Regional study hubs: Increasing student engagement to support regional students facing high first-year attrition risk factors. A Practice Report*

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Abstract

The Country Universities Centre (CUC) network of regional study hubs are an emerging tool for supporting regional students to achieve success in higher education. The CUC cohort of students, and regional students more generally, face several risk factors for first-year attrition including: external mode of study, over 25 years of age, part-time study load, alternative pathways to admission, and medium to low socio-economic status (SES). In addition, work-life balance, financial considerations, and access to technology all create barriers to study for these students. The CUC facilities and staff provide academic, administrative and pastoral support to students, as well as creating a learning community to facilitate student-to-student interactions. The positive effect of the CUC support is shown by means of a survey and student case studies.

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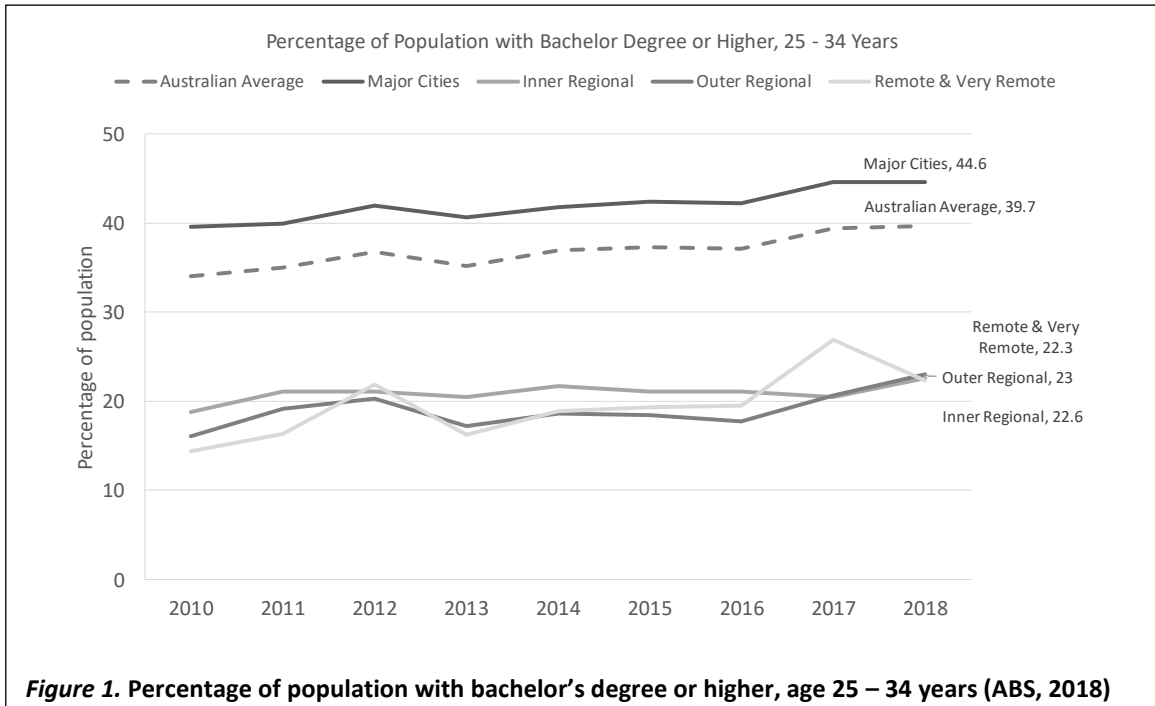
Introduction

Regional Study Hubs (RSHs) are an emerging tool developed to assist regional students to participate and succeed in higher education. Regional and remote Australians hold bachelor's degrees at approximately half the rate of metropolitan Australia. In 2018, 22.7% of people aged 25 - 34 years in regional or remote Australia had obtained a bachelor's degree or higher, compared to 44.6% in metropolitan areas (Figure 1). Following the *Australian Review of Higher Education* (Bradley, Noonan, Nugent, & Scales, 2008) the Federal Government set a target of 40% of all Australians aged 25–34 years to hold a bachelor's degree by 2025. Achieving this target is required to ensure that Australia remains internationally competitive, and that the workforce is prepared for the growing knowledge economy. As of 2018, this target has been exceeded in metropolitan areas but remains a distant goal for regional areas.

