

Enhancing Academic Achievement in Online Open Education

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There is a wealth of both anecdotal and sound research evidence which demonstrates a clear link between a student's engagement with their learning community and their academic outcomes. Having a sense of connection and engagement with the institution, through their contact with lecturers, fellow students, other university staff, can make all the difference between persistence and academic success; and disillusionment, disappointment and abandonment of studies. With the expansion of online studies, an additional challenge for all of us working with tertiary students is to develop and implement strategies through the use of appropriate technology, by which students can be successfully engaged and supported. This paper discusses some of those challenges for the Student Success and Support Services team at Open Universities Australia and the strategies being developed in order to meet them.

Introduction

Enhancing academic achievement is a goal that all of us involved in education strive to meet. Each of the authors of this paper has had close contact over many years with students in different settings, from many diverse backgrounds and of all ages. It is through this close contact that we have been constantly reminded of the importance of students feeling a sense of belonging and connection with the learning community. Hand in hand with this goes the need for appropriately targeted and effective support – both academic and personal, to ensure that every student has the opportunity to reach their potential (Stone, 2000, 2004; Krause, 2005b; Tinto, 2009). How we can achieve this effectively in an online environment is a new challenge for many, as universities and other tertiary institutions move increasingly to online delivery.

Open Universities Australia

Open Universities Australia (OUA), which began as 'Open Learning' in Australia in 1993, is now the national leader in online higher education, with over 200,000 students having studied with it since it started operating. It is a company that is owned by seven Australian Universities, providing over 1400 units of study, and more than 170 qualifications from over 20 Australian Universities and other higher education providers. The list of providers and qualifications offered is growing each year, including those from the Vocational Education and Training (VET) sector.

OUA offers courses and units delivered online by its educational partners and affiliates. These include enabling and bridging courses, VET courses, undergraduate degrees and postgraduate qualifications. Qualifications are awarded by the particular university or tertiary institution which has provided the course of study, and these qualifications are identical to those awarded to on-campus students.

Online delivery removes many of the traditional barriers to higher education. Entry to nearly all units of study is open to all, requiring no pre-requisite qualifications. Students can choose to study a range of individual units, which may be based purely on interest, or can select those which will enable them to work towards a full degree program. Entry to a degree program can be achieved via the credit gained from units successfully completed. Some students also use OUA studies as a way to fast-track their qualifications. With four OUA study periods each year, students can gain extra credit by taking OUA units during the normal university vacation period.

OUA students can also apply for Fee Help, the Commonwealth scheme which allows deferred payment of fees in the same way as HECS (Higher Education Contribution Scheme), so that no money has to be paid up-front. Over 70% of OUA students use Fee Help to fund their studies. They can choose from a wide range of units and courses, including Arts & Humanities, Business, Education, Health, Information Technology, Law & Justice studies, Science & Engineering.

Who are OUA students?

OUA students come from all walks of life, including school leavers, mature workers, full-time parents and those who are unemployed.

Approximately 60% of OUA students are female and the majority is aged over 21 – therefore ‘mature-age’ by definition. The majority of students come from NSW, Victoria and Queensland, but every other state and territory is represented as well. Nearly 78% of students live in major Australian cities with most speaking English as their first language. Over 80% nominate professional development as their primary motive for studying. Nearly 70% are employed full time or part time, while around one in ten are in full-time home duties and a similar number is seeking work. Just under half come from families where neither parent has a university qualification and around a quarter are from the lower five deciles for socio-economic status as determined by postcode. Similar to the statistics in the higher education sector in general, around 5% of students identify as having a disability.

The statistics above indicate that OUA students can generally be considered ‘non-traditional’. Few come straight from school, the majority is mature-aged, a quarter come from the lower five SES deciles, around 40% are the first in their family to come to university, and they are all able to enter university studies through an open-entry environment. As such, OUA provides an important pathway into higher education for identified equity groups.

Importance of student engagement

So we know that OUA is an important entry point into higher education for many students from diverse backgrounds, and what we also know from other research is that the real challenge is effectively engaging and supporting such students so that they are more likely to stay and succeed. Definitions of student engagement vary slightly, but there is general agreement that it requires the investment and commitment of both the student and the institution, and that there are strategies which institutions can use to enhance engagement.

