in determining the way each of them approached learning, the way he/she experienced the learning environment and the student's expectations of university study.

6.3.3 Implications for practice

As practitioner-teacher-researchers it is clear to us that an empirical understanding of students' goals provides valuable insights into the ways in which goals influence students to persist with their studies; provide students with a clear direction to focus their studies; and show the students that achieving their goals is evidence of their capabilities. This understanding highlights for staff the type and nature of student goals and the relevance of students' goals to their academic, personal, emotional and professional growth. It also emphasises the role of student goals in assisting them to organise and manage their life so as to learn, persist, overcome difficulties and succeed academically.

Whilst this project has provided an increased awareness of the importance of student goals to their success at university, we need to advance this knowledge by exploring ways in which academic and general staff can positively assist students to develop, apply, reflect on, adapt and achieve their goals. At a pedagogic level, this may occur by lecturers explicitly linking content and/or class processes to student goals; for example, explaining to students the relevance of knowledge or practice to their career aspirations.

This study provides evidence that goals are relevant to students' academic success and that university students who know *what's in it for them* are likely to persist through the inevitable challenges of life to complete their studies.

6.4 The importance of support networks

Author: Mary Boyce

6.4.1 Introduction

Support generally is well recognized as an important retention factor for first year students and particularly peer support through such venues as peer mentoring and study groups. All the successful students we surveyed and interviewed relied to varying extents on one or more diverse support networks, developed either inside or outside of the University, for successful progression and for overcoming barriers to success. These networks can be broadly categorized as: Family (and to a lesser extent friends); Financial; Employer; Staff; and Peer Support (Figure 1).

For each category of support there were students who clearly articulated that without this support university study would not be possible. It might be a flexible employer allowing an employee to go part-time, a spouse taking on household duties, a family member providing money for fees or accommodation etc.

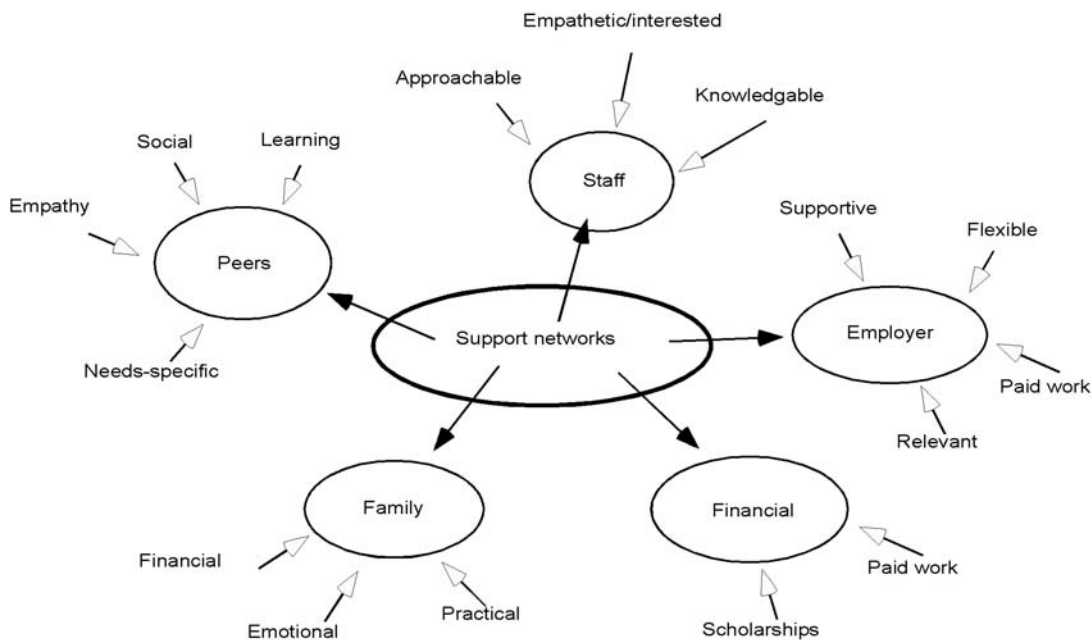


Figure 1. The diverse support networks identified in the student narratives and their important characteristics.

6.4.2 Emergent findings

6.4.2.1 Family support

Family support was clearly recognized as being very important for most students. The type of support students frequently referred to included financial (parents helped with fees and living expenses), practical (partners bore the burden of housekeeping and child minding duties) and emotional support (family members believed in them and urged them on). This family support was important across the different cohorts, however, financial support was a major issue for International students. Practical support was, not surprisingly, paramount for students who had families.

I just couldn't physically manage my time if my husband didn't take over everything at home. I mean he does everything...

6.4.2.2 Financial support

Financial support was clearly a necessity for students. This support came from family (cash and in-kind support), paid work and through actively seeking Scholarships. A few students were proactive in seeking scholarships from ECU and the wider community to help with their studies.

6.4.2.3 Employer support

Employer support was critical for many students. Students who were once fully employed indicated that university study was only possible because their employers were supportive and allowed them to do reduced hours. Other students talked about needing part-time work to support them through university. In general employers were very accommodating in working around students' study commitments.

Definitely I couldn't come to University if they [the employer] weren't prepared to allow me to have the time.

My boss has been so good. Every semester I give him my new university timetable and he's worked around my timetable and kept up my hours.

6.4.2.4 Staff support

Students also discussed ECU staff support. These successful students were generally aware of the facilities (medical, skills advisors, counsellors, student support officers etc) that are available at ECU. Students commented positively about teaching staff that were *approachable*, helpful, *understanding*, responsive and *interested* in helping.

I had really good support from ECU which was good because they were flexible and a few of my lecturers had children of their own so they were very understanding.

6.4.2.5 Peer support

While financial support is a given and closely interwoven with this is family and employer support, peer support featured very frequently in students' narratives. Most students agreed that peer support played a key role in their successful progression through their degree. However, the strategies used in developing peer networks varied. Students understanding of what is meant by peer support also varied and largely fell into three areas: social and emotional, academic or study and the more formal assessment-specific group work. Peer groupings were formed both haphazardly and strategically with student personality, discipline and course structure all playing their part. In summary, student groups usually formed as a result of:

- highly motivated students seeking like-minded students to form highly functioning/successful groups
- students of similar backgrounds feeling marginalized and coming together to support/understand each other (e.g., mature-age students with family commitments understanding each others' needs)
- students who complete a large number of common units naturally forming support groups
- the course/unit actively promoting the formation of peer support groups (e.g., mentoring programs, group work assignments).

However they are formed, they provided students with peers that were understanding, empathetic and responsive to their needs. This may have been in the form of help in *unpacking an assignment* or moral support when a student hit a crisis point, or practical help such as a lift to the University.

I find that the peer group is what's keeping me going because they understand me better than the family.

There are about 10 of us who are around the same age, doing the same classes each semester... exchange information ... quite handy during exam time.

My group of friends we all aim for a high distinction.

Students who did not form strong/effective study groups cited a number of factors including: a lack of opportunity as each semester brings a new cohort of students to get to know (non structured degrees) and competing demands such as paid work and family. There were some students who said they did not need a peer support network and cited other support networks outside of the University as being sufficient.

Students recognized that the university (guild, departments etc) had tried a number of strategies to encourage students to socialize on campus, however, competing demands with paid work and family commitment often meant that students did not participate in these social networking opportunities.

Finally, a very strong theme that emerged from the students' narratives was the importance of empathy – whether it was an empathetic family member to provide emotional, financial and/or practical support, an understanding lecturer who saw the whole person and not just

the student, the understanding employer who saw the need for flexibility or understanding peers who could relate to them and where they were at.

Students value peer support networks. Students in less structured degrees and when there is little or no formal group work as part of the learning environment may struggle to form effective peer groups.

6.4.3 Implications for practice

Staff can provide a range of opportunities for students to build effective support networks early in their studies. However, we need to be cognizant of the demands on our students. Therefore, these networking opportunities might need to be linked to assessment/study so that they are valued by the student. These study networks may then provide opportunities for social networks.

6.5 The learning environment

Author: Adrienne Kinnear

6.5.1 Introduction

The students clearly articulated the characteristics of the learning environment that helped them progress and succeed in the course, even though this was not the focus of direct questions in focus groups and interviews. Because of its encompassing nature, the learning environment cannot be separated in practice, from the themes that precede this one. For example, we have seen that the goals that individual students hold can influence their perceptions of the learning environment; the choice of help-seeking strategies is influenced by the relationship developed with the lecturer or tutor, and the formation of strong peer groups can be catalysed by interactivity in the classroom. Thus the learning environment becomes an integrating theme, and looking at it in this way aids the development of models to inform practice.

6.5.2 Emergent findings

Many of the 'themes' that we have extracted from the student narratives and that are currently directing our analyses of factors underpinning progression and resilience are closely linked with the learning environment. Findings show that:

- the development of individual working relationships with lecturers and tutors was an important factor underlying successful progression
- engagement with the learning environment was a characteristic of most successful students and they clearly articulated the features that promoted effective engagement and encouraged persistence
- the learning environment was central to the development of community for these students and led to a sense of belonging that promoted persistence
- students with one or more characteristics that marginalised them within their learning environments were less likely to develop relationships with staff and peers and less able to utilise the strategies that, for their peers, promoted persistence and resilience.

6.5.2.1 Developing a 'relationship' with the lecturer/tutor

Students commented on the importance of developing a 'relationship' with their lecturer or tutor. They talked about having *a definite student/teacher relationship*, *a personal relationship with your number 1 contact*, or *a good relationship* with the lecturer. *Personal*, in this context, meant individual - that they could interact easily with the staff member on an individual basis outside the class or group contexts. This relationship building was seen as a student responsibility by some of these successful students and they identified particular strategies outside of the class environment: *just go up and say hi*; *just to chat, at the end of class*. Whether the student was proactive or not, this relationship building was enhanced by a lecturer who was *approachable* (a frequently mentioned characteristic); *interactive*; *encouraging*; *able to relate to you as an individual*. While some students expressed ignorance of the professional lives of an academic, (*I don't really understand what they do; until I started speaking to my lecturers one on one I didn't really understand*), others expressed respectful surprise and pride at staff's professional achievements and this in turn

enhanced the student-teacher relationship in their eyes; *you begin to see them as actually a person instead of just this big authority figure that can give you a pass or a fail.*

The student/teacher relationship was characterised by what the students perceived to be an empathy for individual situations (*some ... say I know its hard, I've been there*) and a mutual respect in that *the lecturers see you are interested and then they actually want to help you and be interested.* This could be, in itself, a *driving force* for academic achievement because *at the end of the day they're proud of you:*

If you're a student that does well or is keen, the tutors will always approach you and give you opportunities for work experience of jobs and things so that's definitely a good driving force because you always feel like oh I could get a step ahead.

Relationship-development was important for other reasons. We have seen that it was strongly connected to help-seeking, making it easier because *there was less inhibition about letting them know where you're having problems.* It was also important for 'knowing' the lecturer, and seeking feedback on assignments because *you know the lecturer's expectations, it's so much easier than starting a subject when you haven't met this person before at all.*

When such individual and self-affirming relationships could not be developed with staff who were central to students' progression, or negative relationships developed, students perceived these as barriers to progression and goal achievement. This was seen in the final year Nursing cohort where the majority of the students who attended the focus group discussion in 2007 voiced very strong concerns about one or two staff who held significant course/practicum coordination roles. The students concerns were so strong that the facilitator found it difficult to change the focus of the discussion away from their concerns and towards other topics. The students perceived a lack of respect for them as individuals and as students (*they don't see you as equals; we would like to be listened to*), a lack of empathy and flexibility, and an unsupportive environment which made their final year unnecessarily stressful (*they're threats of whether we are going to fail or not and we don't need that coming into Graduation*). For this group of students in this focus group, this was the first time they had interacted in this way, airing these common concerns and grievances. Interestingly, when these students were asked what made them resilient in the face of this difficult situation, they almost all identified their individual commitment to specific academic or career goals.

In some instances, the staff was a central factor in the decision of a student to persist, whether it was general ongoing support, or encouragement and/or flexibility provided when things went wrong. This applied particularly to the students in the mature-age cohort coming to university later in life, often with family responsibilities to juggle.

If I hadn't had them, I wouldn't have got through.

The thing that got me through my degree was basically the staff ... it only takes one or two people to make the world of difference

... she was so supportive ... It's just sparked me up again to think yes, I'm nearly there.

I ... asked all sorts of questions and they responded to me in a quick way so finally, I'm glad I didn't make that decision to withdraw.

I think if I'd come across hurdles ... that put up barriers to me completing assignments or meeting the lecturers or anything like that, I wouldn't still be here, it would become too hard ...

It is important to make the point that the development of an effective student-teacher relationship, as the students described it, did not mean that staff had to reach out to, and 'know' each individual student in their class. Rather, they simply needed to respond appropriately and consistently when students reached out to them in whatever way, and in whatever context the students chose. By responding in an approachable way, with empathy and understanding of what 'being a student' can entail, the staff became important facilitators and barrier-removers for progression, as well as agents for assisting the development of resilience. It is not that different diverse students require different approaches³, but that the approach should be borne from knowledge that students have varying goals and life circumstances that, from time to time, require understanding. However, it was important that staff repeatedly reaffirmed their roles in support and their availability on a class basis throughout the life of a teaching unit, rather than only when introducing the unit. For some students, it was an essential part of staff being seen as 'approachable'.

The development of individual relationships with teaching staff, centred within the learning environment, enhanced progression for successful students. It made help-seeking less daunting and more strategic, and encouraged academic achievement.

6.5.2.2 Engagement with the learning environment

Students in the majority of the cohorts were very engaged with their learning, though 'engagement' was not a term students used. Instead, when they spoke about their learning experiences they spoke of *bringing it alive, enlivening the whole learning process, influencing the way you see everything* and as generating *a hunger for learning*. Their narratives provided insights into some of the characteristics of the learning environment that promoted this engagement. In particular, they spoke consistently of interaction, relevancy, and lecturer/tutor enthusiasm and passion.

Interactive learning environments were identified as a factor for successful progression. For these students, such environments *challenge your thinking and constantly probe and challenge, involve holding discussions with other people and finding out about how they think and their points of view on things*. Lecturers were valued for their ability to *enliven the whole learning process, to get me to question my values, the way I viewed the world, to challenge students thinking*. It could also increase learner confidence (*... to have discussion ... debates going on in virtually every lecture .. undoubtedly improved my confidence*). This engagement with learning was enhanced by clarity of unit structure and expectations, and face-to-face contact with lecturers and tutors who were *up to date, knowledgeable, enthusiastic or passionate*.

³ This conclusion does not apply to students who, for reason of culture, language or disability, may be marginalised within the learning environment. These students may well require special and considered approaches or strategies to bring them in from the margins, as we discuss in a later section of this report.

If the material's engaging and the lecturer themselves make it enjoyable then I've had units where all the lecture notes are online so if I miss a class then I've got it there, but I have an overwhelming desire that I have to be in that class and have to be in the atmosphere and experience that because the lecturer is very engaging and the material that you cover is visual and I need that interaction process.

We get these PowerPoint slides and we're all capable of reading those ourselves. I find I need a lecturer who will interact with students.

For the students enrolled in professional degrees such as Nursing, Business or Advertising and whose goals set a high priority on the future workplace, the need to see lecturers and tutors as credible professionals, as well as effective teachers, coloured their perceptions of the learning environment. A teacher attuned to the needs of the workplace, who *had done the time*, motivated students to succeed and meet their goals. The students saw them as helping them *to move into the realistic world of business, making them hungry to move into the workforce, hungry to learn, as having experience in the field* and so having *useful contacts in their field*.

The students also identified factors within their learning environments that were likely to cause disengagement or hinder them achieving their goals. This was evident when students perceived teaching staff as unsupportive, (*didn't want to know you*), as poor teachers (*she didn't really understand how to do the class*), as lacking in knowledge or expertise (*he didn't really have a clue*) or unenthusiastic (*you tend to lack motivation to go and keep the momentum up as well*). A lack of consistency in assessment approaches, or a lack of clarity in expectations were particular hindrances to goal achievement for those students whose goals centred around high academic achievement. However, there is some evidence in the students' narratives, that while it was not uncommon for them to experience a unit of study that might be disengaging, or one they were critical of, as long as their experiences with their learning generally were overwhelmingly positive (and for most this was the case), they demonstrated a pragmatic tolerance that allowed them to cope and move on. There is a cautionary note however. If poor experiences occurred early in their learning journey, they were more likely to cause the student to change their course of study:

My first major was Journalism and the tutor I had he just didn't know what he was talking about, so I guess if I had another teacher than I might have stayed in that (An international student who switched Majors).

I find the sport science group very cliquy ... if you're not into elite sport, if you're not into the same thing then they kind of shut down to you. I work with people with disabilities ... I'm not really interested in elite athletes. (A temporarily physically-disabled student who changed her course as a result of being marginalised within the learning environment she had initially entered. Note here the mismatch between the student's goals and those she perceived the staff to have about the students in the course).

Effective engagement with the learning environment is a common feature among successful students. Engagement was enhanced by interactivity, perceived relevancy of content to goals, and enthusiastic, approachable staff.

6.5.2.3 The learning environment and a sense of 'belonging' to a community

... it definitely helps having a university where you feel that you belong to.

Several studies have identified the importance of being part of the university community, of having a sense of belonging at university, as a factor enhancing student retention, particularly in the first year. The idea of 'belonging' surfaced in the student narratives when they were asked about the importance of a supportive community, and closer analysis provided insights into the factors that catalysed, or enhanced a sense of belonging.

The learning environment itself played an important role in the students developing a sense of belonging to a community:

There are opportunities to do courses online rather than attend lectures and that sort of thing and for me, being a mature student, I think part of the attraction is being part of the community, attending lectures and seeing the other students and feeling like you're part of a group working towards something, rather than sitting at home just trying to get it done.

This centrality of the learning environment in enhancing community and belonging is not surprising, given the multiple off-campus responsibilities these students have, and that when they are on-campus, it is primarily to attend classes. Very often, they interpreted that 'belonging' as being part of a peer group that not only provided support, but was a conduit for reliable and timely information, and a vehicle for enhancing learning: *knowing that you belong to the community, you get something out of it for your goals and your direction;. I guess being part of a community so you can have a sense of belonging, you can debrief with friends.*

Consistent and frequent face-to-face interaction with the same learning cohort, particularly in first year, could facilitate the early development of a sense of belonging: *When you were enrolled, you had to enrol in a group and that was the same group for each class. Two students provided examples of maintaining these groups in later years using their own initiative: I just talk to my friends and I actually just email my classes and they enrol in the same classes; OK, what units are you going to read next semester and so you try to get a group of friends around that.*

For some students, the 'community' was developed through the interactions inside the learning environment such as the *four or five friends I've done Units ... there's already a community there to help you out.* Such a community feeling was sometimes not developed until there was more frequent and consistent face-to-face interactions with an identified group of peers, such as *in second year, as you see faces more frequently we got together and pretty much formed a little group where we exchange information and help each other out.* In first year, *there wasn't that much of a community thing going within the course.* Group work within the learning environment, when a positive experience for the students, could facilitate this sense of belonging to a community: *whenever we can work in a group project together we do; I didn't actively seek it; I sort of fell into it. I think a lot of it came about when you start working in your groups which we all hate but I think having to work in groups, you have to work with someone and if you click, yeah.* The student above who commented on the lack of 'community' in first year suggested that *the Uni itself should have more of that such as a community support group, study group and just pick a few students to work in a group, and that is the group they work in for the semester, pretty much.*

There is no doubt from the student narratives that options for after-hours study (e.g., Business students), the opportunity to access information online without the need to come on to the campus, and the deliberate 'cramming' of units by one school to reduce the days required to travel to university (eg two full days of classes per week for final year Nursing students) provided obvious benefits. For some students however, the consequent reduced informal interaction around the learning environment had consequences for developing a sense of community. While it was *really convenient with all the flexibility ... you sort of can miss out on that because, say you don't do all your units together with similar people or like at different times, if you do night time or day time*. One student spoke about a new mentoring program in the Business school developed specifically to overcome what he described as *not much community with the Business students ... because like I said I pretty much go straight to Uni., do my lecture and my tute and then go straight home and study in my own time*. Interestingly, this students' perception of 'lack of community' was due not to a lack of knowing who was in his class, but because *there's not really that much interaction between students* within the learning environment itself. The final year Nursing students (the same group mentioned earlier as airing many grievances at their focus group in 2007) also perceived that there was not a *great deal of community fostered within that School and that there was no continuity between students for an opportunity for us to get to know each other because we are all in different classes all the time*.