Background

The Country Universities Centre (CUC) is a community-owned network of regional study hubs. The hubs offer campus-like facilities to any student studying at an Australian university. The centres typically offer high-speed internet (100 Mb/s symmetrical), video-conferencing facilities, computers and printing, as well as tutorial spaces, and areas for social collaboration. Beyond the facilities, the CUC staff offer students' academic, administrative and well-being support. They also advocate events for the CUC centres that promote educationally meaningful activities to encourage student engagement and develop professional networks.

The CUC concept was initiated in the small NSW town of Cooma in 2013 by the local community. It was influenced by the Geraldton Universities Centre, which has operated since 1999.

Figure 1. **Percentage of population with bachelor's degree or higher, age 25 – 34 years (ABS, 2018)**

The CUC centre in Cooma was supported by local business Snowy Hydro and the Cooma Monaro Shire Council. Initially there was no state or federal government support. The goals of the centre were to:

- create opportunities for youth to remain in the community and be successful;

- encourage local high value jobs for the growing knowledge economy;

- provide educational opportunities for professionals, partners and families coming to the area, and;

- encourage local academic and professional networks.

Following the success of the Cooma centre, the NSW state government provided funding to open a further five centres in NSW. In 2018, the Federal Government launched the Regional Study Hubs program, which further supported the growing network of CUC centres (Department of Education and Training [DET] 2018a).

In 2018, the CUC had three operational centres, located in Cooma (CUC Snowy Monaro), Broken Hill (CUC Far West) and Goulburn (CUC Goulburn), with a further four locations in planning stages. There were 292 students registered, of whom 67% were studying undergraduate degrees. Within the CUC student cohort, 98% of students are classified as regional or remote, with the remaining 2% usually comprised of metropolitan students on placement in our towns, such as medical students.

Regional students have higher first-year attrition rates than metropolitan students

At each benchmark for completion of a bachelor's degree (never came back after the first year; re-enrolled but dropped out; still enrolled at the end of the nine-year cohort period; completed) regional and remote students have poorer outcomes than metropolitan students (Figure 2, DET 2018b).

Figure 2. First-year attrition rates by regional classification (DET, 2018b)
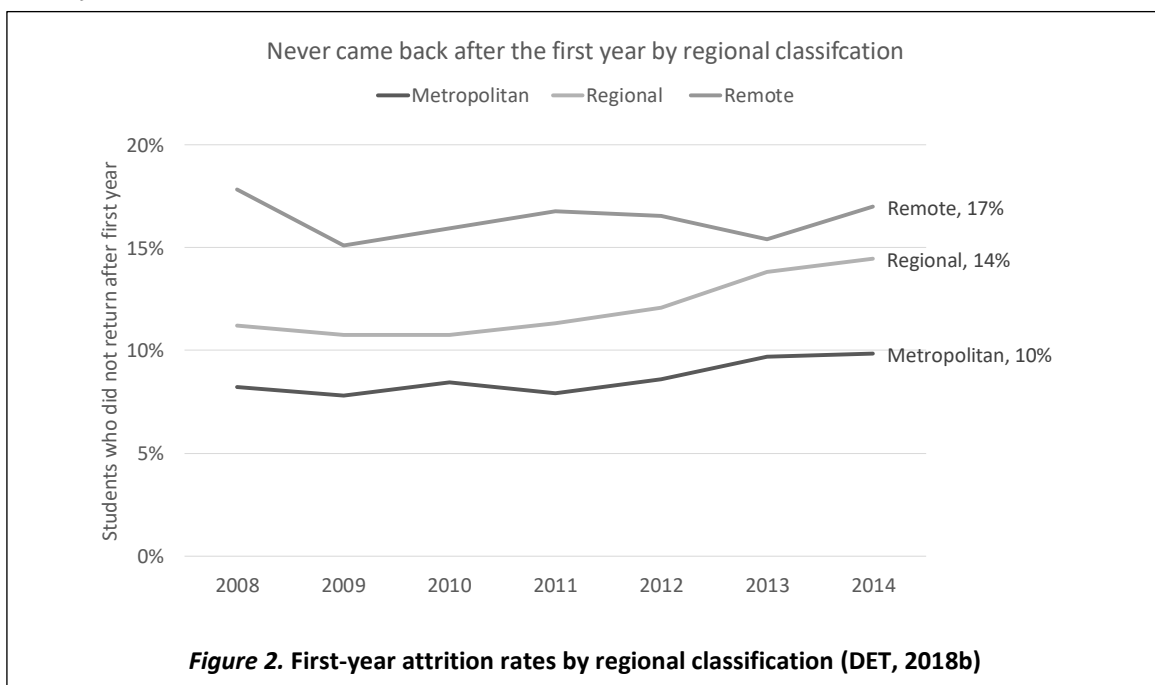
Whilst each aspect of lower bachelor completion rates deserves attention, this study focuses in on just one facet of this challenge: first-year attrition. In the most recent data (measured in the four-year completion rates 2014-2017) regional and remote students have a first-year attrition rate of 14% and 17% respectively, compared to just 10% for their metropolitan counterparts (DET 2018b). This project examines the mechanisms the CUC and regional study hubs use to support regional and remote students through the difficult first year of higher education and show how student engagement can be an effective tool in achieving this. Details of the CUC student cohort are presented below, with correlating national attrition trends.