According to Krause and Coates (2008):

student engagement develops from the dynamic interplay between student and institutional activities and conditions” (p.494).

Vicki Trowler, in her review of the literature on student engagement on behalf of the UK Higher Education Academy, summarises the character of student engagement in the following way:

Student engagement is concerned with the interaction between the time, effort and other relevant resources invested by both students and their institutions intended to optimise the student experience and enhance the learning outcomes and development of students and the performance, and reputation of the institution. (Trowler, 2010, p.3).

Data from the AUSSE (Australasian Survey of Student Engagement; ACER, 2008a, 2009, 2010) informs us that amongst students in Australia and New Zealand, engagement with the learning community is closely linked with student satisfaction and success. This is consistent with the findings from the NSSE – the National Survey of

Student Engagement that began in the US – as well as an international body of research, such as that by Kuh and colleagues who find that “Student engagement in educationally purposeful activities is positively related to academic outcomes” (Kuh, Cruce, Shoup, Kinzie and Gonyea, 2008. p.555).

We also know from the results of these surveys that access to and use of support services makes a positive difference. There is a clear correlation between the use of support services and student departure intentions. Those who have seriously contemplated leaving are less likely to have accessed these services (AUSSE Research Briefing, June 2011). Such findings are also consistent with other international research in adult education (e.g. Couvillion-Landry, 2002; Krause, 2005a; McGivney, 2006, Skilbeck, 2006).

To highlight but one of these, Skilbeck’s (2006) UK study identifies ‘a range of support services’ as one of the key factors contributing towards ‘good practice’ in adult learning.

Value of support mechanisms

Tinto’s work in the area of student retention over many years also points to the impact of support on positive academic outcomes. Support is a condition that promotes student retention. Research points to several types of support that promote retention, in particular academic and social support. (Tinto, 2009). Forging positive connections with teaching staff and fellow students has also been demonstrated internationally to play a significant role in student satisfaction, persistence and academic success (Coffman & Gilligan, 2002; Quinn, 2005; Skahill, 2002/2003).

According to Skahill (2002/2003) “the most important criterion for staying in college is the student’s social support network” (p. 39), while Rendon’s (1998) work with mature-age and other non-traditional students in American colleges indicates the importance of “validation, when faculty, students, friends, parents and spouses made an effort to acknowledge these students and what they were trying to achieve” (p. 3). Kuh et al. (2008) find that there is a “compensatory effect” (p.555) of student engagement for students who are “academically unprepared or first in their families to go to college” (p.555), in that such students, when engaged, perform better academically than expected, in comparison to more advantaged students, as well as demonstrating persistence through improved retention.

Mature-age student experience

Research with Australian mature-age students (Stone and O’Shea, 2012) who are the first in their families to come to university (and who, as we have seen, form a significant cohort within OUA) demonstrates that establishing positive connections with others, such as lecturers, friends and fellow students, library staff, and others on campus, including those working in the cafeteria and the bookshops, played a major role in their determination to persist with their studies, despite the many pressures of time, money and family issues. Another important factor is the presence and use of free, well-resourced and easily accessible support services. “Easy and free access to [support] services is clearly of high importance in terms of supporting students to stay and succeed” (Stone & O’Shea, 2012, p.95).

Challenges for engagement

But how do teaching staff and support staff connect with students in a meaningful way when we never see them face-to-face? And how do we help students to connect with each other when they never come together as a group? And to complicate matters even further, how do we successfully help them to feel connected to and part of a learning community, when they are often studying across two or more different institutions?

We know that student and staff interactions are highly important in student learning (ACER, 2008), particularly for non-traditional students, and that initiatives such as student mentor programs are recognised nationally and

internationally as contributing significantly to student satisfaction and retention (Dearlove, Farrell, Handa, & Pastore, 2007; Erskine, 2000; Krause, 2005b; McInnes, James & Hartley, 2000; Stone, 2000). So, how can we make this work in an online environment and ensure that we are sufficiently engaging students in order to enhance their academic success?