These examples from the student narratives suggest that the ways in which learning environments are structured and timetabled, and the opportunities they provide for interactions, both formal and informal, not only encourage interest and persistence as we have seen earlier, but can provide important catalysts for encouraging a sense of community among the students that in turn, is perceived as a sense of belonging.

It is important to note that not all the students in the project required a sense of belonging in order to persist and succeed. Several students made it quite clear that they didn't need this sense of community. One student saw no need for such a *special community around me; a special group*. Another commented that *I never really saw a university as a base for my friendships*. However, for at least two of these students, their narratives later intimated the development of a community either through the interaction with teaching staff in a course or as result of being invited to join the elite university community of highest-achieving students which resulted in this student meeting like-minded students and being part of a *community of these people with special interests*.

The learning environment can play a central role in facilitating the development of a sense of community. By providing catalysts for frequent and consistent interaction in formal and informal settings, the learning environment stimulates the development of communities that can lead to a sense of belonging and that promote persistence.

6.5.2.4 Marginalisation from the learning environment for some students

The majority of the student cohorts were overwhelmingly positive about their learning experiences as undergraduates. However, there were clear instances of students who did not have the same positive experiences, and their narratives offer stark contrasts with the remainder of the participants. The common factor that these marginalised students shared was one or more characteristics of culture, language or disability, that marginalised them within the learning environment to varying degrees (and sometimes, within the broader

campus community). Given the literature on these topics, this kind of marginalisation is not surprising, nor was it surprising that coming from a different culture, difficulty with English, or having a disability could affect successful progression. What was significant from this project was that, in all other respects, these students identified similar success and persistence factors to their peers, such as support (though it sometimes came from unique sources), goal commitment and their own personal attributes. Here we summarise some of the preliminary findings from the narratives of international ESL students to exemplify this marginalisation.

There is no doubt that international students who had difficulties conversing in, and understanding English in classroom discourses, were marginalised in the learning environment, and that as a result, successful progression was more difficult and there were more barriers to meeting their academic goals. It had isolating effects in the classroom, preventing the students from contributing to class discussions, even when they knew they had something to offer.

Because we think that people around, they can't understand us so what's the point of talking? Even in the group assignment we just keep quiet aside, rather than join in discussion and everything. ... We have lots of information but then we just hand in and keep ourselves aside. (Nursing student).

At the same time as it reduced their understanding of material transmitted in a lecture format, the students were less likely to seek help or clarification, either from their peers or the lecturer (*... if I interrupt and then ask to explain to me ... it would make the process slower in the whole class so sometimes I just let it pass*).

Direct or indirect reference to discriminatory practices were very rare and students commented positively about the campus atmosphere. However, there were indications that the transition into the workplace may not be as easy for international students due to communication issues (*a lot of my friends ... they can't find a job ... because when they go for interview the people say you don't have experience or your language, you can't communicate well*). For some, it wasn't only a language issue:

... and he said that he wouldn't hire someone who looked non-Australian because that was not what audiences would appreciate so it felt that it was going to be very, very hard to break into the industry after hearing that. (An international student discussing the perceptions of a guest lecturer).

The students provided insights into, and suggestions for, strategies that are likely to reduce the isolating effects of differing language and culture. Marginalisation was considerably reduced when students were able to develop supportive peer groups and interact positively with classmates who recognised their language difficulties and gave feedback and encouragement. Yet, joining such groups can be difficult because of the *fear of getting in the peer groups, like course mates, not only dealing with lecturers but also course mates*. Staff from similar cultures to the students provided welcoming environments (*You get somebody the same colour, it's easier to talk with. We are talking in the same language. It does really overcome the culture shock, especially in first year*), as did mentors and empathetic lecturers:

I was the only Asian in the class and the lecturer ... made me feel really comfortable, like people won't see me stupidly and it really changed how the locals stood and looked at me. (A Nursing student, talking about one of her first tutorial classes).

Smaller, interactive classes where the students had time to get involved in discussions eased the 'outsider' effects, and students suggested there was a need to *generate more group activities for all students* both in and outside class, and to use deliberate class strategies to include all individuals in discussion and presenting ideas.

Earlier in this section, we presented the case that the learning environment can be a significant catalyst for developing a sense of belonging. For these marginalised students, it was clear that they were often unable to interact sufficiently to develop the same sense of community and belonging that their peers did. Several students expressed a need to *meet these people who are next to you ... to see these people again so I can get to know them*. For these students, because of the increased difficulties interacting in class, both as individuals and as group members, they recognised a need for additional strategies such as *activity groups for us to get together outside of class and chat a little bit more and get to know more about each other*. One student expressed it as *some kind of belongingness to the community; it gives you some added confidence and I guess it's more a bit about confidence*. The benefits of maintaining consistent learning cohorts were also mentioned by an international student who suggested that they *have same classmates all the time*.

The language and cultural issues that were paramount for some of these students meant that peer support networks, help-seeking strategies and opportunities to develop effective relationships with their lecturers and student peers were often severely compromised. We also have evidence that students with physical disabilities can also feel marginalised. We are still analysing these narratives, but the outcomes to date suggest that alternative support networks (family and uniquely, employers at their part-time place of work), their commitment to their academic goals (underpinned by family obligations and/or expectations) and their own personal attributes provided the resilience and determination to persist, factors that were surprisingly similar to their Australian peers.

International NESB students are often marginalised from the learning environments and have less opportunity to utilise some of the strategies that other students find essential for success and persistence, and for developing a sense of belonging.

6.5.3 Implications for practice

The ways in which teaching staff present themselves to students early in a teaching unit is critical for students initiating effective working relationships that enhance both academic endeavour and successful progression. Regardless of the student background, that presentation needs to incorporate a visible enthusiasm for the subject, frequent reaffirmation of support throughout the semester (not just at the beginning), empathy for, and understanding of students' multiple lives and responsibilities, and a consequent willingness to be appropriately flexible around critical incident points. For some students, this can make the difference between persistence and withdrawal.

Learning environments that are designed to be interactive and challenging, and are compatible with the students' goals, do much more than enhance individual learning. They

are central to the development of formal and informal communities that create a sense of belonging. This sense of belonging is important for progression and the development of coping strategies to promote resilience.

The commonalities in the diverse students' narratives are far more striking than the differences. The features of the learning environment that have emerged as important here are important for *all* students, regardless of diversity or background.

However, for those students with characteristics that are potentially marginalising (whether they be cultural, language, or physical differences) focussed and additional strategies are required to enhance interaction and engagement (preferably both within and outside the learning environment, but centred around it). These strategies need to be targeted towards ensuring that the students develop (i) the same kinds of relationships with teaching staff and (ii) an equivalent sense of community and belonging that their peers develop. This will ensure they have the same opportunities to utilise the strategies that underpin resilience and that make their progression easier and more rewarding.

6.6 Transition to the workplace

Author: Sharon Middleton

6.6.1 Introduction

In the first year of the study, our students were all undergraduates in their penultimate or final year of study. At this stage of the project we were interested in how confident the students felt about moving into the workforce. We were also interested in whether that confidence would differ across disciplines and diversity groups. In discussion groups and interviews, the students were asked 'How confident do you feel, at this point in time, about moving into the workforce?'

In the second year of the study, our final year cohort had either graduated or moved onto postgraduate study. We were particularly interested in the factors affecting workplace transition, but also transition from university in general for those not employed. A series of questions were asked on the topic of workplace transition to probe how students felt about their transition, whether they felt adequately prepared for the workplace, what factors had helped or hindered their transition, and whether paid work as a student had assisted their transition.

6.6.2 Emergent findings

Forty-nine undergraduates participated in the first year of the study and, of those, 21 of them participated in both years of the study. An initial analysis of the focus group and interview data has revealed interesting findings regarding perceived workforce confidence and workplace transition. Further analysis is needed to confirm and elaborate on these findings.

6.6.2.1 Confidence in moving into the workforce

The undergraduate students varied in their level of confidence about moving into the workforce. Words used by students were *worried, scared, excited, nervous, and confident* or *just want to get out there*. The students appeared to anticipate there would be a 'gap' between university and employment but were generally optimistic about finding a job. Perceived preparation for the workforce was related to the amount of experience, practical work or industry links students had obtained during their degrees.

Diversity was most notable among different academic disciplines. Students studying Arts degrees spoke of negative feedback from other people who tended to be pessimistic about their ability to find employment, with statements such as *but what are you going to work as?* These negative comments from outsiders undermined their confidence. In contrast, Education students seemed more confident about moving into the workforce as they felt the University had prepared them well. The discipline differences are best illustrated by the following two student comments:

At the end of the day, we come out of the degree prepared (Education student)
I have gained a superficial understanding of a lot of things but not a lot in great depth (Arts student).

Clearly, dispelling myths about lack of employment or employment pathways for Arts students is needed. Further, students from Arts or other broad degrees would benefit from academic staff demonstrating various choices for career pathways and 'spelling out' the applicable skills and knowledge obtained from their degrees such as people skills, analytical skills, research skills, and field knowledge. Many students voiced their need for more practical experience and links with industry. As well as getting more practical experience in general, getting a 'feel' for the industry and the kind of work expected of them was also considered important.

Student confidence in moving into the workforce would be enhanced by closer links with industry and interactions with a workplace during their undergraduate years.

6.6.2.2 Factors aiding workplace transition

Similar to the overall themes emerging about student persistence and resilience, support was a key theme with the majority of students mentioning support from various sources including family, peers, academic staff, and student support staff and in particular, workplace support. Other factors that assisted workplace transition included knowledge and skills gained at university and from prior work experience, strong self qualities, and being pro-active prior to and after graduating.

Support

Support from academic and student support staff prior to and during transition was important to students. Career guidance, information evenings as well as relevant career information and contacts were appreciated by students, as well as lecturers who were willing to follow them up and encourage them after graduation. One student spoke of the importance of *being able to approach academic staff and ask for vocational advice and direction*. Family support was integral to students during their university years and continued to be important during the transition to employment. Emotional support and encouragement helped students persist with looking for work and financial support provided a buffer to students while they were looking for work.

One of the key findings from these data was the importance of a supportive work environment for those students in employment. As one student pointed out:

The main thing for me was that I moved into a very, very supportive and positive working environment. The workplace is something the University cannot control so you can end up somewhere that's really positive or not.

Another student described it as *a workplace that is willing to encourage new employees and help them just get used to what's happening.*

Self qualities

Similar to findings on persistence and resilience of students, self qualities were consistently mentioned in student accounts regarding transition. Words used to describe self qualities were *confidence, maturity, diligence, self efficacy, perseverance* and *good work ethic*. Students that were satisfied with their transition were more likely to attribute their success to qualities about themselves (i.e., intrinsic characteristics). Students experiencing difficult transitions also spoke about self qualities such as *being able to stand up for myself* or *determination* in order to overcome barriers to successful transition.

Knowledge and skills

A number of students linked confidence in transition with the knowledge acquired through their degrees, and were able to point out ways in which that knowledge had translated into the workplace, particularly for Education and Nursing students.

All the hard stuff teachers complain about, I find a dream – reporting, not a problem, assessing, not a problem ... that's what uni prepares you for... you're not scared to do reporting or assessing (Education student).

Other students were able to articulate particular skills such as people skills, time management, communication skills, and job-specific skills related to work experience and practicum having contributed to their successful transition.

Most of the students in this study had previous paid or unpaid work experience as a student. This appeared to have a largely positive affect on student transition. In the words of one student it *makes transition easier if you have done the work before.*

Being pro-active prior to and after graduating

Similar to self qualities, an emerging theme was that students who were 'pro-active' prior to and after graduation had a more successful transition. Taking the initiative to network, *look beyond the box, being willing to start at the bottom* and pursue employment and contacts while still at university was considered advantageous.

Other factors aiding transition to the workplace were:

- having a job to go to after graduation – not having the pressure to look for a job
- doing a final practicum where you are going to do your Grad program (Nursing)
- having good contacts and networking
- having a good Portfolio.

6.6.2.3 Factors hindering workplace transition

While we did not directly ask students to talk about their current employment, many of them were keen to elaborate on their experience in the workplace following graduation. Two of the main factors that hindered student transition included a perceived *lack of experience*, even among those who had completed a number of practicums; and *a lack of a supportive working environment.*

Lack of experience

A few students spoke about a general lack of experience which made it difficult to find employment. However, a number of students spoke about lack of 'specific' experience which made the step from student to employee difficult. We do have a bias in our study with a large group of Nursing students who were particularly vocal about inadequate hospital-based training. Nursing graduates felt that they lacked ward and clinical experience in particular. However, Nursing graduates who were employed in an area similar to their last placement found the transition easier.

Lack of a supportive work environment

Those students who did not receive support, guidance and encouragement in the workplace as new employees were the least likely to be happy or satisfied with their transition. Several students were now considering changing careers due to their negative experiences and lack of support in the workplace.

Nursing graduates in particular felt overwhelmed by the expectations thrust upon them in the workplace and did not feel adequately prepared to do their job due to lack of experience and lack of support from staff. Lack of support is related to a stressful, resource dependent working environment. For example, a nurse who had a 'buddy' assisting her in her Graduate program felt more empowered and confident than those who were expected to be left to their own devices due to lack of staff time and resources.

The staff who you are working with, make a huge difference as to whether you want to work there or not.

It appears, for the nurses in particular, that although a Graduate program is set in place, staff resources and time to assist graduate nurses is lacking. The graduates commented: *It's two things; not enough clinical experience and also the way that the hospitals are at the moment, it's just so busy. People aren't there to help you when you need them because they're all pulling their hair out because they're all too busy. It gets so scary!*

A supportive work environment characterised by encouragement and guidance, allowance for a 'settling in' period, and adequate staff resources to assist graduates is essential for successful workplace transition.

Other hindrances to workplace transition

Other factors identified by students that hindered their transition to the workplace were issues prior to graduating. For example, two international students mentioned discrimination from guest lecturers in the media industry who admitted to students that they were unlikely to hire international students. This would have been a major setback to students in their final year. Other students spoke of the stress, loss of peer networks and uncertainty they felt once their degrees had finished. And for the first time, after studying for so long, they did not know what they were going to be doing the following year. In the words of one student:

I spent five years at the uni and all of a sudden, in one day, all my lecturers and friends are taken away. Lecturers are always easy to Google on the website to contact but lecturers who have left the uni or whatever. It would have been good to have a final reunion

6.6.2.4 Graduate advice to final year students

Graduate students who had experienced the transition period were in a good position to provide advice to final year students, and they were asked the interview question: 'What advice would you give to final year students?' The resulting comments are provided in Table 15 below.

Table 15: Advice to Final Year students

*Start looking for jobs and talking to employers before leaving university.
As a new employee, don't be afraid to ask for help and ask questions.
Obtain work experience in the industry you will be working in, as a student.
Take it slow and find your feet first.
Expect for things not to go as you planned.
Make the most of your practicums.
Seek advice from career counsellors at university.
Talk to people who are working in a particular area of interest and find out what they like and don't like about the job.
Have a clear picture of what the role is about.
Look outside the box to other alternatives.
Work so you can live your life, not live to work.
Get as much practical experience as you can.
Be confident.
Utilise your support networks.
Talk to people and ask for help.
Expect an information load but try to relax.
The world isn't going to end if something goes 'pear shaped'.
You are not the only person applying for the job – sell yourself the best you can.
Be willing to learn – if you have a skills gap, show that you are willing to fill it.
You can learn a lot from volunteer jobs.
Focus on your study, but also keep an eye on career information and keep checking information about the area you want to work in.*

6.6.3 Implications for practice

An initial analysis of the workplace transition data has identified several issues that affect both student confidence about entering the workforce as well as successful transition. The data has highlighted the importance of students obtaining relevant career information and guidance prior to graduating as well as some type of 'closure' at the end of their degrees.

It is not new information that students want more practical experience during their undergraduate degrees but this study has highlighted the importance of having links to industry and real workplaces for students studying broad degrees. Also, the amount and type of hospital-based experience for Nursing students, in particular, warrants reviewing.

Moving into a supportive working environment not only enhances student transition but also greater resilience of students to challenges that occur, and career progression. While universities have little control over workplace environments, the preparation of diverse graduates for the workplace requires more attention.

6.7 Diversity: Does it matter?

Our preliminary analysis of the student transcripts indicates *diversity does indeed matter* if you are a NESB student with language difficulties, or with a culture that calls attention to difference. Our analysis also suggests that it matters if you are a student with a physical disability. The lack of focused, inclusive classroom strategies for these students leaves them isolated and unable to utilise important tools such as peer support and interaction, and staff relationships that enhance help-seeking. These outcomes are not unique to this project. What this project is enabling us to do, however, is to link these kinds of strategies (strategies from which these students are isolated) into process models to explain how, collectively they underpin resilience and aid progression. We present one such model later in this section of the report.

When we look in detail at the remaining cohorts, including those where we might expect diversity to also 'matter', where we might expect to find different factors underpinning success and progression with different implications for practice (such as first generation students, students of alternative entry, students with parents of limited education, older students juggling substantial parental responsibilities) the similarities are far more apparent than the differences. This was an unexpected outcome. However, the student narratives provide some explanation why the student diversity is not reflected to a greater extent in the factors the students identified as important to their progression. *All* of the students in our project, regardless of their backgrounds, lead multiple lives. 'Being a student' is just one of these lives. As a result, conflicts with study will *always* arise, and critical incidents are *always* likely to rise and challenge their commitment to obtaining a degree. They may involve financial issues (e.g., particularly during a professional practice, when earning is nil), employer needs and workplace demands, family responsibilities, a lack of self-confidence, better or more attractive options elsewhere or the continual need to juggle social and work lives around study. *All* these students bring a 'multiple lives' perspective to their learning environments.

Given these commonalities, it is not surprising that there are similarities in the kinds of factors that these students identify with success, persistence and progression. They all lead busy lives so their time on campus is valuable and centres around their learning environments. For this reason, the university factors promoting progression and resilience lie largely within and around this environment, rather than in the wider institution. (For some students, factors such as professional counselling and library resources are also important). They persist and are able to develop resilience to critical incidents when their learning environment is interesting and engaging, when it provides opportunities for the development of peer and staff relationships that develop a sense of community, when information is obtained in a timely and effective manner, and when their lecturers provide empathy, support and flexibility for their multiple lives. These are features that *all* the students benefit from, regardless of diversity. This is an important outcome of the project. It suggests that, regardless of age, mode of entry, parents' educational background, or family responsibilities, there are *common* features of a learning environment and support context that are likely to enhance student progression. It suggests that, for these student cohorts, 'catering for diversity' does not necessarily require diverse strategies.

There are some differences with diversity across these cohorts, but they are differences of emphasis rather than substance, of 'shades of grey' rather than 'black versus white'.

Nevertheless, these subtle diversity-related differences can have implications for practice. For example:⁴

- The development and initiation of help-seeking strategies may be particularly important for students who are the first of their family to attend university, or for students (either local or international) whose home language is not English.
- All students require empathetic support for success and for an effective transition into the workplace. Different student cohorts rely on different combinations of support networks depending on their diversity, multiple responsibilities and commitments.
- Encouraging and enhancing the development of *diverse* kinds of support within and outside the learning environment is an important strategy to embed in the learning environment. Students without the opportunity to develop diverse support networks are forced to rely more heavily on their own determination and commitment to succeed.
- Juggling and balancing study priorities, and the life balance issues and conflicts that arise can catalyse thoughts of withdrawal particularly in older-aged students (with or without child-minding responsibilities) and students working very long hours in the paid workforce. These students, in particular, rely on a significant degree of flexibility (with study, with assignment deadlines, with their employers) to ensure progression.
- For younger students, even those without family responsibilities, conflicts with 'being a student' and goal clarification (possibly encouraged by/resulting from dissatisfaction with their selected course of study) are catalysts for considering withdrawal. Considering the important role that goals play in persistence and resilience, assistance with goal clarification and commitment early in a younger student's journey is a worthwhile endeavour for enhancing retention.
- Students in non-professional, generalist degrees such as Arts would benefit from the embedding of some kind of workplace experience and strategic career advice. This would enhance the transition into the workplace.
- For students in professional degrees such as Education, Business or Nursing, a successful transition into the workplace requires supportive employers and workplace colleagues who are empathetic, and can respond to the needs of a new graduate.