First year attrition risk factors and the CUC cohort

Figure 3 compares the characteristics of Australian university students who did not return to study after the first year with the CUC student cohort. On the left of Figure 3 are the percentages of students in each classification or equity group who did not return after the first year of study, as reported in the Department of Education and Training (DET) 2017 Completion Rates for Higher Education Students (2005 – 2017 four year completion rates). On the right of the figure are the demographics of the CUC students with the same characteristics.

Mode of study

Most CUC students study externally through an Australian university, although some students do travel (considerable distance) to campus or use the centres during university holidays. One of the principles of the regional study hub concept is that the centres are located in regions where they are able to support students who do not have access to a university campus.

Mode of study is a significant risk factor for students not returning to study after the first

year. Students were two and a half times more likely to not return if they were studying externally (Figure 3a). In addition to increased likelihood of first-year attrition, external students were also more likely to take longer to finish their degree and have lower completion rates than other students (DET, 2017). The DET report into improving retention, completion and success in higher education recommends significant improvement and targeted investment in support for external students (DET, 2018b).

Age and type of study

Students studying in regional and remote areas were more likely to be over 25 and studying part-time than their metropolitan counterparts (Figure 4) (ABS 2016). This trend is reflected in the CUC cohort, where 71% of CUC students are over 25 years old, and more than half are studying part-time (Figure 3c, 3e). Students over 25 had nearly twice the first-year attrition rate as their younger counterparts (DET 2018b). Students studying part-time were three times more likely to not return after their first year of study (DET 2018b). Statistical studies conducted by the DET (2017) identified type of study and age as the greatest influences on a student's completion rates, although the report suggests that age might be related to other factors, rather than being an issue in itself.

Basis for admission

Nearly two thirds of CUC students enter higher education through pathways other than directly from secondary education (Figure 3g). This correlates with the higher age brackets of our students. Students who entered university through pathways other than secondary education were twice as likely to withdraw from study within the first year than students entering university directly from secondary education; 14% compared to 7% (DET, 2018 b).
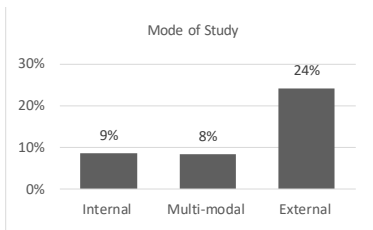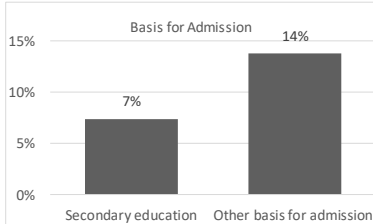
Mode of Study

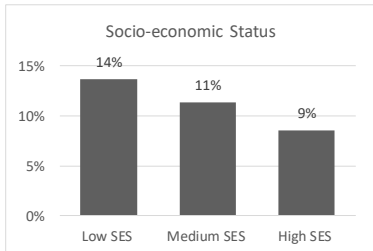a) Did not come back after first year of study by mode of study

