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Sustainable Education in the Western Corridor: establishing the research agenda and roadmap ahead

Introduction
The primary purpose of this research is to inform strategies that will enhance learning of students in the Western Corridor by identifying issues related to retention and progression. Ideally this will aid the development of interventions and quality teaching methods. Specifically, this project will offer a research program and a set of propositions that will identify predictors for higher education progression and retention and their impact on higher educational pathways for persons in the Western Corridor and similar regional centres. This will be the basis for the research agenda for moving forwards. The outcomes of the research ideally will aid in the preparation of a roadmap for the future.

This overall project focuses on examining all levels of higher education from the progression from TAFE through to postgraduate studies. This research specifically aims to identify and consider the unique demographic and psychographic variables of the potential and current students within the wider community and identify their impact on progression through study rate retention and completion rates. Identifying these will aid in informing the design of programs to align and support these diverse needs. It is then proposed that the outcomes from this seeding research would inform the development of a research program to be implemented at all stakeholder levels concluding with a new roadmap for moving forward with a sustainable approach to regional education.

This research is founded in the need for sustainable quality improvements to teaching performance such as early intervention and support that align with the specific socio-demographic educational needs of the local community and improvements in the level of academic feedback and support for students from the Western Corridor. From an organisational perspective enhancement of student retention and satisfaction of the Student Learning Journey and ensuring a viable future for the university in the region is essential.
The profile of the students in new regional and satellite university campuses is not the same as most universities or other traditional campuses in more established regional and rural university centres such as Toowoomba, University of Southern Queensland (Todd & Ballantyne, 2007). Students attending higher education institutions in the Western corridor have a different demographic profile to students in many other universities. From 2006 profiles of students entering university courses at the new regional Springfield Campus have been captured and monitored. Over this time patterns have emerged relating to the socioeconomic factors that influence the students in their decisions for higher education with the data providing an interesting overview of the current target population and their diversity. This research suggests that “over half of respondents were the first in their family to attend university, almost half had parents who did not complete high school, almost a third were managing the care of small children with their study and a majority were engaged in between 10 - 24 hours of work per week (Todd & Ballantyne, 2007). A large percentage (31.13%) were from a low socio economics segments (SES) (as determined by their postcode), and 41.72% were from a middle SES. Singularly each of these factors creates a level of diversity and hardship less common and evident in more established university settings. Interestingly, multiple hardship factors are more evident in the target group for the newer regional university’s creating a unique and complex educational environment that warrants further research (Todd & Ballantyne, 2007). In response to the notion that this target group was diverse and faced varying levels of hardship, academics from USQ coordinated the Western Corridor summit in June 2008. The key objectives of the summit were to develop a vision for the region in a number of key areas including transport, education, communities and health and housing. These outcomes have been integrated into the project to inform a set of propositions for future research in 2012, four years on from the first summit.

Two key outcomes emerged from the summit regarding education. Firstly, the need to develop better skills, training facilities and an environment to ensure high level skills are being developed for the community and that persons from the various socioeconomic backgrounds are being trained to meet the needs of the community. Equally, the need for adequate positions and facilities to ensure basic skills of numeracy and literacy for all in the community who may have slipped through the formal educational processes need to be available. And secondly, the development of educational training pathways program starting at grade eight in schools and progressing through to university, TAFE or other higher educational streams need
to be developed as a matter of urgency. Similarly, the Western Corridor summit
pathways and especially higher education pathways were not transparent and clear for student
progression and warranted attention. The summit outcomes identified that persons in the
Western Corridor were neglected irrespective of the supportive and nurturing strategies of the
education system. The general theme of lifelong learning appeared evident, however the
ability of the institutions to identify and help those in need was difficult to action, as the
students were unique and different to those traditionally attending university. In light of this
information and the need to complement, refine and move forward it has become apparent that
a clear research agenda and implementation roadmap needs to be developed. The primary
and long term goal of this research is to then capture and monitor the higher education profiles
and educational pathways for students in the region and to develop a transparent model of
students’ education pathways to higher education. The economic and social benefits of this
were deemed necessary at the Westerns Corridor Summit (2008).

While it is not unexpected that differences in student profile do occur in different regions,
studies suggest it is not possible to generalize from one university finding to the next
(Pitkethly & Prosser, 2001). The recognition of diversity among universities student
populations and local communities does not imply or preclude the use of an instrument
developed in one region for purposes of profiling and progressing students through various
education pathways (Todd et. al 2007). However, it does suggest that the instrument may
need further development and refinement to ensure consideration of extraneous and new
variables. Thus the need for establishing a research agenda, exploratory work and the
development of a robust model or instrument that can be used as a management and
educational tool in this region is warranted. In particular, the Western Corridor’s need for
such a model to aid in the development of clear pathways for higher education and to provide
institutions with the ability to be proactive in identifying student profiles and thereby ensuring
retention and progression is unquestioned.