Continued detailed analyses of the student narratives both within the themes presented here, and within those identified, but not yet analysed (Appendix 9), are likely to both verify the importance of these subtle differences, and reveal other differences that may be of consequence.

6.8 Making connections

An important feature of this project has been the collection of large-scale quantitative data and smaller, case study scale qualitative data, both focussing on the same research questions. One provides the numbers for generalisation of patterns, the other the richness of experience for analysis of process. One of the most important outcomes of the project has been the consistency in the students' responses between the two data sets. For example, the primacy of goal commitment for persistence was first illustrated by the quantitative responses. It was verified by the students' narratives which also showed how goals could

⁴ These examples are drawn from both the qualitative narratives, and the quantitative responses summarised in Appendix 3.

colour the perceptions of the learning environment and underpin academic success. The quantitative data indicated the importance of support in progression. The narratives not only verified this, but also illustrated how these networks are developed, and the importance of strategies for initiating and accessing support. The kinds of consistencies we present here indicate that the student case studies do indeed reflect the greater student population at ECU, and that findings emerging from the student narratives have currency beyond the cases themselves.

At the end of the penultimate-final year student interviews in 2008, the students were asked to reflect back on their nearly-completed studies, and list the three most important factors that have contributed to their success. When these responses were compared to the questionnaire responses they provided 18 months earlier, there was almost complete matching, with only the rankings differing occasionally. This indicated that their perceptions they had formed into their second year of study were robust and had remained unchanged through the life of the project.

A second important outcome has emerged from the parallel analysis of the quantitative and qualitative data sets. This is best illustrated by an example. Table 11 in the report ranks the reasons that the 1353 surveyed students identified as underlying persistence. Factors associated with the teaching staff such as support, flexibility and learning resources, were ranked low and one might conclude that staff play little role in persistence. In fact, one of the staff responses, on reading the second newsletter, was surprise and concern that feedback to students *didn't matter*. However, as we read and analysed the students' stories, it became obvious that the suggestion that staff or support systems play little role in persistence, as suggested by these simple, quantitative comparisons, is not correct. Simplistic comparisons such as these can obscure more complex interactions and behaviours. For example, focusing on the issue of resilience – in this context meaning the ability to overcome a barrier to continuing and persist with study – the narrative analyses have allowed us to hypothesise how goal commitment is linked to persistence through interactions that develop resilience and in which staff support is essential. Resilience appears to be intricately linked with goal commitment and support systems in a way that is modeled in Figure 2. Similarly, the centrality of the learning environment itself (the features of which are determined by the teaching staff) in linking and operationalising the factors identified in the student survey can also be modeled as a result of the student narratives (Figure 3).

While many of the factors and themes emerging from this project may have been previously identified with student success, this project is enabling us to model the interactions between the factors in ways that have not previously been attempted. It has also enabled us to identify associations with, and similarities between, different diversities of students. This has led us to critically examine the concept of 'student diversity', and what it means for teachers at university.

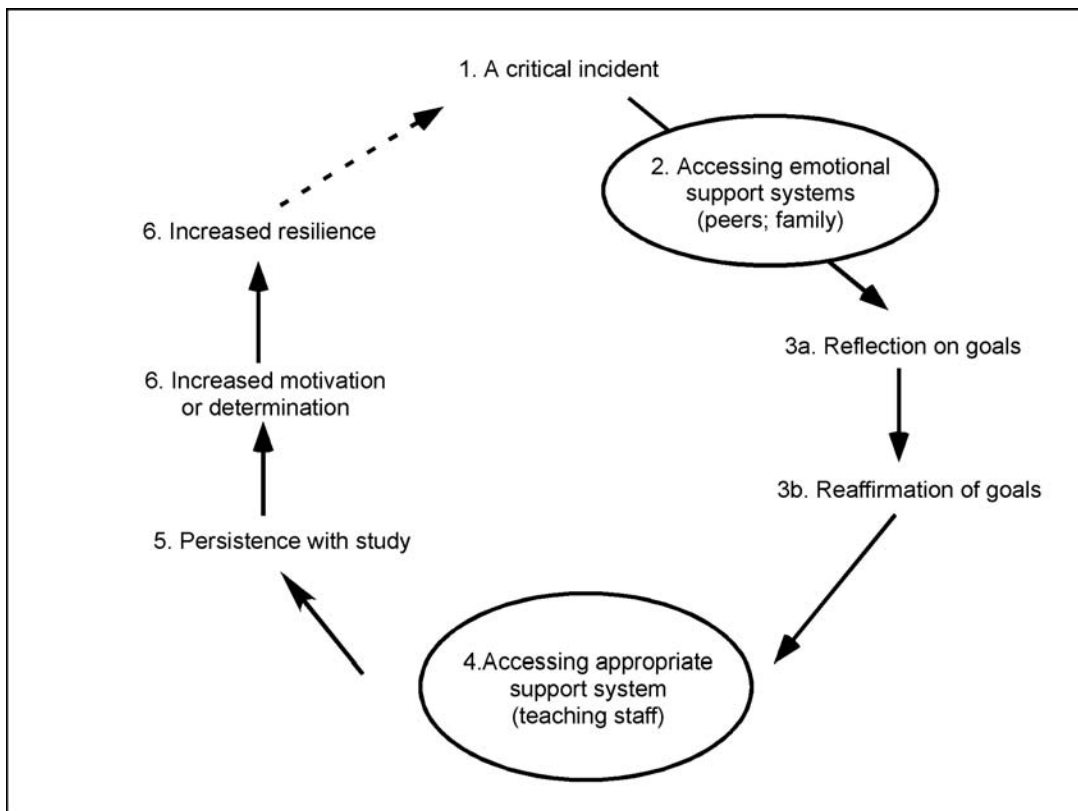


Figure 2. A proposed process model for overcoming barriers to progression and increasing resilience.

1. Student experiences a 'critical incident' that triggers consideration of withdrawal or has the potential to hinder progression.
2. Support and advice may be sought within an appropriate support network. This is often a well-established group of like-minded peers.
3. "Debriefing" of the incident with supportive friends can promote reflection and reaffirmation of goals ("I remain determined to get my degree"). It can also help to identify appropriate help-seeking strategies.
4. Appropriate support is accessed and provided by an approachable, empathetic lecturer/tutor.
5. The incident is surmounted and persistence is enabled.
6. Successful overcoming of a potential barrier to progression enhances self-confidence, and increases resilience to the next critical incident that may arise.

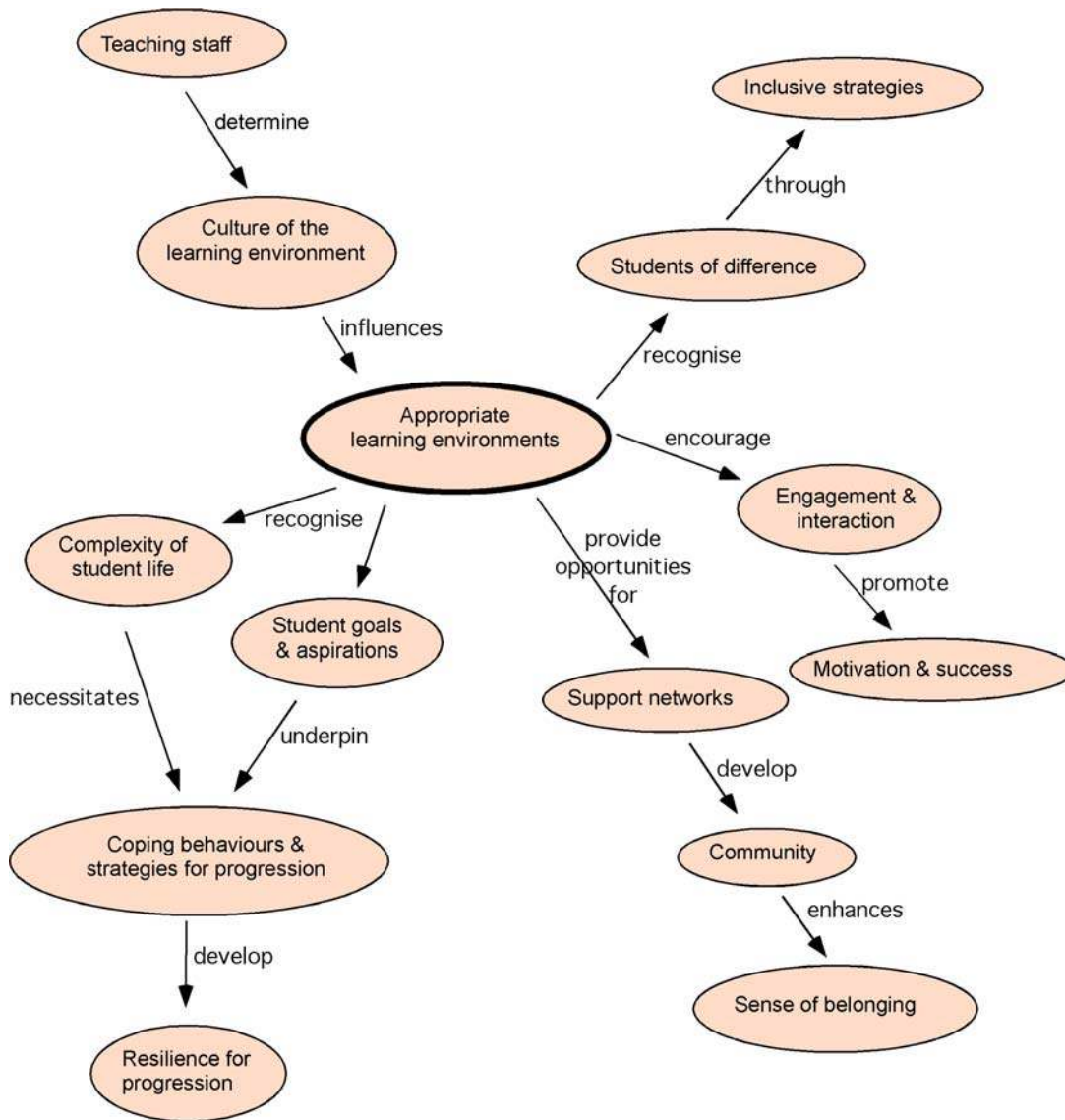


Figure 3. A model illustrating the potential centrality of the learning environment to persistence and resilience

7. PROJECT OUTCOMES AND DELIVERABLES

7.1 Achievement of project milestones

The project proposal identified a set of deliverables for each year of the study. In the table below, we describe the extent to, and manner in which these deliverables were achieved. A separate section considers the dissemination strategies.

Deliverable	Comments
<ul style="list-style-type: none"> • Two-year data sets for students cohorts. • Identification of specific foci (in year 1) worthy of continued study (in year 2). 	<p>Completed: Additional time was required in 2008 for completion of Year 1 Indigenous and international cohorts.</p> <p>Added: An important addition to the project was the quantitative survey of 1353 students and their perceptions. Emerging foci in year 1 informed interview questions for year 2 (Appendix 5)</p>
<ul style="list-style-type: none"> • Identification of commonalities, differences & emergent themes. • Identification of student perceptions and contribution to persistence & resilience. 	<p>Completed: Analysis of survey themes from 1353 students (Final Report, Part 1); Analysis of major emergent themes from qualitative data (Final Report, Part 2).</p> <p>Ongoing: Development of process models linking behaviours, persistence and resilience (as for Figures 2 & 3). Continued analysis of emergent themes (Appendix 12)</p>
<ul style="list-style-type: none"> • Interim and final reports with key findings & recommendations to the wider university communities. 	<p>Completed as required.</p>

7.2 Dissemination strategies

The original project proposal outlined the importance of developing and using a dissemination model that would encourage active participation of staff in the project as it unfolded over the two years - a participatory dissemination model. We were particularly keen to use such a model to engage staff within ECU in the project. In this section we summarise the components of the model as they were planned, and the extent to which we were able to implement each of them. Additional comments are provided in section 9.

7.2.1 Staff involvement in the data collection, & feedback

Model component	Comments
<ul style="list-style-type: none"> • Involvement with survey distribution and returns 	<p>Achieved: this was an effective vehicle for introducing more than 30 staff to the project and obtaining their initial participation. Many staff contributed their own time to ensuring that surveys not returned in class were chased up and returned. This contributed to the percentage of surveys completed and ensured a full range of student diversities.</p>
<ul style="list-style-type: none"> • Involvement in qualitative data collection. 	<p>Not achieved: The model planned for the relevant teaching staff (whose students had contributed to the survey) to be involved, with team members in student focus groups in year 2. (Year 1 was thought to be too early to reasonably organise involvement). The necessary replacement of 3 – 6 focus groups with individual student interviews made this unrealistic.</p>
<ul style="list-style-type: none"> • Involvement in provision of feedback. 	<p>Achieved: As soon as the first project outcomes were achieved, a series of discussion groups and interviews were held with staff early in 2008, to get their perceptions about, and feedback on these early initial outcomes. Staff feedback indicated considerable interest in the initial findings, with some evidence that it began to affect practice⁵.</p> <p>Achieved: As a result of this staff interaction, the staff perception survey was developed both as an awareness-raising strategy for the project, and to involve more staff in the project by making them part of the data collection. A newsletter informing them of their responses and comparing them with those of the students was distributed as soon as possible, to maintain their interest in the project. Staff interest in, and responses to these outcomes prompted us to present these findings in detail to staff at the local T&L conference on campus in November.</p>

⁵ One staff member (DS) was encouraged by the findings to retain a student workshop on goals that she had considered removing from her unit. Another (TL) subsequently incorporated a session on goal clarification in his first year unit.

7.2.2 Established network of well-informed teachers and researchers.

Over the term of the project, a number of deliverables, as listed in the proposal, have contributed to the development of a network of interested people, both within and outside the institution, and whom we update on the project's progress and outcomes.

Model component	Comments
<ul style="list-style-type: none"> • Project newsletters 	<p>Added: An important part of the dissemination is the necessity to keep the project visible in the university community, in a way that is cognisant of the time-poor environment. The project newsletters are designed to provide easy-to-read and visually attractive snapshots of project outcomes, as they emerge (Appendix 10 and 11). These newsletters have been distributed:</p> <ul style="list-style-type: none"> • By email to the ECU academic staff who have participated in any aspects of the project and all senior academic staff (Heads of Schools, Associate Deans, Executive Deans & PVC (Teaching & Learning)). • In hard copy to all staff rooms and meeting areas across all four campuses of ECU. • To other WA institutions via colleagues and in response to requests. • To the broader academic community at all conference venues where members of the research team presented the work of the project. <p>These newsletters have been a particularly successful strategy for disseminating the project outcomes and implications for practice, and for stimulating 'staffroom chatter'. Monitoring of website usage shows peaks following newsletter distribution. We will continue to produce and distribute these newsletters throughout 2009.</p>
<ul style="list-style-type: none"> • Live website, accessible project rpts & processes. 	<p>Partially achieved: The website is established and provides pdf files of all research processes and data collection tools⁶, conference abstracts, and newsletters.</p> <p>Ongoing: the website has been developed to showcase a number of the project's features (e.g., the student voice). It will continue to be populated in 2009 as we continue to analyse and disseminate the findings.</p>
<ul style="list-style-type: none"> • Mini-conferences 	<p>Not achieved, alternatives substituted: These were planned specifically to be end-on to the annual half-day T&L Forums held by each of the Faculty of Communications, Health & Science, and the Faculty of Education & Arts. As part of the establishment of the ECU Centre for Teaching and Learning in 2008, these faculty-based forums ceased, and in their place, an inaugural institution-wide conference was initiated. We took advantage of this alternative and presented the results of the staff survey.⁷ However, a half-day workshop will still be held at the regional Bunbury campus on March 20th, 2009.</p>
<ul style="list-style-type: none"> • Papers & presentations 	<p>Achieved: As soon as project outcomes were emerging, formal forum and conference presentations were initiated to disseminate findings</p>

⁶ A request from a staff member at UWS for the questionnaire for potential use with students at that institution prompted us to place all data collection tools on the website.

⁷ Staff voted this the best paper presentation, and the paper itself has been made a required reading for the Graduate Certificate in Tertiary teaching unit PDC 1113.

	<p>locally (3), nationally (3) and internationally (2). Within ECU, the project findings have been workshopped or presented for discussion to university committees and a T&L faculty retreat⁸.</p> <p>Ongoing: Dissemination activities will continue in 2009, with workshops currently organised locally for January & March, and submissions accepted for conference workshops and presentations in March (international) and July (National).</p>
<p>• Strategy pamphlets</p>	<p>Not achieved, planned for 2009: We consider these to be one of the most important components of the dissemination model. The production of these pamphlets relies on a robust and complete analysis of themes from the qualitative data set, something we have not been able to begin until very recently. The five themes identified in Part 2 of this report will be the basis for the first series of pamphlets in 2009.⁹</p>

As a result of these strategies, we have developed a network of teachers and researchers that form a mailing list for the project for regular updates with newsletters, website additions and (in 2009) strategy pamphlets. This network has enabled us to gain some perceptions of the degree of resonance of our findings with other institutions (e.g., UWS, UNSW) and receive feedback from researchers involved in similar or related projects (eg Newcastle, Arcadia). Currently we disseminate project updates directly to personnel in the following institutions outside ECU:

- Curtin University,
- Murdoch University,
- University of New South Wales
- University of Western Sydney
- University of Newcastle,
- Arcadia University, Canada
- Institute of Education, London

⁸ The project has been highlighted in ECU's 2008 Equity Statement to DEEWR as one of the key Equity Achievements/Strategies in 2007.

⁹ The first pamphlet on student's goals will be presented to a SoTL conference in March, as part of a poster-pamphlet package that has been accepted (after review) for presentation.

7.2.3 Research papers and conference presentations

The project has been showcased at a number of Conferences as well as presentations at University Learning and Teaching Committees.

7.2.3.1 Conference presentations and papers

Kinnear, A., Middleton, S., Boyce, M., Sparrow, H., & Cullity, M. 2008. Success and Persistence in Academic Study: a comparison of student and staff perspectives. *E-Culture Conference*, Nov 5, 2008, Edith Cowan University (winner of best paper presentation award).

Kinnear, A., Sparrow, H., Boyce, M., and Middleton, S. 2008. Perceptions of successful students: lessons for the first year experience. *Preparing for the graduate of 2015. Proceedings of the 17th Annual Teaching Learning Forum*, 30-31 January 2008. Perth: Curtin University of Technology.

Kinnear, A., Sparrow, H., Boyce, M., and Middleton, S. 2008. Narratives of successful students: identifying boundaries and making connections. *Scholarship of Teaching and Learning Conference*, 15-16 May, 2008. London.

Kinnear, A., Sparrow, H., Boyce, M., and Middleton, S. 2008. Perceptions of successful students: lessons for the First Year Experience. *11th Pacific Rim First Year in Higher Education Conference*, 31 May – 2 July, 2008. University of Tasmania.

Sparrow, H., Boyce, M., Kinnear, A., and Middleton, S. 2008. Student diversity and the challenge of support for success. *31st Annual Higher Education Research and Development Society of Australia Conference*. 1-4 July, 2008. Rotorua, New Zealand.

Sparrow, H., Kinnear, A., Boyce, M., Middleton, S., & Cullity, M. What's in it for me: The role of personal goals in student persistence and success. *Society for Research into Higher Education*, 9-11 December, 2008. Liverpool, United Kingdom.