Age

b) Did not come back after first year of study by age
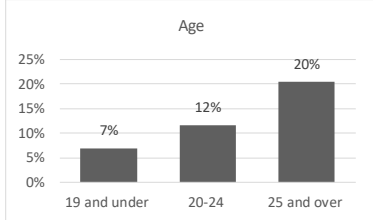
CUC Students - Age

c) CUC Students 2018 by age
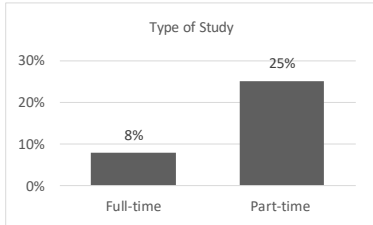
Type of Study

d) Did not come back after first year of study by type of study

CUC Students - Type of Study

e) CUC Students 2018 by type of study

Basis for Admission

f) Did not come back after first year of study by basis of admission

CUC Students - Basis for Admission
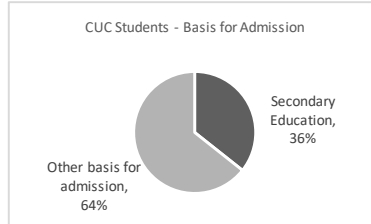
g) CUC Students 2018 by basis of admission

Socio-economic Status

h) Did not come back after first year of study by ses

CUC Students - Socio-economic Status
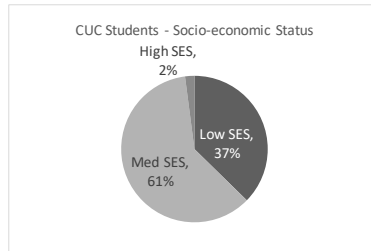
i) CUC Students 2018 by socio-economic status

Figure 3. Student characteristics compared to first-year attrition rates. Australian student figures are presented on the left side, with CUC students on the right.

Socio-economic status (SES)

CUC students studying in Goulburn and Cooma are classified as medium SES and students located in Broken Hill and surrounds are low SES (Figure 3i). Low and medium SES students are more likely to withdraw during the first year of study (14% and 11% respectively) than high SES areas (9%). The DET (2018a) acknowledged that low socioeconomic status does not necessarily mean low achieving, however many students who are low socioeconomic also share other characteristics associated with poor retention and lower completion rates, such as being mature-age and part-time. Cassells, Dockery, Duncan, Gao and Seymore (2017) identified a range of barriers to accessing higher education for low SES students, including lower expectation and aspirations for higher education, lower preparedness and less family support. They also suggest that low SES students are more likely to fall into other equity group categories.

Compounding effect of belonging to multiple equity groups

Belonging to multiple equity groups has a compounding effect on higher education completion rates: the more at-risk groups to which a student belongs, the lower the completion rates for a student becomes. Completion rates of regional and remote students who were over 25 years old and studying part-time dropped to 43.9%, compared to full-time metropolitan students, who had a completion rate of 78.7% (Edwards & McMillian, 2015).

Amongst the CUC cohort of students several first-year attrition risk factors are present, including mode of study, type of study, age, SES, and field of study. These factors combined indicate regional students and the CUC cohort have a high probability of not returning after the first year of study and are a group in need of

additional support to achieve academic retention and success.

Barriers to study for regional students

In addition to the quantifiable characteristics of CUC students, there are several other barriers to study that regional and remote students face. These factors are intertwined with the above equity factors.

Work/life responsibilities and financial considerations

The CUC cohort is dominated by mature-aged students, studying part-time. Many of these students have work and family responsibilities. The issue of financial difficulties is cited as the most common factor for regional and remote students who consider leaving university early, closely followed by health or stress, workload difficulties and study/life balance. Metropolitan students more often cited factors of choice and lifestyle (Edwards & McMillian, 2015). These financial constraints may lead to students prioritising paid employment over study, and time may be restricted by other roles, such as family and caring responsibilities (Devlin & McKay, 2017).

First-in-family

In the Goulburn and Far West centres, over half of CUC students are the first in their family to attend or complete higher education. While this is not reported in the student characteristics for completion or attrition rates, it has been identified as a barrier towards study. Issues faced by first-in-family students include lack of familiarity with the peculiarities of university life, and an absence of university specific cultural and academic capital in their families on which they can draw (Devlin & McKay, 2017). The choice to attend university can also be viewed as a departure from social norms

within their families, friendship groups and communities.