OUA Engagement & Support

OUA relies on educational technology to engage and support its students in a number of ways. Strategies and initiatives which offer academic preparation and support currently include:

Enabling Units

- PREP 01 – Preparing for University Learning (10 weeks)
- PREP 02 – Preparing for e-Learning (self-paced, open all year, 26 weeks)
- PREP 03 – Preparing for University Learning (Intensive) (3 weeks)
- PREP 04 – Preparing for Academic Writing (6 weeks)

These units are offered and taught directly by OUA. They were developed in 2010 as part of the Pathways & Transition Project in order to enhance the engagement and retention of OUA students. They have undergone significant review and re-design in 2012 and are designed to prepare students for study at OUA, assisting them to develop the academic skills required for successful online study. Encouraging more students to begin their studies via the Enabling Units is likely to improve their academic success in their subsequent accredited units. In fact, not only do enabling units help students learn and/or sharpen their academic skills, but they also allow them to practice with Web 2.0 technology that will be useful for subsequent online studies. The curriculum of enabling units combines a range of interactive individual and group activities, such as quizzes, WIKIs, workshops, lessons, glossaries, and polls, with the structured approach provided by experienced online tutors via electronic communication, interactive classrooms and virtual whiteboards.

OUA data modelling clearly demonstrates that success in a first unit of study is the most significant predictor of future enrolment and success in further units. Offering an appropriate, affordable and high quality range of Enabling Units is the important first step in improving student retention.

Tutorial Support through Smarthinking

Smarthinking is a US based service that provides access to online tutoring on a 24 hour per day, 7 day per week basis. Through this portal, students can use a variety of services, which includes the Online Writing Lab, where they can submit a draft of assignments for feedback and advice. Students can also submit questions to tutors who will respond within 24 hours, or participate in synchronous or asynchronous discussion with tutors in a wide range of subject areas.

Both synchronous and asynchronous tools, with the exception of the Online Writing Lab, make use of Web 2.0 technology, specifically an electronic interactive whiteboard, which allows for maximum interactivity and stimulates the students' active participation in the construction of learning. By engaging with Smarthinking, not only do OUA students gain confidence in regular online application forms and file transfers with the OWL, but they also explore new avenues for live communication that erases the physical distance between the interlocutors and strengthens the student-tutor and student-student relationship. The benefits of these virtual interactions can be seen both at technology level, with an improved level of user confidence, and at academic level, with students clarifying their doubts in a stress-free and relaxed environment.

Readiness for online study

Launched at the end of 2011, this is an online assessment tool, to assist prospective students to understand what is required for online study and how to prepare themselves for this. In conjunction with this is an online Career Advisor tool, to help prospective students decide what they would like to study, depending on the career path they may wish to pursue.

The Enabling Units can be particularly recommended via this tool as a pathway to successful OUA study, particularly for those students who may find themselves assessed as 'almost ready' for tertiary study online by the Online Readiness tool.

My Study Centre

"My Study Centre" developed in 2012, brings students together, by providing them with an opportunity to create a profile, connect with 'Study Buddies', track their enrolments and results, set up a study calendar, and generally take an active role online in their academic progress. Only recently introduced, "My Study Centre" is attracting tens of thousands of students to the site, with nearly 30,000 visits in one week.

Engaging with students via social media

The use of social media, in particular Facebook and Twitter, is increasing, with OUA reaching out to students via the OUA Facebook site and Twitter feeds and responding to student posts with timely information and discussion. Students are increasingly setting up their own Facebook sites within their classes, indicating that they are looking for more connection via these types of social media. Best, Hajzer, Pancini and Tout (2011) talk extensively about the ever expanding role of social media sites in the learning experience. They shed light on the nature of such interaction, which has predominantly operated in a peer-assisted learning environment rather than a vertical, more traditional tutor-student relationship. As educators, we need to be asking ourselves how we can stimulate the use of such student-focussed learning resources more proactively and effectively.