7.2.4 Conference proposals for 2009

The 2nd annual "The SoTL Commons" conference, Georgia Southern University, 11-13 March 2009. Poster reviewed and accepted: *Succeeding at university: the centrality of students' personal goals*.

www.georgiasouthern.edu/ijstl/conference

Higher Education Research & Development Association (HERDSA). Conference to be held on 6-9 July 2009 in Darwin, Northern Territory;

<http://learnline-dev.cdu.edu.au/herdsa/dates.html>

International Conference on Learning. Conference to be held on 1-4 July 2009 in Barcelona, Spain;

<http://i09.cg-conference.com/>

WA Teaching and Learning Forum. Curtin University. Forum to be held on 29-30 January 2009 in Perth, Western Australia; <http://lsn.curtin.edu.au/tlf2009/index.html>

Sparrow, H., Kinnear, A., Boyce, M., Middleton, S., Cullity, M. 2008. More similar than different: An exploration of powerful personal goals as a key to the persistence and success of diverse students. Abstract accepted December 11th 2008 for the 2009 Teaching and Learning Forum.

7.2.5 Citations of project activities

Perceptions of our students - what helps them succeed in their course? *Cohesion: Faculty of Computing, Health and Science Quarterly Magazine*, April, 24, 2008.

Perceptions of successful students: What helps them succeed in their course. *The Learning and Teaching Office Newsletter, Edith Cowan University*, August 20, 2008.

7.2.6 Ongoing activities for 2009

Development and dissemination of strategy pamphlets:

- Helping students develop and clarify their goals
- Encouraging students to develop support networks (working title)
- Enhancing the transition into the workplace (working title)

Ongoing population of the project website:

- Examples of the "Student Voice"
- Strategy pamphlets for lecturers
- Presentations, papers and models as they are developed with further data analyses.

Conference presentations:

- Western Australian Teaching and Learning Forum, Curtin, January (Accepted)
- SoTL conference, Georgia, USA (Poster accepted)
- HERDSA Conference, Darwin, July
- The 16th Conference on Learning, Barcelona, July (Abstract accepted)
- Local workshops (eg UWA & Bunbury, March)
- Continued preparation and submission of manuscripts to journals.

8. FACTORS AIDING SUCCESS OF THE PROJECT

There were several notable factors that contributed to the success of this project.

- **A competent and committed Project Manager:** This was essential for this project which presented some early methodological challenges. It required continual evaluation to maintain focus and achieve milestones, and to consistently follow-up and maintain contact with students in order to retain them in the longitudinal study.
- **An experienced and empathetic student interviewer:** The richness and focus of the qualitative data was largely due to the way in which this member of the research team was able to work with the project participants, probing and verifying the accuracy of their responses, and producing extensive field notes and summaries.
- **The support of teaching staff:** Their involvement in the initial survey stage of the project help to ensure a very large sample size, lending considerable weight and value to the patterns that emerged from this data. Their feedback was also instrumental in prompting us to use a staff perceptions survey as both a data collection and dissemination strategy.
- **The number of students who committed to both years of the project:** Over 40 students provided longitudinal data and this provided an almost 'quantitative' sample of case studies for analysis.
- **Software training:** Early introduction and training in software for qualitative analyses proved essential for members of the research team, particularly given the unanticipated data load (as a result of individual interviews rather than focus groups). The ability to efficiently identify emerging themes and probe for diversity relationships would not be possible without the use of NVivo.

9. CHALLENGES AND LESSONS LEARNT

No project proceeds exactly as planned, and this project was no exception. A number of challenges confronted us, particularly in the first year of the project, and each brought its own lessons for the research team

- **Obtaining and keeping students in the project:** The success of the project relied on the involvement of a 'case study-sized' sample of suitably diverse students in the appropriate stages of an undergraduate degree course, taking into account unavoidable attrition in the second year. This was not obtained easily. From a starting point of over 500 students who expressed a willingness to be contacted, we finally obtained a approximately 60 students willing to participate. For the remainder of the project, at each contact time, repeated emails, and follow-up phone calls were required to ensure students remained in the project and to organise mutually agreeable times for meeting. While there was attrition in the second year, mainly in the graduate cohort, the students who participated over the two years responded at length, and with considerable willingness, to the interview questions. While no remuneration for these students was specifically built into the project, in hindsight it should have been. In recognition of the students' time, we presented each of them with a letter of participation (in the first year) and a book voucher and certificate of appreciation signed by the PVC (T&L) (in the second year).

- **Different student cohorts required different methodological approaches:** Particular student cohorts (those with language difficulties and Indigenous students in particular) did not respond well to an invitation to a group discussion. After obtaining advice from relevant personnel in the University, we approached the NESB students, and later the Indigenous students, individually for an interview. This proved to be a successful strategy for the NESB students. Accessing Indigenous students took somewhat different strategies, and had several setbacks, as explained in detail in the methods section of this report. The approach that we utilised with success (until the staff member concerned took leave of absence) was to involve the Indigenous support staff in Kurungkurl Katitjin as part of the research team. The advantage was that these staff members were well known to, and interacted with, the Indigenous students on a day-to-day basis and so they were more likely to respond to their requests. A disadvantage is that staff are not necessarily skilled in interviewing techniques, and the data obtained can be of lower quality. In hindsight, an earlier approach should have been made to this staff member. Also it would have been appropriate for the indigenous staff member to 'sit in' on some interviews with our researcher to experience expert interviewing techniques.
- **Changes in methodology brought an increase in data to process and analyse:** Originally, we had expected to conduct individual interviews with only a small number of graduate students out in the workplace in the second year of the project. For all other cohorts, we planned a maximum of 4 - 6 discussion groups in each year, hence 8 – 12 transcripts and perhaps 10 interviews to code and analyse. The inability to bring students together in large enough groups in second year resulted in a total of over 70 transcripts to transcribe, enter and code in NVivo and analyse for emergent themes and relationships. This considerably extended the time required to code the complete data sets – a necessary prerequisite to begin analysis. However, in hindsight, the extra work involved has been well worthwhile as the individual data are much more rich and detailed.
- **Involving staff more intimately in the project:** The altered methodologies and the consequent increased workload made the inclusion of staff in the actual data collection in year 2 both unrealistic and impossible. There is no doubt that the other dissemination strategies that involved staff (the discussion groups and interviews early in 2008; the newsletters; the survey, the presentations to staff) were instrumental in raising awareness about the project throughout ECU, and in the findings being recognised by both teaching and administration staff, with some examples of embedding.

10. EVALUATION

Summative and formative evaluation strategies were utilised as follows to ensure that the project was adequately evaluated:

- Fortnightly meetings with all team members were held over the life of the project. Important components of these meetings were regular Progress Updates by the Project Manager that the team used to chart the progress against established milestones. This enabled the CI to evaluate what had been achieved and where possible issues were arising that might need attention or action. These Progress Updates were essential for keeping the project on track, and identifying and verifying individual team members' responsibilities.
- The Advisory Committee was updated fully on the progress of the project and their feedback was sought at least twice each year. Two of the members provided

valuable feedback that we could act on, and were effective disseminators for the project.

- An independent evaluator provided a detailed formative evaluation report of the entire project at the end of the two years.

11. REFERENCES

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12. APPENDICES

- Appendix 1. Student Questionnaire.
- Appendix 2. Emergent themes coded from the student responses.
- Appendix 3. Analyses of Questionnaire responses by diversity cohort.
- Appendix 4. Group discussions and interview questions, 2007.
- Appendix 5. Interview questions, penultimate to final year students, 2008.
- Appendix 6. Interview questions, graduates (employed), 2008.
- Appendix 7. Interview questions, graduates (not employed). 2008.
- Appendix 8. Staff survey on student perceptions.
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- Appendix 10. Project Newsletter 1.
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- Appendix 12. Published papers and presentations.

APPENDIX 1

STUDENT QUESTIONNAIRE

14. Student type

local international

15. Manner of payment of fees

HECS up front HECS deferred scholarship full fee paying

16. Country of birth of your parents

Mother

Father

17. Your country of birth

18. Are you an Indigenous Australian?

yes no

19. Language spoken at home

English other

20. Do you have a registered disability with the university that affects your ability to study?

yes no

21. Are you the first of your immediate family to attend University?

yes no

22. Mother's highest qualification

primary secondary post secondary (e.g. TAFE) university

23. Father's highest qualification

primary secondary post secondary (e.g. TAFE) university

24. Current hours in paid employment

<=5 6-10 11-15 16-20 21-25 >25

25. Do you have parental responsibilities?

yes no

26. Identify (up to) FIVE factors that have helped you to progress this far in your studies. How has each of these contributed to your progression?

	Factors	How they have contributed to your progress?
1		
2		
3		
4		
5		

27. Have you ever considered withdrawing from your ECU studies?

yes no

If yes, list (up to) THREE most important reasons why you considered withdrawing and the reasons why you decided to stay.

	Reasons to withdraw	Reasons to stay
1		
2		
3		

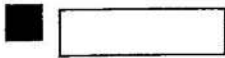
28. Would you be willing to be contacted about further participation in this study?

yes no

If yes please provide your contact telephone number.

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Thank you for participating



Disclosure Statement for Carrick Student Survey - Helping students succeed

You are invited to participate in this project which is investigating students' perceptions of their learning experiences as they move through their studies at ECU and into the workforce.

Some background on the project

We have been awarded funding from a Federal agency, the Carrick Institute of Learning and Teaching, to describe the journey of diverse groups of students as they progress through the later years of their degree and into the workforce. We know very little about the strategies and behaviours which students use to successfully progress through their undergraduate studies, often in the face of substantial difficulties such as language barriers, or financial problems and often while juggling a large number of commitments which make substantial demands on their time and energy.

A short questionnaire:

You are asked to complete this short, initial questionnaire. It will provide us with some background information that will enable us to choose different student groups for the project which are representative of the diversity of the ECU student body (eg international students, domestic students juggling study with paid employment, or with demanding family responsibilities, students who are the first in their family to enter university). The last question asks you to indicate whether you would like to be further involved in this important project.

What will be gained from this project?

For the university? We will have a better idea of the 'whole of university life' experiences which students have and the coping strategies they use to succeed at university. This will help us identify, improve and develop better university support services which better meet the needs of the diverse student groups which attend ECU.

For the students involved in the project? If you choose to be involved further in the project, you will be part of a peer group which, over a 1 – 2 year period, will share experiences, strategies and ideas for coping successfully with the demands of university study.

What will happen to the information?

All this information is collected and stored confidentially. Providing your student details will allow us to contact you should you wish to be part of one of the student groups we will work with over the course of the project. **Once this questionnaire data is summarised for reporting purposes, it will not be possible to identify individual students. No individuals will be identifiable in any reports or research papers which are produced from the research.**

Are there any questions?

If you have any queries about this project, please contact Professor Judith Rivalland (6304 5088; j.rivalland@ecu.edu.au) or Associate Professor Adrienne Kinnear (6304 5446; a.kinnear@ecu.edu.au)

This project has received ethics approval from the ECU Ethics Committee. If you have any concerns about the project and wish to discuss issues with an independent person, contact Kim Gifkins (63042170; research.ethics@ecu.edu.au).

IMPORTANT NOTE: Participation is entirely voluntary and your decision to participate or not in no way impacts on your progress in this unit, or in your course.



APPENDIX 2

EMERGENT THEMES FROM THE QUESTIONNAIRE

Table A2.1. Themes for coding student factors assisting progression.

Code	Factor assisting progression
1	Parents as support
2	Friends as support
3	Immediate family as support
4	University peers as support
5	Teaching staff as support
6	Course/ECU related support
7	Self characteristics
8	Goals/career aspirations
9	Employment (as financial support)
10	Scholarships (as financial support)
11	Previous study
12	Financial issues (general)
13	Other

Table A2.2. Themes for coding student reasons why a factor assisted progression.

Code	Why progression is assisted
1	Financial support
2	Other support (non-financial)
3	Personal attributes
4	Goals/career aspirations
5	Study habits/personal resources
6	Interactions/resources from teaching staff
7	University resources
8	Study flexibility
9	Aspects of employment
10	Interest in course
11	Previous study
12	Access to campus
13	Other
111	Both financial and emotional support
222	Practicum experiences
333	Sport/recreation/relaxation
444	Parental obligations/expectations.

Table A2.3. Themes for coding student reasons for considering withdrawal

Code	Reason for considering withdrawal
1	Financial
2	Personal and family issues
3	Life choice conflicts with being a student
4	Life balance
5	Changes in goals, career aspirations
6	Stress
7	Dissatisfaction with course/units
8	University-related issues
9	Study workload
10	Lack of academic success
11	Teaching staff
12	Lack of support
13	Job prospects

Table A2.4. Themes for coding student reasons for persisting following consideration of withdrawal.

Code	Reasons for persisting
1	Goals, career aspirations
2	Personal attributes
3	Support (other than financial)
4	Self-management/coping skills
5	Come too far to quit
6	Course flexibility
7	Interest in the course/discipline
8	Financial support

APPENDIX 3

Analyses of Questionnaire responses by diversity cohort.

Table entries indicate the most frequently occurring responses for each cohort, compared with the total student sample (column 1).

Notable disparities are indicated in red.

- 107 - Table A3.1 Factors assisting progression for the diverse cohorts.

All students	Gender		Disability
	Male	Female	
1. Support (from people)	1. Support	1. Support	1. Support
2. Self characteristics	2. Self characteristics	2. Self characteristics	2. Self characteristics
3. Course/ECU-related	3. Course/ECU related	3. Course/ECU related	3. Course/ECU related
4. Goals/career aspirations	4. Goals/Career aspirations	4. Goals/Career aspirations	4. Goals/Career aspirations
5. Employment related (non-financial)			5. Employment (financial)
6. Financial support			

All students	Age			
	<=20	21-30	31-40	>40
1. Support (from people)	1. Support	1. Support	1. Support	1. Self characteristics
2. Self characteristics	2. Self characteristics	2. Self characteristics	2. Self characteristics	2. Support
3. Course/ECU-related	3. Course/ECU related	3. Course/ECU related	3. Course/ECU related	3. Course/ECU related
4. Goals/career aspirations	4. Goals/Career aspirations	4. Goals/Career aspirations	4. Employment (financial)	
5. Employment related (non-financial)				
6. Financial support				

All students	Home language non-E (all)	Home language non-E (local)	International students
1. Support (from people)	1. Support	1. Support	1. Support
2. Self characteristics	2. Self characteristics	2. Self characteristics	2. Self characteristics
3. Course/ECU-related	3. Course/ECU related	3. Course/ECU related	3. Course/ECU related
4. Goals/career aspirations	4. Goals/Career aspirations	4. Goals/Career aspirations	4. Goals/Career aspirations
5. Employment related (non-financial)			
6. Financial support			

All students	Parents	Indigenous	Study mode PT	1 st Gen
1. Support (from people)	1. Support	1. Support	1. Support	1. Support
2. Self characteristics	2. Self characteristics	2. Self characteristics	2. Self characteristics	2. Self characteristics
3. Course/ECU-related	3. Course/ECU related	3. Goals/Career aspirations	3. Course/ECU related	3. Course/ECU related
4. Goals/career aspirations	3. Goals/Career aspirations	4. Scholarships	3. Goals/Career aspirations	3. Goals/Career aspirations
5. Employment related (non-financial)				
6. Financial support				

Table A3.2 Reasons for considering withdrawal for the diverse cohorts.

All students	Gender		Disability
	Male	Female	
1. Financial	1. Conflicts with study	1. Financial	1. Pers/family issues
2. Personal/family issues	2. Financial	2. Pers/family issues	2. Financial
3. Conflicts with study	3. Pers/family issues	3. Life balance	
4. Life balance	4. Course dissatisfaction	4. Conflicts with study	

All students	Age			
	<=20	21-30	31-40	>40
1. Financial	1. Financial	1. Financial	1. Pers/family issues	1. Pers/family issues
2. Personal/family issues	2. Conflicts with study	2. Conflicts with study	1. Financial	1. Life balance
3. Conflicts with study	3. Course dissatisfaction	2. Pers/family issues	2. Life balance	
4. Life balance	4. Changes in goals/aspirations			

All students	Home language non-E	International students	Parents	Indigenous	Study mode
1. Financial	1. Conflicts with study	1. Pers/family issues	1. Pers/family issues	1. Life balance	1. Life balance
2. Personal/family issues	2. Course dissatisfaction	2. Financial	3. Life balance	2. ECU-related issues	2. Conflicts with study
3. Conflicts with study	2. ECU-related issues	3. ECU-related issues	3. Financial		3. Pers/family issues
4. Life balance					4. Financial

All students	Year level			1 st Gen
	2 nd year	3 rd year final	4 th year final	
1. Financial	1. Financial	1. Financial	1. Financial	1. Financial
2. Personal/family issues	2. Life balance	2. Pers/family issues	2. Pers/family issues	2. Pers/family issues
3. Conflicts with study	3. Pers/family issues	3. Conflicts with study	3. Conflicts with study	3. Life balance
4. Life balance				

All students	Hours in paid work					
	<-5	6-10	11-15	16-20	21-25	>25
1. Financial	1. Pers/family issues	1. Financial	1. Financial	1. Financial	1. Financial	1. Financial
2. Personal/family issues	2. Financial	2. Pers/family issues	2. Conflicts with study	2. Conflicts with study	2. Pers/family issues	1. Conflicts with study
3. Conflicts with study	3. Life balance	3. Conflicts with study		3. Pers/family issues		2. Life balance
4. Life balance						2. Dissatisfaction with courses

Table A3.3 Reasons for staying factors for the diverse cohorts.

All students	Gender		Disability
	Male	Female	
1. Goals/career aspirations	1. Goals/career asp.	1. Goals/career asp.	1. Goals/career asp.
2. Personal attributes	2. Personal attributes	2. Personal attributes	2. Interactions teaching staff
3. Other support			
4. Managed/coped			

All students	Age			
	<=20	21-30	31-40	>40
1. Goals/career aspirations	1. Goals/career asp.	1. Goals/career asp.	1. Goals/career asp.	1. Goals/career asp.
2. Personal attributes	2. Other support	2. Personal attributes	2. Personal attributes	2. Personal attributes
3. Other support		3. Other support	3. Other support	3. Managed/coped
4. Managed/coped				

All students	Home language non-E	International students	Parents	Indigenous	Study mode PT
	1. Goals/career asp	1. Goals/career asp	1. Goals/career asp	1. Goals/career asp.	1. Goals/career asp.
1. Goals/career aspirations	2. Personal attributes	2. Personal attributes	2. Personal attributes	2. Personal attributes	
2. Personal attributes		3. Other support	3. Other support		
3. Other support					
4. Managed/coped					

All students	1 st Gen	Year level		
		2 nd year	3 rd year final	4 th year final
1. Goals/career aspirations	1. Goals/career asp.	1. Goals/career asp	1. Goals/career asp	1. Goals/career asp
2. Personal attributes	2. Personal attributes		2. Personal attributes	2. Personal attributes
3. Other support	3. Other support			3. Other support
4. Managed/coped				

All students	Age					
	<-5	6-10	11-15	16-20	21-25	>25
1. Goals/career aspirations	1. Goals/career asp.	1. Goals/career asp.	1. Goals/career asp.	1. Goals/career asp.	1. Goals/career asp.	1. Goals/career asp.
2. Personal attributes	2. Personal attributes	2. Personal attributes	2. Personal attributes		2. Personal attributes	2. Personal attributes
3. Other support			3. Other support		3. Other support	3. Study flexibility

4. Managed/coped						
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APPENDIX 4

Discussion group/interview questions All students, 2007

1. What is it like to be a student studying at ECU?
2. You have succeeded well in your studies to reach this stage in your degree. What factors have helped you reach this point in your study?
3. Have any serious issues affected your studies and how have you coped with them?
- include a probe about whether the institution or staff have helped or hindered you (if appropriate).
4. How confident do you feel, at this point in time, about moving into the workforce?
5. Is there anything else you would like to raise that you think is important, that we haven't covered?

APPENDIX 5

Penultimate to final year students Interview Questions, 2008

1) Belonging to a community

Our data suggests that for some of you, but not all, being part of a supportive community is an important factor helping you progress through university. Do you agree?

(Probe: if some do not have this kind of support system, is it because they do not have time to devote to developing one? Does all the other juggling and balancing preclude this? Or is it that they do not see it as necessary? We are not concerned about whether this support is in the University or not, and it can be learning support or social support)

2) Development of goals and/or career aspirations

For many of the students, having clear goals and a strong commitment to them, especially when problems arise, have been important factors in prompting you to continue with your studies. Has this goal development been important for you?