Technology

As most external courses these days are delivered online, access to high quality internet is vital. This has been recognised as a key equity issue for education in Australia (Devlin & McKay, 2017; DET, 2018c; Halsey, 2018; Pollard, 2017), The average internet speed in Broken Hill is 4 Mb/s, and in Narrabri, where a new CUC location is due to open in 2019, the average internet speed is only 0.2 Mb/s (Speednet, 2019). By comparison, the average internet speed for Sydney is 38 Mb/s. In addition to lack of access to high speed internet, the connection in regional and remote areas is often significantly more expensive, as fewer providers operate in regional areas, and those that do often only provide an 'off-net' service that is more expensive than metropolitan products.

Early signs of success in supporting our students

Student engagement has been proven to deliver positive outcomes for students, including persistence, satisfaction, achievement and academic success (Astin, 1984; Coates, 2005; Krause, 2005; Kahu & Nelson, 2018; Kuh, 2009: Thomas 2012; Trowler & Trowler, 2010). Kahu and Nelson (2018) introduced a framework to define four key mechanisms of student engagement; belonging, emotions, self-efficacy, and well-being. Aspects of this framework, specifically for mature-age distance learners, are discussed in more detail by Kahu (2014). The CUC has examined support mechanisms for our students through this framework. Aspects of student engagement for the CUC cohort have been measured by means of a student survey, collected at the end of each semester.

The student survey for Semester Two 2018 was completed by 143 students (approximately 49% of the student cohort). The survey was delivered online using Google Forms. The survey used Likert scales (based upon Quality Indicators for Learning and Teaching ([QILT] survey scales), multiple choice, or open text responses. The surveys were analysed by the CUC central team, including data validation and comparison to previous survey data. Testimonials were gathered from each surveyed student, and de-identified as appropriate. Questions around engagement were twinned to questions from the national QILT surveys, to allow comparison of CUC students to national averages.

Belonging

Sense of belonging is the first aspect of student engagement identified by Kahu and Nelson (2018). The sense of belonging is the student's subjective feelings of relatedness or connectedness to the institution, staff or other students (Thomas, 2012). Success for students transitioning into study can be facilitated through being a part of a learning community, and the sense of belonging that students feel because of this (Krause & Coates, 2008).

The presence of a CUC regional study hub in the community assists in bridging the socio-cultural gap between the student's existing environment and identity, and the university. Activities hosted by the centres, such as seminars and short-courses, assist in creating further connections between universities and the community. When surveyed about sense of belonging CUC students returned 81% positive results, compared to a QILT national average of 51%, and a QILT average for external, regional students of just 36% (Figure 5).

Figure 4. **Age and type of study by regional classification (ABS. 2016)**
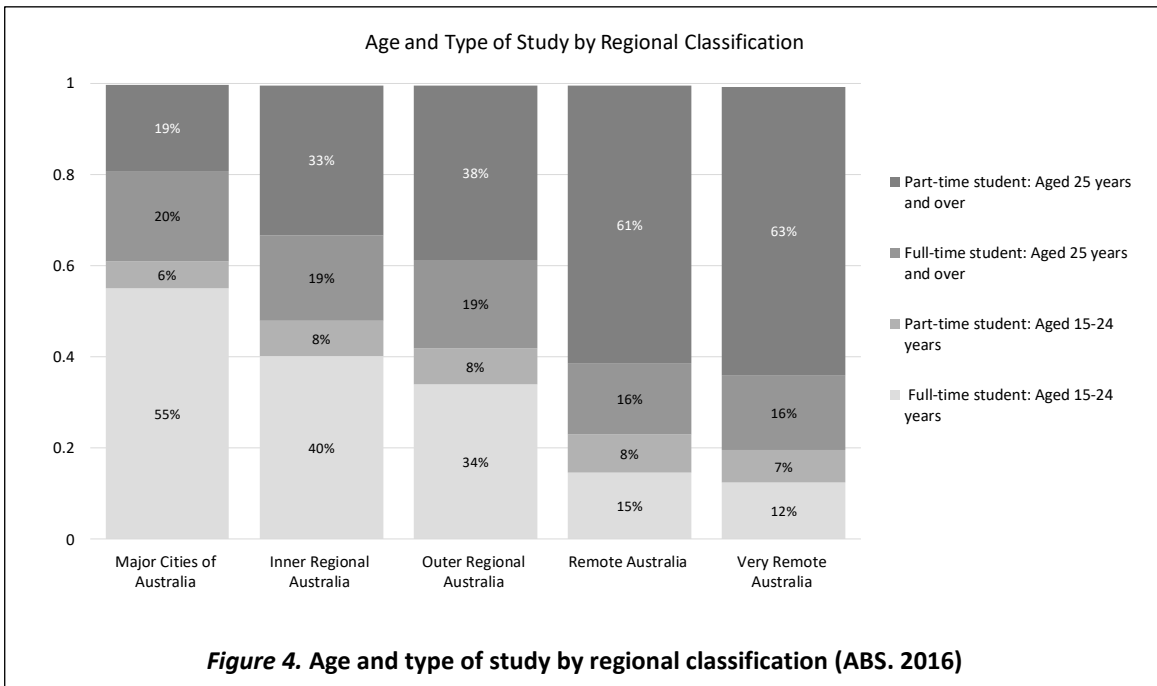
Kahu (2014) identified that student to student connections were the most important relationship in developing a sense of belonging for mature-aged external students. These students, who have busy lives, often with families and work commitments, may not seek a sense of belonging to the institution (Wyatt, 2011). When asked about opportunities to interact with local students, CUC students returned a 58% positive result, compared to the QILT national average of 56%, and a QILT external, regional student average of 21%.