Ballentine, Todd and Olm (2007) in their study of factors that specifically influence the USQ
Springfield campus student’s self perception identified demographic characteristics such as
age, parental status, stage of education (e.g. school leaver), and the program they opted to
study were very influential. Of lesser importance were factors such as having dropped a
course, working 10 hours or more, socioeconomic status and reasons for dropping a course. Clearly this study while looking at the social and demographic conditions of the student did not consider the sociological factors such as those proposed for this study, being self-efficacy (Zimmerman 2000), orderliness, achievement-striving, self-discipline, vulnerability and friendliness (Montag, & Levin, 1994). It is believed that these items having been used for many years in sociology will allow for further and comprehensive modelling of student profiles and enhance a targeted response to community needs. This will allow for the development of comprehensive and sustainable higher education pathways that enables retention and progression of the student through the education providers in a region.

As identified by Todd and Ballentine (2007) and Krause (2005), the surveying of students enables institutions to better model their demands and thereby meet the education needs of the catchments they serve. If multiple learning institutions in the same region are able to model their student needs then a regional response to the development of education pathways and programs can be developed and better retention and progression of students achieved. Moreover, the relevant opinions of stakeholders and community leaders should be captured to ensure that the tailored and aligned pathways to employment and community development are also enhanced by the educational pathways and strategies developed. Establishing this sound and rigorous research agenda will inform this roadmap ahead and is vital for success.

Moving forward Conceptualisation of the research agenda
The research objectives addressed in a future research agenda are proposed to include the identification of psychological dimensions related to study outcomes that inform development of interventions and sustainable study practices; the development of data to inform retention strategies; the collection of data to predict, and possibly influence, progression rates; and better tailor activities in the student experience to differentiate USQ from alternative providers; and provide educational programs aligned to sociocultural and demographic found. The proposed research problem examines “What are the predictors for higher education progression and retention and their impact on selected higher educational pathways for persons in the Western corridor?” Any roadmap must include strategies that will exploit and harness the benefits of the proposed high-speed broadband networks in the region that are aimed at accessing even “hard-to-reach” communities. The impact on education, and in particular the role of technology is predicted to play in the near future, is expected to be far-
reaching. An early conceptual model can be found in Figure 1.

It is proposed that:

P1: Psychological dimensions such as self-efficacy, orderliness, achievement-striving, self-discipline, vulnerability and friendliness (Montag & Levin 1994) influence, progression through study rates retention of and completion rates.

P2: 2012 demographic and psychographic profiles will have changed from 2007 and include second in family to study, parents to study, post study employment factors with these changes offering new factors to consider and new factors that influence attraction, retention, progression and completion.

P3: The impact of better online access, high speed access and pervasive technologies on learning and teaching has assisted in the progress of these students and aided in progression through study rates, retention and completion rates.

P4: Educational programs aligned to socio-cultural and demographic and teaching and learning supporting developments have influenced progression through study rates retention and completion rates.

Figure 1: Conceptual model of factors influencing progression, retention and completion.
Finally, future research should be longitudinal in nature advancing discussions from the Western Corridor Summit held in 2008 with a further summit conducted in 2012. This will allow for projective data to be collected from large forum groups and for the dynamic changes of the community to be considered.

**Final discussion**

By establishing this research agenda for discussion and moving forward in developing propositions and a road map for the future this research will contribute to developing suitable and successful educational pathways for newer regional universities in similar social economic environments with proposed benefits for both faculty and university levels.

**References**


Todd, Nick and Ballantyne, Julie (2007) "This is our campus!" - *student perspectives of their 1st year experience at a new university campus*. In: 10th Pacific Rim First Year in Higher Education Conference, 4-6 July 2007, Brisbane, Australia.

Paper 9: Fostering Improved Learning About Sustainability

Michael Mills and Andrea Quinn

Abstract

University business graduates must not only understand but also be equipped to apply a sustainable thought process to today’s business challenges. However, evidence suggests that standard approaches to teaching business courses have not advanced to reflect changing student needs, especially for NetGen students who have differing expectations than earlier cohorts. The current challenge for instructors concerns the preservation of rigor and integrity in course design, while responding to the needs of a new generation of learners. This article presents a conceptual framework incorporating experiential learning, reflective practice, and the use of metaphor, with application to the teaching of sustainability within a number of business courses.