(Probe: When/how/what was behind the development of their goals. Have their university experiences played a role in the process – helped, or hindered? We know that this is important for resilience, and it would be useful if we could get a handle on what has helped them identify, clarify and maintain these goals so we can see if the information can be translated into classroom strategies for teachers).

3) Help seeking behaviour

Our data indicates that making that first step towards seeking help, and continuing to do so is important to student success and persistence in their studies. If you were asked to talk to first-year students about 'seeking help', what would tell them about making that first step?

(Probe: If possible, as well as their general behaviour, it would be really useful to know what catalyses this and gets them over that first 'bridge' they talk about. Again – we are looking for strategies to get all students making this first step and continuing to seek help).

4) Key characteristics of a university environment

What **must** a university provide for its students if they are to continue and succeed with their studies?

APPENDIX 6

Graduate Questions: Employed

Intro blurb:

Thank you for offering to participate in the second year of the study. As you are aware, the project is tracking ECU students as they progress through the later years of their degree and into the workforce/life beyond university.

During the interview I would ask you to focus on your 'transition' from university study to the workforce/life beyond university; that is, your progress since moving from being a student to life beyond university.

Goals and current aspirations

- What were your goals when you started at university?
- Did your goals change in any way across the period of your study?
-if so how
- Do you still hold these goals?

Student transition from university to the workplace – the switch from study to work?

- Tell me about your transition from university study to community, voluntary or paid work.
- Reflecting back on your university studies and your current job, how well did your University experiences prepare you to undertake community, voluntary or paid work?
- Do you believe you are prepared adequately for the transition from study to work?

(Probe: skills and knowledge)

- Have there been any other factors that have helped you to make the transition from university to the workplace?
- Have there been any other factors that have hindered you to make the transition from university to the workplace?

(Probe: support and gaps)

Summary

If paid work contributes to a successful transition from university to the workplace?

- When you were at university were you community, voluntary or paid work?
- 'Yes': Has that work influenced your transition from university to your current job?
- What aspects of that work influenced your transition from university to your current job?

Probe: You mentioned _____,

-how did that help/hinder you in making the transition from university to work?

What aids students to make a successful transition to the workplace?

- Generally speaking, what are the key qualities/attributes that students require for them to make a successful transition from university to the workplace?
- What are your key qualities/attributes that have assisted you to make a successful transition from university to the workplace?
- If you were speaking to final year university students, what advice would you give them about making the transition from study to work?
- How can universities best assist students to make the transition from study to work?
- Are you satisfied with your life beyond university?

Summary

Is there any point that we have not discussed that you would like to mention in relation to your transition from university to the workplace?

APPENDIX 7

Graduate Questions: Life Beyond University

Intro blurb:

Thank you for offering to participate in the second year of the study. As you are aware, the project is tracking ECU students as they progress through the later years of their degree and into the workforce/life beyond university.

During the interview I would ask you to focus on your 'transition' from university study to the workforce/life beyond university; that is, your progress since moving from being a student to life beyond university.

Goals and current aspirations

- What your goals were when you started at university?
- Did your goals change in any way across the period of your study?
-if so how
- Do you still hold these goals?

Student transition from university to life beyond university?

- Reflecting back on your university studies, has your course been a worthwhile experience?
- What factors have:
 - helped you in making the transition from university to your life beyond university?
 - hindered you in making the transition from university to your life beyond university?
- Looking back on your university studies, how could the University have better assisted you to make the transition from study to life after study?

Summary

To what extent does work contribute to a successful transition to the workplace?

- Did you study for career/job or personal satisfaction reasons?
- When you were at university were you community, voluntary or paid work?
- 'Yes': In what ways has that work influenced your opportunity to participate in your interest area?
- 'Not employed in a job that they would like to be in':
 - How could the University have helped you to obtain employment in your area of interest?

(Probe: explain how that has influenced your opportunity to find work?)

Why are some students more successful than others in making the transition to work?

- Generally speaking, what are the key qualities/attributes that students require for them to make a successful transition from university to life after university?
- What are your key qualities/attributes that have assisted you to make a successful transition from university to life beyond university?
- If you were speaking to final year university students, what advice would give them about making the transition from study to life beyond study?
- How can universities best assist students to make the transition from study to life beyond study?
- Are you satisfied with your life now that you have completed your degree?

Summary

Is there any point that we have not discussed that you would like to mention in relation to your transition from university to life beyond study?

APPENDIX 8

STAFF SURVEY QUESTIONS

1. Can you identify up to 3 factors that you think help students progress in their studies?
2. What do you think are the 3 most important reasons why students consider withdrawing from their course?
3. What 3 factors do you think contribute to their persistence despite consideration of withdrawal?

APPENDIX 9 NVIVO NODES

Major Themes	Sub-themes1	Sub-themes 2	Sub-themes 3
COMPLEXITY OF STUDENT LIFE			
	Financial Hardship		
	Juggling and balancing		
		Family commitments	
	Paid work and study		
	Personal and Family Issues		
	Struggle		
ECU FACILITIES AND SERVICES			
	Blackboard		
	campus security		
	Counselling and Health services		
	Disability considerations		
	ECU reputation		
	Food services		
	Gym and sporting facilities		
	Indigenous considerations		
	Library		
	Nice campus or environment		
	Parking		
	School holiday or after school club		
	Social activities		
	Student Support Services		
	Study spaces apart from library		
INTERNATIONAL STUDENT ISSUES			
	Adapting to Australian culture		
	Discrimination		
	Financial strain		
	Language issues		

	Parental expectations		
	Practicums		
	Sense of belonging to a community		
	Transport and Resources		

LEARNING ENVIRONMENT			
	Culture of the Learning Environment		
	Flexibility		
	Nursing issues		
	Practicum -related experiences		
	Quality Teaching		
	Staff Resources		
	Staff Support and Interactions		
	Student facilities within schools		
	Timetabling issues		
RESILIENCE AND PERSISTENCE FACTORS			
	GOALS AND ASPIRATIONS		
		Achieve work and life balance	
		Be a good role model	
		Changing goals or exploring other options	
		Choice of job and enjoyment	
		Commitment to goals	
		Future Job Security	
		Get a Degree in general	
		Get a degree to improve current job level	
		High Academic results for better career options	
		Personal achievement and Self esteem	
		Specific Career Aspirations and goals	

		Timing of goals - right time in life	
	HELP SEEKING		
		Help seeking 2007 data	
	SUPPORT		
		Employer support	
		Family Support	
		Financial Support	
		Friends support (outside Uni)	
		Lack of support	
		Peer groups and support	
	THE STUDENT SELF		
		Personal Attributes	
			Determination
			Factors helping academic success
			Hard work or good work ethic
			Interest in the course or discipline
			Maturity - right place at right time
			Motivation
			Self discipline
			Time management
TRANSITION TO AND BEYOND GRADUATION			
	Advice to Final year Students		
	Factors aiding transition		
	Factors hindering transition		
	Graduate experiences in the workplace		
	how can ECU help transition		
	Influence of paid or unpaid work as a student on transition		
	Satisfaction with life beyond University		
	Workforce readiness prior to graduation		
		Work availability	

		Work connected to study	
		Work related skills and competencies	
		Workforce and Discipline differences	
		workforce confidence level	
		Workforce reappraisal and decision making	
WHAT ARE 3 KEY FACTORS FOR YOUR SUCCESS AT ECU			
	Goals		
	Lecturers or teaching staff		
	Self factors		
	Study spaces and physical environment		
	Support		
WHAT ARE 3 KEY FACTORS TO TRANSITION SUCCESS			
	Goals		
	Knowledge and Skills		
	Previous work experience		
	Self factors		
	Student support services at ECU		
	Support		



STUDENT RESILIENCE & DIVERSITY PROJECT



ABOUT THE PROJECT

This Carrick project commenced in January, 2007 and is describing the journey of different cohorts of ECU students as they progress through the later years of their degree and into the workforce.

The research team is focussing on the students' perceptions of the ECU environment and the behaviours they adopt to maintain progress in their studies and as they enter the workforce. We are also documenting the decisions they make along the way, as they juggle the often competing demands on their time and allegiances.

There is surprisingly little research which has the perceptions of successful, progressing students as the focus, and the factors that contribute to their successful progress.

We are interested in how this student journey differs between the diverse groups of students typical of the ECU profile, such as:

- **mature-age**,
- **parents**,
- **international**,
- **indigenous and**
- **first-generation to university.**

The results of our study will provide us with a better knowledge base to respond to the needs of such diverse student groups.

In this first newsletter, we describe some of the outcomes from the first stage of the study.

WHAT HELPS STUDENTS PROGRESS AND PERSIST?

In commencing the project, with the assistance of 35 lecturing staff we surveyed over 1200 students in the penultimate and final years of their degree and within the following disciplines:

- **Arts**
- **Natural Sciences**
- **Business**
- **Education**
- **Media/Communications**
- **Nursing**
- **Social Sciences**
- **Psychology**
- **Sports Science**
- **Science/Computing**

The students represented all of the diverse student types we mentioned earlier.

We asked the students to reflect on the factors that have helped them to progress in their studies. We also asked them if they had considered withdrawing. If so, they were asked to give their reasons and to identify the factors that contributed to them persisting in their studies.

What factors have helped students progress this far in their studies?

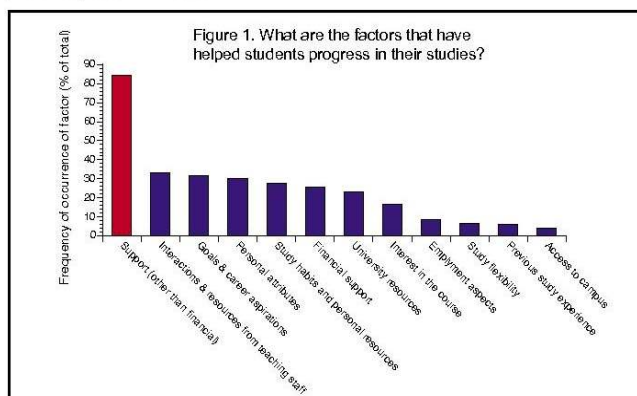
Figure 1 shows that *support* (provided by family, peers) was by far the most frequently cited factor. Students spoke of:

- *"Peer support- collaborative study";*
- *"Family support - having family care for children while I study"*
- *"Peers - encouragement to continue".*

This support factor was important regardless of discipline, year level or student type - a very consistent outcome for such a large sample.

Our focus group discussions are now providing us with additional insights into how our students identify and use the different support networks, both within and outside university, and how course structures can enhance support networks or mitigate against them.

Four factors ranked second or third in frequency of occurrence, depending on the student type. *Interactions & resources from teaching staff* ranked more highly with female student and those who were first generation university attendees. *Goals & career aspirations* were more frequently cited



by indigenous and part-time students. *Personal attributes* were more frequently cited by males and our international students.

From our perspective as teachers, these data are illuminating. All the factors ranked 1 - 3 in Figure 1 are factors which we, as lecturers and course planners, can potentially influence at an early stage in a student's life to assist progression.

How many students consider withdrawing at some time in their course?

Over a third of the students we surveyed (38%) had considered withdrawing from their course at sometime, a relatively high number! The percentage was slightly higher in the Arts & Humanities disciplines (Education, Social Science and Arts) and among older students. Very few international students surveyed ever considered withdrawing.

Figure 2 shows that *Financial issues* were the most cited reasons for considering withdrawal, followed by *Personal and family issues*. These outcomes are perhaps not surprising, because they are also key factors known to underlie attrition in first year students.

Different student cohorts responded differently. For example:

- As the student age increased, extrinsic issues such as *Personal/family* and *Life balance* were cited more frequently. These responses did not rank highly in young students.
- Students whose home language is not English cited *Course dissatisfaction* and *ECU-related issues* more frequently. (eg *"The environment makes international students feel left out"*).
- Students with one or more parents with only primary education were more likely to cite *Lack of academic success*.
- Students with higher grades cited *Life balance* and *ECU-related issues* more frequently than those with lower grades. The latter students tended to cite *Lack of academic success* and *Stress*.

Why do students persist when withdrawal is considered?

Remember - all these students have chosen to persist in their course, despite these financial, personal or university-related obstacles. We are interested in their reasons for continuing and what contributes to this degree of resilience? Students' most frequently-cited reasons all centered around individual goals and career aspirations (Figure 3):

"Promise of future career and employment opportunities"
"I want a degree."
"A better future (having education)."
"A better life."

The consistency between all the student cohorts was a striking feature of these data. These progressing students display a strong commitment to their course because of the intrinsic motivators associated with a desire to graduate and/or have access to better jobs and futures.

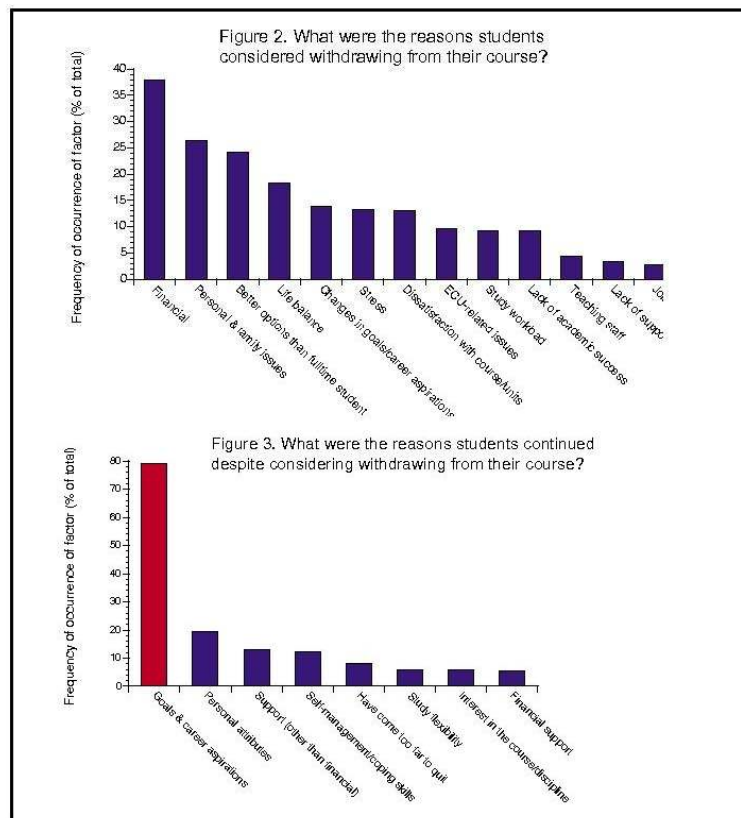
What's next for the project?

More than 60 students are now involved in our project, providing us with rich narratives about their experiences and perceptions as they proceed into their final year, or into the workforce. We will keep you informed of the research outcomes.

The research team

You can contact any one of us for any information about the project:

- Adrienne Kinnear (CI) 5446
- Mary Boyce
- Heather Sparrow
- Sharon Middleton (Project Manager).



STUDENT RESILIENCE & DIVERSITY PROJECT
EDITH COWAN UNIVERSITY



DO STAFF & STUDENTS SHARE THE SAME PERCEPTIONS?

Welcome to Newsletter No. 2 from the ALTC (Carrick) project which is describing the perceptions of different cohorts of ECU students as they progress through the later years of their degree and into the workforce. The project focusses on identifying the factors contributing to the students' success in their studies.

In commencing the project, we surveyed over 1200 students in the penultimate and final years of their degree and asked them to reflect on the factors that have helped them to progress in their studies. We also asked them if they had considered withdrawing. If so, they were asked to give their reasons and to identify the factors that contributed to them persisting in their studies. In our previous newsletter we described the students' responses to these questions.

These students responses provided some interesting and unexpected outcomes, and prompted us to ask:

Would staff hold the same perceptions about factors enhancing success and persistence with study?

If there are differences between student and staff perceptions, are they likely to influence how we assist the students to manage their learning and succeed?

We surveyed 50 staff (45 academic and 5 support staff) using similar questions to those asked of the students, asking them to identify the factors they thought were most important for student success and persistence. We then compared the responses. In this newsletter we give you the results of that comparison.

What factors help students progress in their studies?

Figure 1 compares the student and staff responses to this question. Both groups recognised *support* and *personal characteristics* as being important for progression. When we delved more deeply into the kinds of support, there were interesting differences in perceptions. The staff identified *staff support* most often (13% of the time) while the students identified primarily *family support* (19%). Staff underestimated the importance to students of support from both family peers.

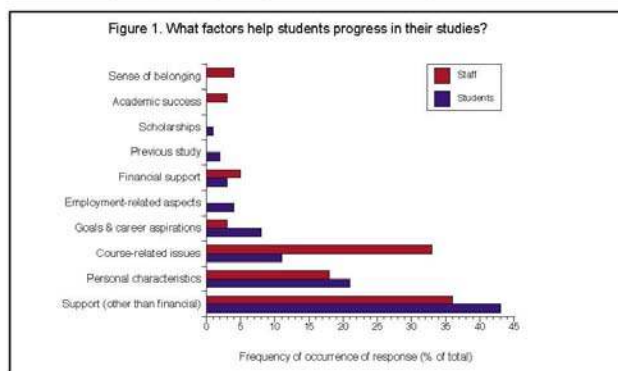
Some of the *personal characteristics* the students and staff identified as important for progression and perceptions were quite well-matched. Characteristics such as *"time management"*, *"organisation"* and *"intrinsic interest in the discipline"* were cited frequently by both groups.

When it came to more personal attributes, the students' responses were very focussed on their *"determination"* and *"motivation"* to succeed, attributes that were mentioned by staff, but only rarely.

The remaining patterns of responses in Figure 1 diverged considerably. The staff ranked *course-related issues* almost equally in importance to *support* as factors assisting progression. The type of learning environment provided, staff competence and accessibility, and the provision of constructive and timely feedback were all considered important factors for assisting progression.

The students' perceptions about *course-related issues* were very different from both quantitative and qualitative perspectives. These issues were cited far less frequently, and when they were mentioned, the dominant themes were Blackboard/online resources, and the library, with indications that flexibility of access to course resources was paramount.

The small number of student responses identifying staff interactions and learning resources described aspects of the learning environment similar to the staff, as well as clarity of unit resources and assessment. The absence of feedback as a factor was a very obvious difference in the students' responses.



Why do students consider withdrawing from their course?

Staff recognised that the overriding factors causing students to think of withdrawing are intrinsic to their personal lives - *financial pressures* and *personal or family issues*.

Staff were less inclined to recognise that students have *life choice conflicts* with study, and that the juggling of multiple responsibilities (*life balance*) and the often-associated *stress* might also precipitate consideration of withdrawal.

Staff were more inclined to cite some kind of *course dissatisfaction* including *inappropriate choice* and *lack of support* as potential barriers to persisting. They focussed on the possible lack of relevance of a course to work and industry as factors which are likely to cause student dissatisfaction.

In contrast, the students, when they did identify course dissatisfaction, paid very little attention to the job-relevance. Instead they identified a lack of interest or boredom, or very specific concerns about the course delivery or structure.

An obvious feature of Figure 2 is the presence in the staff responses of *inappropriate course choice* and *personal characteristics* of the students themselves which could impede academic progress (eg lack of ability, knowledge of skills). We know that these factors affect progression in the first year of study and their identification by staff is entirely reasonable. However, the students in our sample were well advanced in their degrees so it is not surprising that these factors are unimportant to them at this point in time.

What factors help students to persist after considering withdrawal?