The QILT results clearly show limited opportunities for regional students who are studying externally to interact with other local students, and a similarly low sense of belonging. The CUC facilities and staff create a learning community in regional areas, and opportunity for students to interact with other students. A testimonial from the most recent student survey summarises this:

[The best thing about the CUC is] … the support from staff, connecting with other students in the same study situation. Before CUC I felt very isolated as an external uni student, it was hard for my family and friends to understand the demands of full-time external study so it was a breath of fresh air coming into the center [sic] and being welcomed and surrounded by people in the same situation!

Emotions

The second aspect of student engagement identified by Kahu and Nelson (2018) is academic emotions. In the context of the student engagement interface, positive emotions, such as interest in course content, led to motivation and enthusiasm, whereas negative emotions such as anxiety, boredom and frustration became significant barriers to learning and student engagement (see also Griffiths,
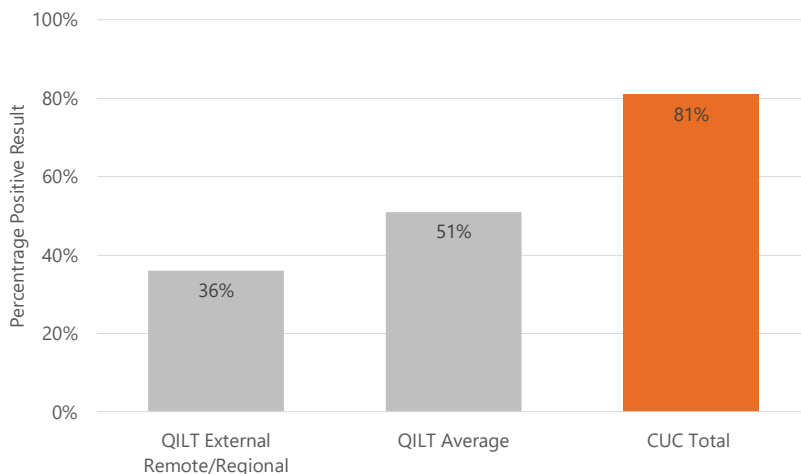
Figure 5. Sense of belonging, CUC survey results compared to QILT (QILT 2016)

Winstanley, & Gabriel 2005; Kahu 2014)). For the CUC cohort, frustration is often triggered by difficulties with technology, online university portals, and unfamiliar university administration processes or terminology. Unreliable or slow internet connections add to these frustrations:

> … if the internet connection available is substandard (which it is where I live) the very method I am required to learn becomes the greatest frustration and hindrance on how well I can complete assignments.

The CUC tackles the issue of connectivity by providing a high-speed internet connection in every centre- typically 100 Mb/s symmetrical.

Anxieties and frustrations felt by students around navigating university portals or administration processes are addressed by support from the centre managers. A significant portion of this role includes assisting students in these tasks, especially for mature-aged students who may be new to study or returning after a significant break. Students were surveyed on receiving support to settle into study. The CUC students overall returned a 67%

positive result. The national QILT average was a 58% positive result, with a regional, external student average of 61%.