The participation of academic staff in Facebook and, by extension, other social networking study groups poses questions of 'boundaries and identity management' (Best at al., 2011, p. 25). How to assist students in a realm that is still regarded as exclusively their own is therefore problematic. Peer-mentoring programs and specific study groups delivered via social networking tools do however have the potential to engage students both academically and socially.

Student Counselling

The OUA Counselling Service currently offers distance counselling not only by the traditional telephone, but also via Skype, which is being increasingly taken up, particularly by those students who are living overseas. Our next step with the Counselling Service is to move into secure e-counselling and live chat, so that students can genuinely be offered an online counselling service, in both synchronous and asynchronous modes. Initial investigation of the appropriate tools for this is underway, with the intention of introducing this later in 2013.

OUA Student Engagement Cycle

Students who consider beginning their learning journey with OUA are at the starting point of a cycle, which continuously repeats itself. At each point of this student engagement cycle, there are possibilities for using technology to connect and engage with students in ways that will enhance their overall learning experience and their academic outcomes.

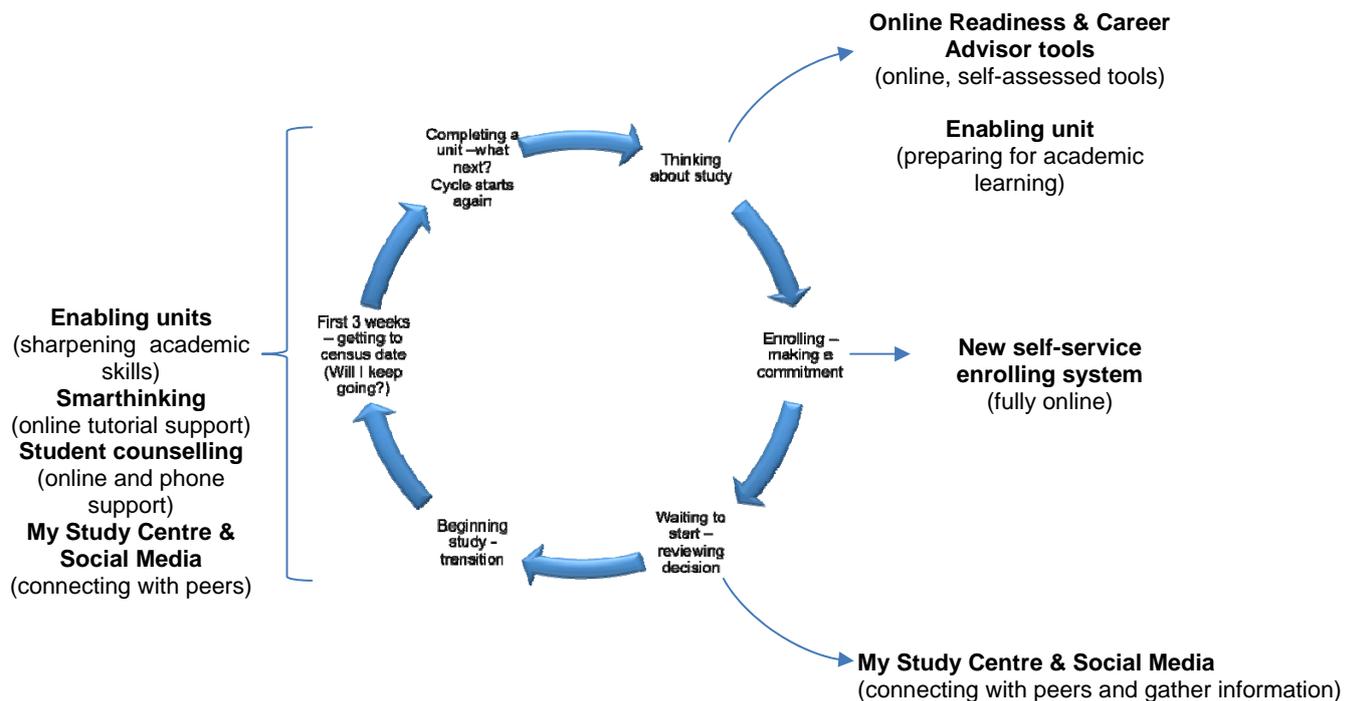


Figure 1 – Student Engagement Cycle

Online Learning need not be a barrier to effective engagement

A research briefing from the AUSSE (ACER, 2008b) indicates that online learners are not necessarily less engaged with their learning and their institution than the on-campus students. Many would argue that it is the development of an identity as a student, and a sense of belonging to the learning community, which are the prerequisites for student engagement (Jackson, 2003; Kuh et al., 2005; Krause & Coates, 2008). This development can be encouraged and facilitated whether the student is studying online or face-to-face. However, the challenge in achieving this is arguably greater with online students, and this challenge is further increased for ‘non-traditional’ students, such as first-generational students and students from low SES backgrounds, who may be more likely to experience higher educational culture as alienating. For instance, Mann (2001) likens the experience of non-traditional students to that of being “a stranger in a foreign land” (p. 11). This is where the effective use of learning technologies can and do make a significant difference.