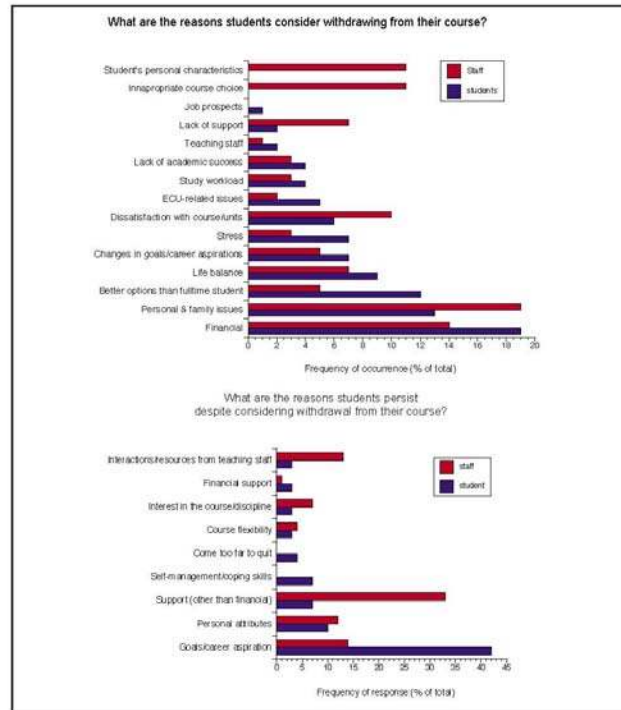
It is here that the responses of staff and students diverged the most (Figure 3). The previous newsletter

described the dominance of the *goals and career aspirations* theme in the students' responses. No other theme approached the frequency of citation of this one. Students commonly commented on their goals, eg "to achieve a degree", "to graduate", "the future will be better", "long-term goals", a role model for my children". Only a small percentage of staff responses related to this theme. The staff were far more likely to identify *support* (equally from staff, and friends/peers) and *interactions and resources from teaching staff* (particularly feedback) as factors encouraging persistence. Once again, there were significant qualitative differences from the students who saw the support coming from family and/or friends almost exclusively. Their rare mentions of staff interactions were general ("talking with lecturers") and the theme of feedback was conspicuous for its absence.

Do differences in perceptions matter?

We think they do. Our students' responses are coloured by the perspective that they live multiple lives, with diverse responsibilities that affect their progression and persistence with university study. "Being a student" is only one of these lives. Within all this, it is their personal commitment to their goals which provides the strongest incentive to continue. Diverse support networks both inside and outside university underlie their success.

The staff responses are, understandably, focussed on the learning context almost exclusively, and the interactions, support and resources that lie within it. Incorporating the broader student perspective into this focus may provide us with additional and better opportunities to help students manage their learning within their 'universe' as well as in ours.



APPENDIX 12

PUBLISHED PAPERS

Perceptions of successful students: lessons for the First Year Experience.

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Hobart, June 20 – July 2.*

Abstract

We surveyed over 1300 successful undergraduates students from 12 disciplines and different diversity groups about the factors that have assisted them to progress in, and persist with their course. We show how the reflections of these successful students can inform institutional practices enhancing retention and progression through first year. The students' perceptions indicate that a focus on ensuring that students across all diversity groups are equally able to develop and use a variety of support networks (particularly peers), and strategies to assist students to clarify their personal goals would enhance the FYE.

Introduction

Increased access and widening participation with consequent increased student diversity has been a feature of higher education generally and of the 'new generation' universities, in particular over the past three decades. Institutions have responded with a diverse range of strategies to aid student retention and progress (McInnis, 2003a). Today's students juggle interpersonal relationships, may have family responsibilities, mortgages and other financial commitments, work long hours, and may be coping with an unfamiliar culture and language. They have differing control of the multi-literacies needed to operate successfully in university settings. As a consequence of this increased diversity of students and their needs, we are moving well away from a uni-dimensional construct of the "typical" university student or university experience towards multi-constructs which have been termed 'student ecologies' or 'multiple selves' (Horstmanshof and Zimitat, 2003). While we recognise these multiple student constructs, we lack a sound understanding of them. All this is placing new demands on academics and challenging the way university courses are delivered, the administrative and organisational frameworks in which they are delivered. At the same time, student perceptions of their learning journey reveal that universities may not be valuing diversity sufficiently when it comes to institutional policies and practices (Leathwood and O'Connell, 2003).

The importance of the transition to university and the first year experience is acknowledged (Krause, Hartley, James and McInnis, 2005) and across the higher education sector a range of evidence-based programs and approaches are in place to help reduce the numbers of students who drop out of studies in the first 12 months (Darleston-Jones, Cohen, Hanould, Young and Drew, 2003; McInnis, 2003a). However, despite reference to an extensive literature on persistence, the studies really focus on retention for the most part, and there has been much less emphasis on actual successful progression through the later years of a degree. As a result we lack information on which to base indicators of effective student *progression* (Robinson, 2004). There are many factors impacting on students' lives that create conflict and dilemmas, which can impact on their progress. We know very little about how *successful* students resolve these conflicts and develop resilience. The need for individual institutions to understand the 'micro-ecology' of students over time, to understand how the complexity of social, academic, and cultural factors play out for the student within the specific institutional context is an urgent and emerging one (Krause et al., 2005; Leach and Zepke, 2003).

With this background, we obtained funding from the Carrick Institute to conduct a longitudinal study to document diverse successful students' perceptions of their learning journey through the latter part of their undergraduate course and into their first year in the workplace. A focus of the project was student diversity and the consequent multiple stories which might emerge. Through this project we hope to present to staff, new accounts of students' whole-of-degree experiences, providing insights into institutional factors that enhance or hinder progression. The first step in the project was to canvass students' willingness to participate in the longitudinal study through a questionnaire which would enable us to select students with diverse profiles and backgrounds. At the same time, we utilised this questionnaire to obtain students' perceptions about factors contributing to their success and persistence with their studies. Currently we are conducting focus groups and interviews with over 60 students who are part of the longitudinal study. In this paper, we present some initial analyses of the students' perceptions and describe how they might inform institutional strategies for improving the First Year Experience.

Methods

The university at which the research was conducted is one of the "new generation" universities, evolving from a College of Advanced Education in the 90's that, in turn, was formed from the amalgamation of long-standing teachers' colleges. The 3-page questionnaire was distributed to undergraduate students who were in their penultimate or final year of their degree. The first part of the questionnaire was quantitative and focussed on demographic data such as discipline, age, enrolment and student type, and various family background and spoken language details. The second qualitative section asked students the following open-ended questions:

1. Identify up to five factors that have helped you progress this far in your studies. How has each of these contributed to your progress?
2. Have you ever considered withdrawing from your studies?
3. If yes, list up to three most important reasons why you considered withdrawing and the reasons why you decided to stay?

The survey involved the collaboration of 33 staff across four campuses and students representing 12 disciplines. Completion of the questionnaire was voluntary and to maximise questionnaire returns, members of the research team personally contacted relevant staff and arranged to distribute the questionnaires directly to the students in the classroom. The response was excellent and resulted in a very high return rate, with 1353 students responding.

Questionnaire responses were digitally scanned using Cardiff Teleform software into an Excel database for easy export into SPSS (Version 14) for analysis. Each of the digitised qualitative responses was manually verified for accuracy. Only the first three responses relating to question 1 above were used in the analysis as it was questionable whether all students could reasonably provide more than three sensible responses. The student responses were numerically coded into themes by the research team and Crosstab routines were applied to both single and multiple response data to describe response patterns by discipline and student diversity. From these response patterns, we were able to identify emergent themes underlying student persistence and resilience.

Results

Of the 1353 students who completed the questionnaire, 993 were females (73.4%) and 360 were males (26.6%). This is a similar profile to the general university population. The higher percentage of females reflects the range of disciplines included in the study, with Nursing and Education students dominated by females. There was a greater number of final year students

(n=822 or 61%) than penultimate-year students (n=502 or 37%). All the diversity groups of concern to the project were represented in this initial survey (Tables 1 & 2).

Table 1. Diversity of students who participated in the questionnaire (n=1353).

Diversity group	Percentage of students ¹ (n)
International	5 (68)
Indigenous	1 (17)
Mature age ²	68 (902)
First generation ³	44 (587)
With parental responsibilities	16 (209)
With a self-reported disability	2 (24)
Academic discipline:	
Media and communications	15 (201)
Social Sciences/Psych/Social Work	10 (130)
Computing	2 (30)
Arts (English/History/Politics)	11 (146)
Business	7 (97)
Nursing	14 (187)
Natural Sciences	5 (75)
Education	23 (310)
Sports Science	13 (177)

1. The total percentage will exceed 100% as students could have multiple descriptors.

2. Mature age in this table = students >21 years of age.

3. First generation = first in immediate family to attend university.

Of particular note are the relatively high proportions of mature-aged students, those who represent the first of their family to enter university and those entering the university through non-traditional pathways. As has been shown for students elsewhere, the majority of our students in the sample work substantial hours in paid employment (Table 2). The results present the general response patterns for the entire students sample first, followed by a summary of the differences in outcomes by discipline or diversity group.

Support was the most commonly cited factor assisting progression with almost 50% of the responses identifying one or another form (Table 3). When this “support” was analysed further, there were 5 main people-based sources - parents, friends (unspecified), student peers and university teaching staff, the last three sources being the most commonly cited

Table 2. Demographics of students who participated in the questionnaire (n=1353).

Demographic characteristic	% of students (n)			
	<=20yrs	21-30yrs	31-40yrs	>40
Age	32 (428)	52 (693)	9 (116)	7 (93)
Type of study	Fulltime 92 (1240)	Part-time 8 (106)		
Entry pathway to ECU	TER 50 (654)	STAT 15 (207)	TAFE 13 (170)	Other 22 (270)
Hours in paid employment	<=5 19 (249)	6-10 12 (156)	11-20 43 (568)	>20 26 (339)

Table 3. Student-identified factors assisting course progression.

Values are the frequency of each response as percentage of the total number of responses.

Factor assisting progression	Percentage occurrence ¹
Support (from specific people such as financial motivation, assignments, living at home, encouragement, childcare, learning assistance):	43
... Parents	7
... Friends	5
... Family	12
... Peers	9
... Staff	10
Course-related issues (e.g., interesting content, learning/ environments, flexibility, online resources, good tutors).	11
Self-characteristics (time management, organization, motivated, determined, hours spent studying).	21
Goals/career aspirations (determination to obtain a degree, desire to be a teacher, want to have a well-paid job)	8
Employment-related (non-financial such as supportive employer, flexible work hours)	4
Scholarships	1
Previous study	2
Financial support (non-parental such as able to delay HECS, paid work)	3

1. These figures exceed the total number of students because the data is collated across three responses per student.

The parental support provided was identified as either directly financial (about one third of students mentioned this: “*Support from parents – payment of my fees*”), or as other kinds of specified or unspecified support (e.g., living at home, emotional support such as encouragement or motivation, or just unspecified “support”). Family support included partners or spouses, children and other close family members (“*Family – encouragement to continue*”; “*Family – financial and moral support*”). Student peers and staff were each identified in about 10% of responses. Females cited “support” factors more often than males (44% compared with 39%) with higher frequencies of family and peers as their sources of support.

Just over one fifth of the students’ responses identified one or more self-characteristics (e.g., time management, personal motivation, determination, ability to balance) as important in assisting their progression. After support, this was the second most cited theme. Once again there were gender differences with male students citing self-characteristics more often than females (26% compared with 19%).

Almost 40% of students had considered withdrawing from their course at some time during their studies. The reasons for considering withdrawal were varied and broadly distributed across a number of themes (Table 4). The most frequent themes were *extrinsic* to the university itself with financial issues ranked as the most cited. These included responses such as “*money – I need to work a lot to pay for my fees*” and “*financial hardship*”. Personal and family issues were very diverse. Almost one quarter of the responses identified a desire to be something other than a fulltime student (life choice conflicts) such as “*Desire to gain different life experiences e.g., Travel*”; “*Don’t like Uni life – prefer to work*”; “*Could make money now – easier way of life*”. Students tended to cite university-related issues such as courses,

services, resources and staff less often, though dissatisfaction with actual courses formed 13% of the responses.

Table 4. Student-identified reasons for considering withdrawing from their course.

Reason for withdrawal	Percentage occurrence ¹
Financial	38.0
Personal and family issues	26.4
Life choice conflicts with being a student	24.2
Life balance	18.3
Changes in goals, career aspirations	13.8
Stress	13.2
Dissatisfaction with course/units	13.0
ECU-related issues	9.6
Workload (Study)	9.3
Lack of academic success	9.1
Teaching staff	4.3
Lack of support	3.3
Job prospects	2.8

¹ Note: this column may exceed 100% because students could each identify up to three factors.

The reasons which students gave for remaining in their course despite considering withdrawing were very skewed towards those associated with the students' personal goals or career aspirations (Table 5). This theme dominated the responses and no other theme approached the frequency of citation of this one. Students commonly commented about their need to complete a degree ("*Achieve a degree*"; "*Graduation*"; "*Want to finish my degree*") or have a better future or specific career ("*want to achieve my goal*"; "*The future will be better*"; "*Long term goals*"). Across both the disciplines and the difference diversity groups there was considerable consistency in the responses given for persisting in a course, and the same two themes (goals/career aspirations and personal attributes) led the rankings for all cohorts but one. (The exception was students with self-reported disabilities who had, as their second –ranked factor for persisting, their interactions with the teaching staff). Across all the disciplines and diversities, personal goals/career aspirations remained uppermost.

Table 5. Student-identified reasons for persisting with study after considering withdrawal

Reasons for continuing	Percentage occurrence
Goals, career aspirations	79.0
Personal attributes	19.5
Support (other than financial)	13.2
Self-management/coping skills	12.3
Come too far to quit	8.1
Course flexibility	5.8
Interest in the course/discipline	5.8
Financial support	5.4

¹ Note: this column may exceed 100% because students could each identify up to three factors.

Discipline-related responses

There were only a few discipline-related response patterns which are noteworthy. Students in Nursing and Education disciplines cited family support twice as frequently as students in other disciplines (17% frequency compared with 6-9%) and there was considerable variation in the degree to which peers were cited as factors aiding progression, from rather low frequencies of 3 – 5% in Media, Arts and Business to higher frequencies of 12 – 14% in Social science, Computing and Nursing. The percentage of students who had considered withdrawal was highest in Arts and Humanities disciplines (Education 49%; Soc. Sci 45%; Arts 42%). There were suggestions of staff issues contributing to withdrawal consideration with Nursing and Computing students citing teaching staff as a reason for considering withdrawal, more often than other students (6% compared with 1-2%).

Student diversity groups and response patterns

We were particularly interested in any differences in student perceptions across the main diversity groups, and whether any differences might inform strategies for improving the FYE. There were differences in the response patterns of factors assisting progression. They showed as differences in the relative importance of factors *intrinsic* to the students themselves (personal characteristics and goals/career aspirations), indicative of self reliance, and the *extrinsic* factors of support and course-related features. Also, within the support factors themselves, different groups of students showed different profiles of support sources, indicating shifts in the importance of particular support sources (e.g., less responses related to family support and more towards peer support).

International students

For these students, support from other people (particularly peers) was less important for assisting progression (36% cf 44% for other students), and self-characteristics were cited more frequently (31% cf 20%), indicating increased self-reliance for continued progression. Very few international students (15%) had ever considered withdrawing from their course and for those that had, personal/family issues and ECU-related issues were particularly common. They, more than other students, tended to cite “no choice” and the role of university staff as reasons for persisting.

Students with parental responsibilities

Students with parental responsibilities had an intrinsic-extrinsic profile for factors assisting progression similar to the total sample population, but within the support profile, family and peer support were far more frequently cited as important for course progression and together represented 30% of the 44% of total support responses. The importance of family for these students is not unexpected, and acknowledgement of the importance of partner/spouse assistance was a common response. Perhaps not unexpectedly, life balance and workload issues were cited more frequently as prompting withdrawal considerations (“*Juggling kids and home – university not supportive*”; “*Too many other competing responsibilities*”; “*Too much workload from all lecturers*”).

Indigenous students

These students indicated a much greater reliance on their own personal characteristics and goals to progress academically (16% cf 7% for the non-Indigenous sample). These same factors were also the most frequently cited for persisting in their chosen course. Life balance issues and issues related to the university prompted withdrawal considerations in these students. This latter theme and the fact that support from others was less frequently cited as

assisting academic progress (32% cf 43%), is worth further investigation given that there is a dedicated physical space, and staff resources for this student cohort.

Students with a self-reported disability

Like the international students, these students indicated a greater importance of self-reliance (30% cf 20%), and less reliance on peers for assisting their progression (6% cf 10%). Course-related issues were also cited almost twice as frequently by these students (19% cf 11%). When withdrawal was considered, family/personal issues were cited ahead of financial issues.

First-generation university students

For factors assisting their progression, and reasons for considering withdrawal, these students had the same profile of responses as the general student sample.

Mature age students

Mature age students (excluding parents, to avoid confounding these two variables) in the upper age brackets demonstrated considerably more reliance on self-characteristics (36% frequency) and less on support from family and friends (2%). These students in the upper age brackets also do better academically. Peer support however, remained frequently cited regardless of the age of the student. As the age of the student increased, personal/family issues and life balance were cited more frequently as reasons for considering withdrawal (21% frequency). Neither of these ranked highly in the responses of the youngest students (5%). The older students were also more likely to cite their personal attributes (such as managing or coping skills) as helping them persist. On the other hand, the younger students identified study conflicts (such as a desire to travel) and dissatisfaction with aspects of their course as reasons for considering withdrawal, and their goals and career aspirations as reasons for persisting.

We were also able to extract response patterns for additional student groupings reflective of diversity in the student body, such as students with parents of differing education levels, students with alternative entry strategies and students whose home language is not English. Some of the more interesting outcomes with these groups were:

- *Level of parents' education:* Students with both parents educated to only primary school level were much more likely to identify self factors as important to their progression (29% of responses identified this as a factor). Peer support was cited most frequently by students with both parents educated to the secondary level and parental support by students with tertiary educated parents.
- *When home language is not English:* Students (local and international) whose home language was not English showed greater reliance on teaching staff for assisting progression (13% frequency cf 9%). For international students in this cohort, aspects of employment (e.g., employer assistance with English, with assignments) were cited more than twice as frequently as assisting progression, than by students with English at home. (This same factor did not score any differently in local students whose home language was not English, but there was a similar increased reliance on teaching staff.
- *Hours in paid work:* Students at this university are more likely to come from backgrounds where a university education is not the norm, and very likely to come via a non-TEE route (654 students). They also work substantial hours in paid employment on a weekly basis (Table 2) that is likely to hinder their ability to form support networks inside the university and interact with the teaching staff. When we investigated the response patterns of students by their hours of work, we found that as the hours of paid work increase, students cite parent support (11% cf 5%), course factors (14% cf 7%) and employment factors (e.g., flexibility of hours, supportive employers; 7% cf 1%) more often. That increasing hours of paid employment affects academic success, an effect discussed by other authors (McInnis, 2003c;

Moreau and Leathwood, 2006) is shown by our data. Numbers of students gaining high distinctions decrease substantially with increases in paid work hours (from 11% for those working 5 hours or less to 2-3% for those working in excess of 10 hours).

Discussion

Support generally is well recognised as an important retention factor for first year students and particularly peer support through such avenues as peer mentoring and study groups. The successful students we surveyed rely heavily on one or more support networks, developed either inside or outside the university. The frequency with which different support networks are mentioned, and hence their apparent importance in contributing to successful progression vary considerably with the diversity of the student. International, Indigenous and self-reported disability students have response patterns which suggest relatively less reliance on these support networks for successful progression, (particularly peer support) and more on self-reliance. For parents and first generation university students, the reverse is true, with family and peer networks being particularly important to the former student group.

The three student groups above, who mentioned support networks less frequently (32-36% of responses compared with 44%) have characterising features (language, culture or physical/learning impediments) which can make the students susceptible to marginalisation and, in the case of Indigenous students, also greatly reduce the chances of progressing (Marks, 2007; McInnis, 2003b; Sawir, Marginson, Duemert, Nyland and Ramia, 2008). Their reduced reliance on support networks for successful progression may reflect reduced opportunities to develop and maintain such networks. We are finding evidence of this in our interviews with international students for whom English is a second language. For these students, interactions with Australian peers, whether in or outside the classroom can be problematical for them. In the absence of other support networks, these students tend to mention assistance from staff and employers (for English assistance) more frequently.