Self-efficacy

Self-efficacy is an individual's belief in their innate ability to achieve goals. Self-efficacious students are motivated and engaged in learning, which promotes confidence as learners. This motivation, engagement and confidence leads to academic success, which in turn, further increases engagement and confidence. Conversely, low self-efficacy can lead to reduced engagement and poor retention (Schunk & Mullen 2012). Kahu and Nelson (2018) suggest that self-efficacy may be one of the key mechanisms that could cause non-traditional students to be less engaged.

Self-efficacy is addressed by the CUC through student support from CUC staff, creating a learning environment where student-to-student interactions can take place and providing tools such as one on one tutoring to increase the student's academic capabilities and confidence in their abilities. The CUC student

survey (2018) revealed that 97% of CUC students felt the CUC helped to improve their academic results. This feeling of improvement is a positive signal that the CUC facilities, staff and learning environment positively contribute to student efficacy. Student testimonials further provided evidence:

> Since joining CUC my grades have improved and I have maintained a distinction or higher. I have also been a lot happier in myself as I have a space where I can study, be supported and connect with other like-minded students in similar situations and this has motivated me to study.

An example of successful student support, addressing both negative emotions and self-efficacy, is presented through the case study of CUC Far West Student, Leise. This student is studying towards a Bachelor of Education by distance education, on a part-time basis. She is the first in her family to study at university level, over 25 years of age, and resides in a low SES region. She entered into study based on a previous qualification - a Diploma of Early Childhood. Her bachelor's degree is her first experience with online learning. During her first semester she experienced high levels of stress, difficulty coping with the workload and balancing study with life factors. She experienced diminished self-confidence through poor grades in first semester. Her academic issues included problems with structuring assignments and referencing, and difficulties navigating university portals. The CUC Far West Centre Manager and Academic Advisor were able to provide the student the following support:

- Assistance with study skills, including one-on-one tutoring;

- help navigating the university learning portal;

- assistance with planning, and discussing the number of units she may be able to practically take on each semester;

- pastoral care; and

- assistance in applying for extensions and special considerations where appropriate.

Leise improved her grades from almost failing in first semester and considering withdrawing from study, to gaining high-distinctions in second semester.

Student well-being

As discussed above, regional students cite financial difficulties, health or stress, workload difficulties and study/life balance as the most common reasons for considering leaving university early (Edwards & McMillian, 2015). For many regional students, attending university means relocation to a metropolitan area. In addition to the cost of relocation, there are increased costs of living (compared to regional areas), without the option available to many metropolitan students of reducing costs by residing in the parental home.

The CUC provides a supported study option for students who choose to remain in their regional town, whether for financial reasons, lifestyle, work or family commitments. These students can retain their existing support networks in their community, including family and friends. Additionally, centre managers can provide pastoral care to students and assist them in coordinating with further professional support such as counselling as required. A realistic understanding of study load can be vital for part-time students who are also balancing work and family commitments. Centre managers support students in understanding what this work load may be.

Conclusion

Regional study hubs have been demonstrated to improve student engagement for regional students facing high first-year attrition risk factors. For each of the four mechanisms of

engagement presented by Kahu and Nelson (2018) the CUC was able to improve student outcomes. Sense of belonging was facilitated by creating a space to encourage student-to-student connections, as well as hosting educationally purposeful activities at the CUC centres. CUC staff assisted students to resolve causes of frustration and anxiety through providing assistance with unfamiliar university processes and administrative tasks, and ensuring students are supported to settle into study. High-speed internet connections in the regional study hubs removed a further source of frustration for students where poor internet connections interfere with online study. Self-efficacy for students was improved through access to academic support and pastoral care. Student well-being was maintained by creating an opportunity for regional students to remain in their home towns, and retain their family, friendship and community support networks.

The CUC network provides a practical opportunity for regional students to remain in their home towns and still be successful in their studies. The facilities and support structures of the CUC and regional study hubs increase student engagement, which in turn will improve student retention and success. Further work will continue to monitor the impact of regional study hubs, including success in higher education, integrated workforce pathways and local high value jobs, and local academic and professional networks for regional towns.

Project Team:

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