A surprisingly high percentage of these progressing students had considered withdrawing from their studies at some point in their course. For the 500 students in the penultimate year (second year for most of them) this consideration would have occurred during their first year at university. The set of reasons the student gave for considering withdrawal includes factors which are well known to underlie attrition in first year and many of the most highly ranked factors are often outside the influence of the university (e.g., financial). There was some variation across the different student diversities in how the top four factors identified in Table 4 ranked, and the response pattern with age was the most distinctive. McInnis (2003b) refers to first year students as belonging to a different 'species' in terms of their very different learning needs and behaviours and this has some resonance in this study. The youngest students (those ≤ 20 years) frequently cited conflicts with study, course dissatisfaction and changes to goals or career aspirations, all themes which suggest a lack of clarification of goals or lack of commitment to their chosen course of study. Each of these factors was outranked only by financial factors. Yet in the older age groups (>30 years), none of these factors ranked highly and personal/family issues and life balance (including workload issues) were the most frequently cited. The goal/commitment issues in this youngest age group is particularly interesting given the pattern of responses to factors enabling persistence. Across the entire student sample, it is the students' own commitment to, and clear clarification of personal goals and career futures that overwhelmingly influences them to persist, and this factor remains remarkably consistent across the student cohorts.

There has been little discussion of goal clarification in the context of the FYE, nor of the roles that clear goals and career expectations might play in enhancing persistence in a course of study. Holden (2005) interviewed a small group of education students and for most of these,

persistence was enhanced by clear identification of long-term goals. The responses of these students were similar to those of our study – e.g., to obtain a degree, or to have a better job. We agree with this author that there is a need for strategies in first year that assist students with goal identification and clarification. Our data suggest that this is an important contributor to persistence.

Conclusions

The students' perceptions summarised in this study touch on many of the 'institutional conditions' required for student persistence, particularly those of commitment, involvement and support which Tinto (2005) has drawn from the persistence literature. Given the importance of peer networks, whether they are social or learning in their intent, special institutional efforts are needed to ensure that all these students have the same opportunities as other students for social involvement and development of these networks from first year. Tinot (2005) argues that the retention and persistence literature is interwoven and that institutional actions to improve retention will also improve persistence. The reverse is also true, and because persistence is such a student-centered construct, we would argue that an understanding of persistence from the view of the successfully progressing student is particularly likely to provide sound, evidence-based initiatives to add to the retention strategy toolkit.

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Success and persistence in academic study: a comparison of student and staff perspectives.

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Introduction

The importance of the transition to university and the first year experience is acknowledged (Krause, Hartley, James, & McInnis, 2005) and across the higher education sector a range of evidence-based programs and approaches are in place to help reduce the numbers of students who drop out of studies in the first 12 months (Darlestone-Jones, Cohen, Hanould, Young & Drew, 2003; Krause et al., 2005; Leach & Zepke, 2003; McInnis, 2003). However, despite reference to an extensive literature on undergraduate persistence in first year, there has been limited emphasis on actual successful progression through the later years of a degree. As a result we lack information on which to base indicators of effective student *progression* (Leach & Zepke, 2003; Robinson, 2004). There are many factors influencing students' lives that create conflict and dilemmas and these can affect their academic progress. We know very little about how *successful* students resolve these conflicts.

Funding was obtained from the Carrick Institute (now the Australian Learning and Teaching Council) to conduct a longitudinal study to document a diverse range of successful students' perceptions of their learning journey through the latter part of their undergraduate course and into their first year in the workplace. The first step in the project was to canvass students' willingness to participate in the longitudinal study through a questionnaire which would enable us to identify student volunteers with diverse profiles and backgrounds. At the same time, we utilised this questionnaire to obtain students' perceptions about factors contributing to their success and persistence with their studies (Kinnear et al, 2008). The initial outcomes of these student reflections prompted us to ask the questions: would staff hold the same perceptions about factors enhancing success and persistence? If there are differences between student and staff perceptions, are they likely to matter? In order to answer these questions, we surveyed a sample of academic and general staff to provide us with parallel data to those collected from the students. In this paper, we present our comparative analyses of the student and staff responses and provide some initial insights arising from the comparisons.

Methods

(i) *Student perceptions*

A questionnaire was distributed to undergraduate students who were in their penultimate or final year of their degree. The first part of the questionnaire was quantitative and collated demographic data such as discipline, age, enrolment and student type, and various family background and spoken language details. The second qualitative section asked students three open-ended questions:

1. Identify (up to) FIVE factors that have helped you to progress this far in your studies. How has each of these contributed to your progression? (*Only the first three of these were used in the analysis*).
(*For students who considered withdrawing*).
2. List (up to) THREE most important reasons why you considered withdrawing.
3. List the reasons why you decided to stay.

The questionnaire involved the collaboration of 33 staff across four campuses and students representing 12 disciplines and diverse backgrounds (e.g., mature-age, school leavers,

students with parental responsibilities, international onshore students). Completion of the questionnaire was voluntary and to maximise questionnaire returns, members of the research team contacted relevant staff and arranged to distribute the questionnaires during class time. The rate of return was high, with 1353 students responding. This represents about 11% of the undergraduate cohort.

(ii) Staff perceptions

The staff survey was based on the questions above, with staff being asked to identify and comment on:

1. Three factors they thought helped students progress in their study;
2. The 3 most important reasons why students consider withdrawing from their course, and
3. The 3 most important factors contributing to students' persistence despite consideration of withdrawal.

An email was sent to all faculty staff asking them to participate in the survey, and 50 staff responded. Staff respondents represented about 7% of the academic staff cohort.

Questionnaire responses were digitally scanned using Cardiff Teleform software into an Excel database for easy export into SPSS (Version 16) for analysis. Each of the digitised qualitative responses was manually verified for accuracy. The student responses were numerically coded into themes by the research team and Crosstab routines were used to calculate the frequencies of occurrence of responses. From these, we were able to identify emergent themes underlying student persistence and resilience. The staff responses were coded and analysed using the same themes and approaches that had been used to code and analyse the student responses. This allowed direct comparisons to be made between the two sets of responses. The responses have been compared both quantitatively (as percent frequencies) and qualitatively (by analysing the actual response statements).

Results

(i) Factors that help students progress in their studies.

A full description of the sampled student profile is provided in Kinnear et al (2008). Table 1 summarises the student and staff responses that identified factors assisting study progression. *Support* was the most-commonly cited factor assisting progression for both students and staff, with almost 43% of the student responses and 36% of the staff responses identifying one or more support source. Within the support theme, the relative importance of family and peer support to students was underestimated by staff.

Both staff and students recognised the importance of students' *personal characteristics* with about 20% of responses within this theme. There were also qualitative similarities. Both student and staff responses fell into three main categories of characteristics: 'personal attributes', 'time management and organisation', and 'student intrinsic interest in the discipline'. In the first of these groupings, 'personal attributes', there were obvious qualitative differences in the two groups of responses. The students' responses identified almost exclusively, just two attributes - 'determination' (to keep going, to finish, to better myself, to get far in life) and 'motivation' (to succeed, to work in industry, passion to be a teacher). In contrast, staff responses were not focussed on any particular attribute, and their responses included higher-level academic attributes such as meta-cognition and reflection (terms not used at all by the students), as well as commitment, motivation, and self-discipline.

The most obvious difference between student and staff response profiles shown in Table 1 was in the frequencies with which *course-related issues* were identified as factors assisting progression. One third of staff responses fell within this theme, compared with only 11% of student responses. For staff, this factor was the second most-frequently cited for assisting progression, and it was not far behind the *support* factor.

Table 1: Student- and staff-identified factors assisting course progression. Values are the frequency of each response as a percentage of the total number of responses.

Factor assisting progression	Student (n=1353)	Staff (n=50)
Support (from others):	43	36
Friends	5	3
Family	19	7
Peers	9	5
Staff	10	13
Personal-characteristics/behaviours (time management, organization, motivation, determination, hours spent studying).	21	18
Course-related issues (e.g., interesting content, learning/ environments, flexibility, online resources, good tutors).	11	33
Goals/career aspirations (determination to obtain a degree, desire to be a teacher, want to have a well-paid job)	8	3
Employment-related (non-financial such as supportive employer, flexible work hours)	4	1
Scholarships	1	0
Previous study	2	0
Financial support (able to delay HECS, paid work)	3	5
Academic success	0	3
Sense of belonging	0	4

There were also very significant qualitative differences between the two respondent groups. For the students, *university resources* (Blackboard and the library facilities) rated very highly in importance, contributing almost 50% of the responses within the *course-related issues* theme. In contrast, these resources made up only 12% of the staff responses and staff identified their own interactions and resources (54%) and constructive and timely feedback (20%) as the major factors. Staff feedback was not identified at all in the students' responses.

While there were these major differences of emphasis in the responses of the two groups, within some of the sub-themes there were similarities in the kinds of factors identified. For example, the staff's recognition that interactive and engaging learning environments, clear unit materials, and interesting content were important aspects of the learning environments for successful progression compared well with the student perceptions and comments.

A small number of staff responses identified 'academic success' and 'sense of belonging', factors not present in students' responses. Expressions such as "sense of belonging" and "connectedness" reflect academic terms which arise out of the tertiary research literature on retention and persistence. They are not terms normally used by students. It is very clear that these students value support of peers and staff (19% of responses are directed to these) and see this kind of support as important for their success, support which has been shown to enhance the 'sense of belonging'. The absence of the specific terms in the student responses may simply be due to semantics rather than significant perception differences.

In summary, students identified their support networks, particularly family members, and their own determination and motivation to achieve a desired end. Staff also recognised the importance of support but with a focus on the staff themselves (not family), and in contrast to the students, considered the resources and feedback they provided within the learning context

equally important. In this context, the students' responses were strongly focussed only on those elements which provided flexible access to learning resources.

(ii) Reasons why students consider withdrawing.

Almost 40% of students indicated they had considered withdrawing from their course at some time during their studies. The reasons for considering withdrawal were varied and broadly distributed across a number of themes (Table 2). There was a reasonably good match between the factors that the students identified and those that staff perceived might precipitate consideration of withdrawal. The overriding reasons for the students were factors intrinsic to their personal lives, *financial issues* and *personal or family issues*, and staff also recognised these as the primary factors, though with a difference in relative emphasis between the two.

Staff were less inclined to recognise that students have *life choice conflicts* with study, and that the connected factors of juggling multiple responsibilities (*life balance*) and *stress* together might precipitate consideration of withdrawal. Staff were much more inclined to cite some kind of *course dissatisfaction* (including *poor choice*) and *lack of support* as factors likely to cause students to consider withdrawing. Staff particularly focussed on the possible lack of relevance to work and employment as reasons why students might be sufficiently dissatisfied with their course to consider withdrawing from it. In contrast, students paid very little attention to academic difficulties which could impede progression, or to the job-relevance of their courses. They cited either a loss of interest or boredom, or very specific concerns about the course content or structure (e.g., poor design, no external units, insufficient practical approach).

Table 2. Student- and staff-identified reasons for considering withdrawing from a course. Values are the frequency of each response as a percentage of the total number of responses.

Reason for considering withdrawal	Students (n=499)	Staff (n=50)
Financial	19	14
Personal and family issues	13	19
Life choice conflicts with being a student	12	5
Life balance	9	7
Changes in goals, career aspirations	7	5
Stress	7	3
Dissatisfaction with course/units	6	10
ECU-related issues	5	2
Workload (study)	4	3
Lack of academic success	4	3
Teaching staff	2	1
Lack of support	2	7
Job prospects	1	0
Inappropriate course choice	0	11
Personal characteristics	0	11

Over 20% of the staff responses concerned two factors that were rarely, or not observed within the students' responses, *inappropriate course choice*, and *personal characteristics* or behaviours of the students themselves (in this context, factors that might impede academic success or progress, and hence prompt students to consider withdrawal, e.g., incompatibility with university, lack of ability, knowledge or skills including language skills). While these factors are entirely reasonable and known to impact on first year retention, it is reasonable that they did not figure highly in the responses of this particular student cohort. These students were well into their course and experiencing successful progression. It is unlikely they would cite important knowledge or skill deficits at this stage. Only two students cited inappropriate course choice and both these students had taken action to change their course.

In summary, both staff and students recognised two primary factors, financial and personal issues, as potential barriers to persisting with study. An almost equally important issue for students was the notion that there were sometimes more attractive alternatives to ‘being a student’ and that this idea prompted them to consider withdrawing. This issue was not as well-recognised by staff.

(iii) Reasons why students stay following consideration of withdrawal

Table 3 lists the response frequencies of students and staff to the third question concerning the reasons students persist with their studies in the face of consideration of withdrawal. There are some significant differences in these two response profiles. For this group of students, their own *goals and/or career aspirations* were the most important factors underlying their persistence. This theme dominated the responses and no other theme approached the frequency of citation of this one. Students commonly commented about their need to complete a degree (“achieve a degree”; “graduation”; “want to finish my degree”) or have a better future or specific career (“want to achieve my goal”; “the future will be better”; “long term goals”). Only 12% of staff responses fell within this theme, though the responses were very similar qualitatively to the student responses in that they were focussed around ‘goal orientation’ and ‘job or career opportunities’. Staff were much more likely to identify *support and interactions and resources from teaching staff* as factors encouraging persistence.

Table 3: Student- and staff-identified reasons for persisting with study after considering withdrawal.

Reasons for continuing	Students (n=499)	Staff (n=50)
Goals, career aspirations	42	14
Personal attributes	10	12
Support (other than financial)	7	33
Self-management/coping skills	7	0
Come too far to quit	4	0
Course flexibility	3	4
Interest in the course/discipline	3	7
Financial support	3	1
Interactions/resources from teaching staff	3	13

Staff mirrored the students’ responses in citing ‘student attributes’ as important for persistence. Within this theme, and also evident in staff responses in other themes, was a consistent identification of ‘support’ as an important factor likely to contribute to persistence, and in particular, support from university staff. For example, within the *support* factor, staff identified ‘general support’ (29% of responses), ‘family’ and/or ‘friends/peers’ (38%) and specifically ‘university staff’ alone (34%). By comparison, only a small percentage of the students’ responses fell within the support theme and almost exclusively, family and/or friends were the only support sources, assisting them across a broad range of issues such as teaching and courses, family issues, juggling commitments, stress and lack of confidence.

The centrality of staff support and teaching in the staff responses was also seen in the relatively high frequency of responses citing *interaction/resources from teaching staff* (13% compared with only 3% of student responses). Like the factors identified for progression in Table 1, the most frequent staff responses concerned feedback on academic progress, while the students referred most often to simply “talking with lecturers” to sort out problems such as

juggling commitments, workload and course difficulties. Students were also more likely to cite their own coping and management skills as reasons for persisting.

In summary, it is here that staff and students' perspectives diverged substantially. The overwhelming importance of the students' own longer-term goals and future aspirations for their persistence with study in the face of potential barriers was not recognised in the staff responses. Instead, the focus in the staff responses was on support and the staff interactions with the students.

Conclusions

The results of this research show that there are potentially-important differences in perspectives between the students and staff about what matters *most* for academic persistence and progression. Today's students lead multiple lives. "Being a student" is just one of these. The totality of these multiple lives and the responsibilities that accompany them affect progression and persistence. It is this holistic perspective that underlies and colours the responses of the students in this study. For them, 'being a student', when it sits within a multiplicity of other responsibilities and issues, is difficult and prompts doubts about continuing. A commitment to their own future goals and aspirations beyond education provides the strongest incentive for persisting and progressing. Diverse support networks and flexibility are essential factors underlying academic progression. While the staff responses recognise some of these factors, the staff perspective is generally focussed on the centrality of the learning context (its interactions, support and resources) to progression and persistence. This initial analysis suggests that the students bring a more 'holistic' perspective to their learning context; they are managing their study and learning in the context of their whole life and its multiplicity of 'selves' and they see their persistence and progression within this larger universe. A better understanding of that perspective may provide staff with additional and better opportunities to help students manage their learning within their own universe, rather than ours.

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What's in it for me: The role of personal goals in student persistence and success

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Summary

Access and participation has increased dramatically, and a much wider diversity of students are now undertaking higher education courses. There is, however, concern that far too many students with great potential, do not thrive, but rather struggle and often fail, or simply withdraw. There is a growing literature about attrition and retention, however, the reasons that some students are so much more successful than others in overcoming difficulties and persisting in their studies despite barriers and problems remains under-researched. This paper reports on one of the most striking initial findings from a 2-year project, funded by the Australian Learning and Teaching Council to investigate the factors contributing to student success: the critical role that students' goals play in giving them the strength to rise above their problems, to persist and to succeed.

Context: What's the problem?

The global context for university teaching and learning has changed significantly in recent decades. Within a relatively short period (less than 30 years in many countries) universities have moved from providing advanced research and study opportunities for a small elite, to a mass higher education system that aspires to educate a large percentage of the population and offer life-long learning opportunities to people of very diverse backgrounds. Whilst the social justice and equity goals of increased participation are well supported by the rapid increase in the number of university places available, more open entry pathways and access to financial support for study through study-loans, there is evidence that not all students find their studies easy or engaging and attrition rates are high (Long, & Hayden, 2000; DEST, 2004; Leathwood C. & O'Connell P. (2003).).

Attrition is an expensive and often negative outcome for institutions, communities and particularly students, so there is great concern that far too many students with the potential to succeed do not thrive, but rather struggle and often fail, or simply withdraw (AVCC, 2006; Scott, 2005). The importance of the transition to university and the first year experience in engaging students and helping them find early success is widely acknowledged and there is a lot of energy around developing improved programs to support and engage students (Darlestone-Jones, Cohen, Hanould, Young, & Drew, 2003; Krause, Hartley, James and McInnis, 2005). However, there is much less attention paid to the successful progression of students through the later years of a degree. Our understanding of the factors contributing to effective student progression is limited (Leach and Zepke, 2003; Robinson, 2004) and we know very little about why some students are so much more successful than others in overcoming difficulties and persisting in their studies despite barriers and problems.

Background to the study

This paper reports on some initial findings from a 2-year project, funded by the Australian Learning and Teaching Council to investigate the factors contributing to student success in one ‘new-generation’ university. The main data source is the experiences and perceptions and beliefs of diverse students, as captured through surveys, interviews, focus groups. The highest priority in this study is genuinely listening to, and learning from student voices. Data collection has been conducted in three key stages:

Stage One: A text-based survey conducted with 1200 students in the penultimate and final years of their degrees

Stage Two: Focus groups conducted with volunteers from Stage One to gain broad understandings of the students’ experiences of university study and their perceptions and beliefs about successful students (n=<200).

Stage Three: Interviews and more focus groups were used with smaller sub-sets of volunteer students from Stage Two (n=60) to probe more deeply into their learning journeys through their final year of study and into the workforce. Wherever possible these students were interviewed twice, once in 2007 and once in 2008. This allowed for reflections on changes across time, and also from penultimate into final year of study and from the final year of study into the workplace.

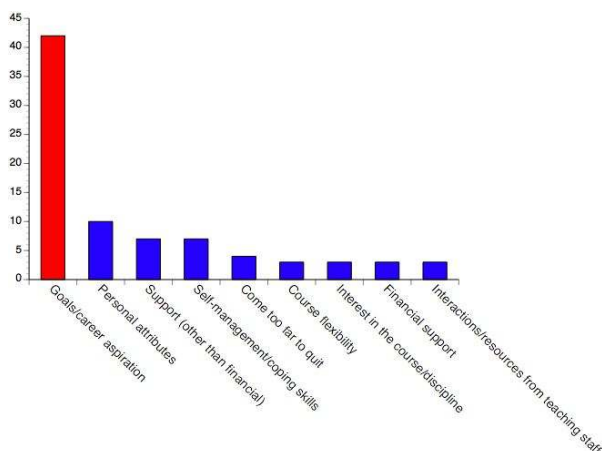
Student diversity is a particular focus of the study, so particular care was taken to ensure that participants at all three stages included Indigenous & International students; students from low-income families; first-generation students; mature-age students; full-time & part-time students; students from second language backgrounds and students with disabilities. The participants were also selected to ensure different discipline and professional courses across all faculties were represented.

The initial survey (Stage One) was designed to collect base-line data about student demographics, for example: age, gender, background, entry pathways, course-work grades, discipline. It also invited the students to:

- 1) reflect on their persistence and identify up to three significant factors they thought contributed to their success
- 2) note if they had ever considered withdrawing from the course, and if so
 - give reasons for considering withdrawal
 - give reasons why they had not withdrawn.

A copy of the survey tool and overall results is available at:

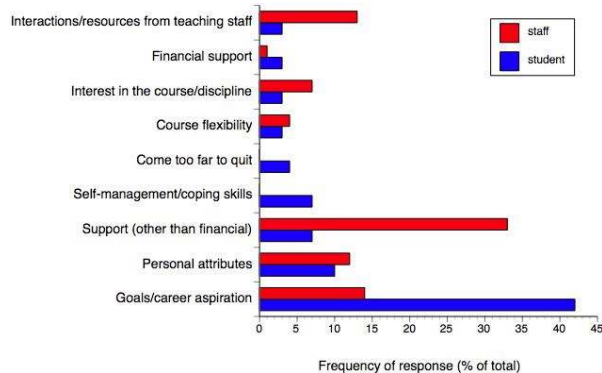
[Http://www.chs.ecu.edu.au/org/tlo/projects/CG638/](http://www.chs.ecu.edu.au/org/tlo/projects/CG638/).



One of the most striking initial findings of this survey was the critical role that personal goals have in student persistence. Students consistently named their own goals as being responsible for persistence. As shown in Table One (left), the frequency of occurrence was

42% of the total responses to the question *why did you persist when you thought about withdrawing?* The next most cited reason was personal attributes at a frequency of only 10%.

The strength of this finding and its consistency across all the diverse student groups was somewhat surprising to the research team.



Subsequent dissemination discussion groups conducted with staff teaching in the participants' study programs, revealed a similar reaction. Staff were far more likely to identify *support* (from staff and/or family and friends), or *interactions and resources from teaching staff* as factors encouraging persistence.

Table Two (right) shows the dramatic difference between frequency of reasons students gave for persisting, compared to staff predictions about students' reasons.

Analysis of the Stage One survey data took some time: Paper based forms were scanned and converted to text by a digital reader. The electronic text required careful manual checking and correction; and all data was entered into SPSS. This meant that the significance of student goals was not realized until after the completion of Stage Two focus groups. However, as the insights became apparent during Stage Three interviews and we were able to include specific probes to investigate goals more deeply: In the final round of interviews students were specifically asked to reflect on goals and elaborate on their role in their study.

Although the project still has some time to run, a vast amount of data has been collected. Hundreds of transcripts of focus groups and interviews have been transcribed. A decision was taken to adopt a grounded theory approach to analysis. As transcripts from Stages Two and Three became available, each of the five members of the research team contributed to an iterative, collaborative process of coding, analysis and interpretation. The first sets of transcripts were hand coded on an individual basis, and then the team compared their thinking, debating the similarities and differences in their analysis, coming to agreements about key themes. As common understandings were established, basic coding of all transcripts using the identified themes was undertaken using NVivo7 (a qualitative software package). NVivo facilitates key word searches, and quick and easy sorting and categorisation of coded information. This allowed us to identify the prevalence of particular themes across all transcripts, and relationships between different issues students raised, experiences they reported and some personal characteristics. Analysis of such extensive and rich data will continue for a long time into the future. The findings offered here are tentative, they represent only the first level of analysis and interpretation. However, some insights in relation to goals are emerging from the initial establishment of key themes that merit sharing, and may prove interesting stimulus for others concerned with understanding and promoting student success.

Emergent findings about goals

The narratives collected from interviews and focus groups confirms our survey data: most students believe their goals have a very powerful influence not just on resilience, but also over their approach to learning and their reactions to their teachers and the learning environment. Most students were able to articulate their goals, although they rarely used the terms “goals” or “aspirations”, but rather referred to things they “*wanted*”. Students were strong in their beliefs that goals were inextricably linked to their level of motivation and study behaviours, that if student goals were sufficiently strong, they were much more likely to manage difficulties and overcome barriers to success. These beliefs were commonly expressed by students of all backgrounds and demographics.

Observations from our initial analysis of the data suggest that:

- student goals are diverse, there are many different orientations, targets and foci, and students **want** different things: career or work; personal growth and fulfilment; self-efficacy and control; life-style achievements (economic and social); academic and learning achievements (good grades, course completion), intrinsic interests (in learning, disciplines, professions); personal ambition (to be the best, to become ‘someone’ who is or does); altruism (to contribute, lead or provide role models)
- student goals are underpinned by different motivations and purpose: the reasons student want particular things are varied
- student goals may have diverse origins, they can be intrinsic or extrinsic, they may be rooted in self, family, or culture. There is great diversity of goals across demographics but also some indications that particular groups may show common patterns and tendencies
- student goals work across varied time scales: short term, intermediate, or long term and these often function in different ways
- student goals have varying characteristics: strong (passion) or weak; stable or dynamic and changing
- student goals (what they want & the reasons they want it) influence the way students approach learning, and the way they experience university life
- strong, clear goals assist students in responding positively to learning environments (including those that are not ideal, and provide the motivation to take the actions needed for success, to solve problems associated with study and to overcome barriers
- students may be driven by a single goal but more often students have multiple goals that have relevance across all dimensions of their lives. Multiple goals interact in different ways, priorities change and the value students different goals underpins their decision-making
- Teachers can sometimes have a positive influence on the development and application of goals, through providing opportunities to discover goals, inspiring new goals, and helping students use goals strategically for success.

A sequence of forthcoming papers will elaborate on these findings in more detail (see <http://chs.ecu.edu.au/org/tlo/projects/CG638/> for updates & references). For the purposes of this conference, what follows are some illustrative examples of student narratives, selected to share the spirit and diversity of students experiences and beliefs.

Students spoke extensively about career goals, but they were often seeking quite different outcomes from their career goals. Careers could be intrinsically interesting because of the nature of the work, or equally because students believed they opened the door to a better life style, or more enjoyment, or better life-balance or better security, or an opportunity to make a contribution to society or join a particular community. It was evident that students with apparently similar work goals might have very different motivations and purposes.

Not all students had clear or specific career goals, some were looking for experiences that would please them in the here and now, or satisfy their passions and desires. Despite the apparent dominance of economic goals, the sheer joy of learning, the intrinsic love of a discipline or the satisfaction of deeply felt personal need, or generic goals about self-development and self-efficacy was evident in a surprisingly high number of students:

My Uni Degree is not necessarily about working in that field but it's a field that interests me and it was more an interest.... it was about extending that knowledge and that learning. I love learning, I absolutely love it.

... the main goal is actually to become a host, so money is important, power is important, but my main focus is to become like a host, so my life belongs to me and I can do whatever I want with my life.

Participants were predominately mature-aged females, reflecting both the university demographic and a greater willingness to volunteer. It was evident that mature –aged women, in particular, were often looking for some personal satisfactions and achievement, following years of prioritising the needs of others:

I'm not doing it for the family. My husband, he studied for a while and now he's doing exactly what he wants to do and the kids are up and running. They're fine. They're 17 and 13 but they're fine and there's nobody out there saying you've got to do this or I'm paying for this. There's nothing there. It's just me. It's maybe my personality. I want to achieve this because I want it so much basically.

However, goals extend beyond the individual and the study experience and do often include other priorities:

For me, my priority is my kids and when I went back to school, I didn't want to compromise their education or their experiences because I've decided to do this now.

Mature-aged people and people from groups under-represented in university were frequently driven by a goal of role-modelling success through education:

It's taken me a while to find out what I wanted to study but I've found something that I like and it makes me want to go to uni to learn what I'm learning... and probably wanting to be a role model in other avenues of sport has helped me as well... Young Indigenous kids in particular, to show them that there are more avenues than just being that top AFL [Australian Football League] player and stuff like that.

For many students, goals expressed a need to prove themselves, sometimes against others, sometimes against themselves, sometimes to prove others judgements of their capacities were wrong. Ours is a new generation university, where many students are the first in their families to come to university, and they have often achieved entry via alternative pathways: attending university and achieving some success in degree level study can in itself be regarded as a real achievement against the odds:

[my goals] were very simple. To try to see whether I could do university full-time, and I had no idea whether I am even university material, so they were very simple.

The need to demonstrate or improve self-esteem and self-worth clearly underpinned some students' goals. In most cases this was expressed as an aspiration to achieve an individual sense of value, to affirm a sense of self or avoid negatives such as sense of failure:

I wanted to prove myself, not only to myself, but perhaps to the younger students, you know I might be an old bat but I can still do it, especially in IT

... proving to myself that I could do it. I'm from a family of six and my family were all very bright at school and I wasn't. In the nicest possible way they told me I was stupid most of my life.

Maybe proving something to myself that I can do it. It's my last chance. I'm not going to get another chance. It could be proving something to myself that I can do it because I was told as a young girl that there were a lot of things that I couldn't do because of my [disability].

I'm a fear of failure person! I quit uni the first time and when I went back to uni, it was of my own volition, it was my choice and it was something that I'd chosen to do. I'm one of those people, if I decide to do something, I will stick by my guns and do it and so quite frequently the goal was just to get the assignment in, just to get through and pass the exam..

In other cases, it was closely linked to the ways significant others viewed them. Families were described as having an influence on goals, and for some students study goals were clearly aligned with family values, beliefs and aspirations. This was particularly evident in the case of several international students who came from very family oriented cultures.

The expression “*I want*”, was often presented with great conviction and passion. Students spoke with emotion about the things they wanted from their university study and experience: it really mattered to them.

*I'm only 20 and I know **I want** to do my Masters in Business, **I want** to go do this, go do that and I absolutely love it. It's awesome...*

It was common also for students to make the observation that people who did not have strong personal goals, who did not know what they wanted, were likely to lack direction and commitment, and unlikely to engage with either their studies or

university life. They were therefore far more likely to drop out of study, or loose time swopping and shifting between courses.

I've got friends even now they're still in their first year of their fourth degree because they don't have any direction.

Conversely, strongly held personal goals keep students motivated and give them the strength to work through problems, overcome difficulties and do things that actually were not engaging at the time:

Do you know what really keeps me motivated is, I want to be a nurse. I don't care how many obstacles I have to fight and how many people I have to yell at, I am going to be a nurse.

I'm in my third year now. The long haul is over and done with. I've just got to stick it out for the rest of the year because you're doing uni for a reason so just a light at the tunnel of your career path.

...when you're in your second or first year, it gets tough but then when you gradually move on, you see that you're doing it for a reason and you want to reach that goal of bettering your career path and getting a Degree helps you better your career.

...if you don't know where you are going, you are not really determined to keep going, because its all up in the air. You just go with the flow and then sometimes when you do that, you settle for less because its easier. But if you've got a goal, like I really, really want to get there; it doesn't matter if it takes me do long or if I've got to work extra hard or do extra better on my assignment, do having clear goals makes it a whole lot easier to succeed at uni.

I've wanted to be a nurse from when I was 16, never had the opportunity to do it and now I'm not going to let that go, there's no way I'm going to let that go. By hook or by crook I'm going to get through this course and I'm going to get through it as best I can. I wouldn't say I'm a perfectionist but I have to understand it. I can't just learn something off, I really do know what it's about. So I give myself more work, but I end up doing okay in the end of it. So yeah the goals definitely.

The strength of a students' **want**, was important regardless of the type of goal. For example, the simple desire to be a particular kind of person, to retain integrity of character was sufficient to drive some students: *"I'm the kind of person who succeeds who doesn't give up"*.

While a lack of goals could contribute to problems of motivation and direction, for some students, particularly school leavers, a primary goal of university could be simply about growing up, becoming adult and developing as an independent person: Finding goals and interests, finding a career path, discovering what kind of people to be with, and what kind of person you want to be, and what kind of a place you want to be in the world. Where students were aware of this as a goal, it could give shape and purpose to their experience. They saw university not as directionless and time-wasting but as a valuable time and space for a privileged opportunity for personal growth. Enhancement of self-efficacy, self-determination, self-knowledge were particularly

important goals for students who did not hold particular strong, tangible targets such a specific career.

Many students spoke about the difficulties of finding out what it was they wanted. They recognised the importance of finding something that motivated them to engage seriously with their studies and the discovery of goals was typically associated with judgements about their own maturity or the maturity of others.

I think being a mature student I have come to University because I know exactly what I want to do rather than, I think you get a large range of students who are here because they're not sure what they want to do, so they are trying things out, whereas I've been doing web design and I knew I wanted to go into programming, so I'm doing Computer Science.

This observation was commonly made by mature-aged students and often in the context of reflecting back on earlier study experiences where they had failed to complete a course. Finding something they *wanted*, was the stimulus to reconnect with university.

I think it's going away from uni and having that goal and wanting it and coming back. You know I took five years off between, well almost five years, between leaving my last degree and starting this one. I came back and I knew that this was what I wanted to do, I was sure that I wanted to complete a degree, yes I changed when I found that human biology was more what I was looking for than sport science but I knew this was where I wanted to be and I knew this was the right thing for me to be doing right now in my life. So I think that's really helped. It's been a definite decision that this is where I wanted to be.

Some students also reflected on the way their goals changed in response to both life experiences and interactions at university:

My goals are permanently changing, constantly. Yes and no. I don't know how to explain that. Coming back from uni, I guess studying Human Biology to begin with was something I didn't expect to do that I've really enjoyed...I ended up with doing a lot of exercise work, just enjoyable exercise work with a lot of people with disabilities ... everything that I learnt at uni so being able to take them to the gym and actually do a workout and that kind of changed my perspective on working with people with disabilities so in some ways, yes they changed my goals.

Many students were able to clearly articulate the way that goals changed their approach to learning by making effort or sacrifices worthwhile, by creating motivation and stimulating determination, by encouraging self-driven adjustments in life to accommodate learning, and by triggering help-seeking behaviours that increase the chances of success:

Having the goal of where you're trying to get to and seeing that longer term vision and the little pot holes along the way, you can get past it and I think that's life. You are going to have times when things don't go as well as you want and you think "okay, shake it off, let's move on to the next thing". You might not get the mark you wanted and that's okay. I think keeping the long term goal in mind.

If you're doing it for yourself and you're accomplishing everything you want to, then you're heading in the right direction. If what you want to get after Uni or what you want to get out of it is get a job, something that you want then you've got to achieve it, no matter what it takes. I mean, if it takes an extra whole weekend where you can't go out and you've just got to study, then just do it. You have to sacrifice yourself sometimes. I mean you've got to work less, maybe reduce your social life a tiny bit but you've got to put yourself first because this is for your future in the end. I mean you can't keep slacking off and pretending yeah it's going to happen eventually, you've got to put yourself there first. If you can't do it by yourself then you get a bit of support and this is where the support groups come from and peers and lecturers and everyone helps you.

Having a goal though was not the only factor in successful engagement. Students have multiple lives, for most people study is only one strand amongst many others. Many students spoke about the importance of the alignment of their goals with other dimensions of life: *the right thing at the right time*, was a common theme. Successful engagement seems to depend on the way study fits in the jigsaw of a student's holistic view of life.

I knew exactly what I wanted to do from Year 10, I was just like that's what I want to do but I just felt I'm not ready to go to Uni. I know what I want to do but I'm not ready.

It was common for students to have multiple goals, and these might combine different types of goals for example long term and short term; achievement, mastery or self-improvement oriented. A student might have a long-term career goal, but also want to be a high achiever or prove their worth.

Those two things, the goal of wanting to be a nurse and the proving to myself that I'm actually not too stupid, I can actually do it.

I'm here primarily to get my degree you know and that's fine but for me if I get less than a High Distinction then it's like I haven't done very well [laughing] in this unit.

Multiple goals can work together in a common direction, or alternatively in contrast and conflict. A long term career goal might keep a student persisting in the course, even sticking with units of study they did not like but they needed, whilst a goal of getting top marks might encourage them to work strategically on assessments they knew they could do well in, regardless of the contribution it made to their overall career goal. Some students were quite strategic in using different goals in different ways to keep them going:

Definitely, short and long term. The long-term goal of I decided I wanted to do this and if that wasn't your goal that you were devoted to, you wouldn't stay. It's too hard. You just wouldn't do it and in the short term, for me it's a step at a time, a step at a time, this assignment, this exam, otherwise in the long term if it's too long term it can be overwhelming and I think you can lose track of what you have to do this week. It's a whole spectrum of short and long term goals.

Short term goals in particular were used as a way of organising and managing their learning, breaking it into manageable chunks or setting themselves less complex, achievable goals that helped them work progressively towards longer-term or more difficult goals:

Short term goals for me are getting through each semester. From the beginning I've never thought past the next semester. I want to pass these exams, oooh I've past them, I'll do the next ones, past them.

Goals also tended to be considered in a hierarchy of importance. And for many students this hierarchy sets the parameters for planning time, energy and decision-making, allowing them to take some control over their learning. Students have to juggle many different life demands, needs and interests. Clarity of thinking about goals assisted many students in balancing one goal against another, and sometimes in making difficult decisions about the value of their study, the approach they took to it, and the kind of study experience that best suits their circumstances. This could be powerful, for example, in allowing a student to give up study for a period to manage a domestic or health crisis, and return without a sense of failure, or to feel okay about not engaging in social life at uni:

I'm generalising now but your goal [if you don't have family responsibilities] is to have a social life at university whereas when you're a mature student, your goal is to get to where you're going with the degree

...you prioritise what you want to do first, the important stuff first.

Goals were certainly dynamic, with many students describing the way that their goals had changed in response to their learning experiences as well as events in other aspects of their lives. Goals interact with the complex dimensions of a student's own characteristics and the many dimensions of their lives beyond study. For example a student may be driven to succeed by a need to prove their ability in competition with others, through studying strategically to gaining high grades. But as they feel more confident about themselves, grades may become less important and they may find an intrinsic interest in their discipline or long-term career goal that leads them to engage deeply but with far less focus on grades. Priorities clearly shift and change, and the relative power of the things each individual "wants", plays a significant role in determining the way they approach learning, the way they experience the learning environment and the expectations they have of university study.

Concluding statements: next steps and implications

Data analysis is still at an early stage and the research group recognise that qualitative interpretation needs to go well beyond the simple identification and description of themes and issues (Bazley, 2007; Flick, 2007; Richards, 2005). The data will be scrutinised more deeply to explore the frequency of responses, and investigate the relationships between different individuals and demographics. The emergent themes need to be considered in the light of a rich multi-disciplinary literature available on goals from management, psychology, sociology and educational research and theory (for example: Fenollar, P., Roman, S., & Cuestas, P., 2007; Kember, D., Hong, C., & Ho, A. 2008; Radosevich, D., Vaidyanathan, V., Yeo, S., & Radosevich, D., 2004; Valle, A., Cababach, R., Nunez, J., Gonzalez-Pienda, J., Rodreiguez, S., & Pineiro, I.,

2003). And our analysis of goals needs to be linked to the models and frameworks for success that are being developed in the wider study.

Despite the clear need for continued analysis and meaning making, the research team has actively worked to share early insights. One value of collaborative, work-based studies such as this is that the emergent evidence has immediate relevance to participants. It is impossible to be engaged in qualitative analysis with such relevance to one's own work without wanting to make personalized sense of the information. The voices of the students describing their lives, beliefs and perspectives have a powerful influence on teachers who want to improve their practice. Teaching members of the research team and colleagues with whom the student voices have been shared, have found that the emergent ideas have created a real energy around consideration of the potential implications of the findings.

As practitioner-teacher-researchers it is clear to us that student goals are significant in defining what students want and expect from higher education; how students experience university; the extent to which they will be satisfied; how they will approach learning; and their capacity to persist and be successful. We need to understand much more about student goals in order to understand them, accommodate them, and where appropriate exploit them to encourage persistence. This implies a real value for further generic research, but also a need for on-going local context-specific studies that connect teachers with their own students effectively. Goals are very complex and students have very different profiles, so our work as teachers need to include time and resources directed at communicating with students and getting to know a lot more about them as individuals. Our teaching programs need to provide opportunities for students to learn about the interaction between their goals and aspirations and their learning behaviours; and also help them to find personally meaningful goals and exploit the power of their goals in effective decision-making, and management of their university experience and learning. Our study provides powerful evidence that goals are important to academic success, and that university students who know *'what's in it for them'*, are likely to persist through the inevitable challenges of life to complete their studies.

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