Impact of OUA Online Academic Support on academic achievement

Analysis of data gathered within OUA on the academic outcomes of students related to their use of our online academic support is demonstrating some very positive results.

Impact of studying an Enabling Unit

A 2012 analysis of pass rates of students entering OUA studies via an Enabling Unit, compared with those who entered straight into an undergraduate unit, found that new students who commenced their OUA studies with a preparatory unit were on average 1.43 times more likely to succeed in their first undergraduate units than new

students who started their studies with undergraduate units, as shown in Figure 2 (Lynch, Edlund, Atkins, Stone and Hague, 2012).

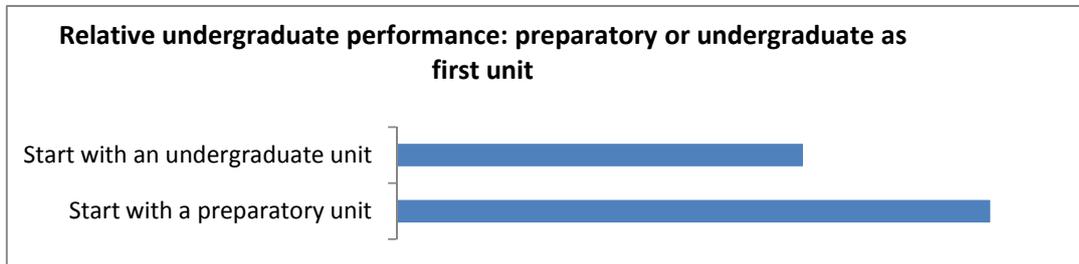


Figure 2. Relative undergraduate performance comparison

In addition, this study revealed that the students' levels of independence and engagement with their study materials were higher for students participating in an enabling unit; this also affected positively the students' performance in their subsequent undergraduate unit. Independence was measured in terms of enrolling methods; the proportion of students self-enrolling via the online channel was 1.95 times higher for students who undertook preparatory units. Engagement was measured by the students' level of activity within the learning management system (LMS) while undertaking a unit; this correlated positively with the students' likelihood of continuing their studies and also with their subsequent pass rates. Figure 3 illustrates the relationship between student LMS activity in undergraduate units and student performance (Lynch, Edlund, Atkins, Stone and Hague, 2012).

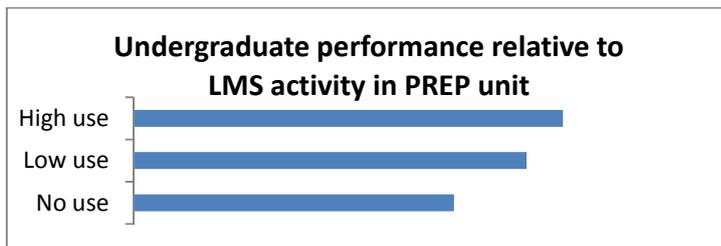


Figure 3. Undergraduate performance relative to LMS activity in PREP unit

Use of Smarthinking and academic outcomes

Data collected throughout 2011 demonstrates a clear correlation between Smarthinking usage and students' academic performance. Figure 4 below demonstrates that the pass rate for Smarthinking users was strikingly higher across the whole year, with very little difference between study periods.

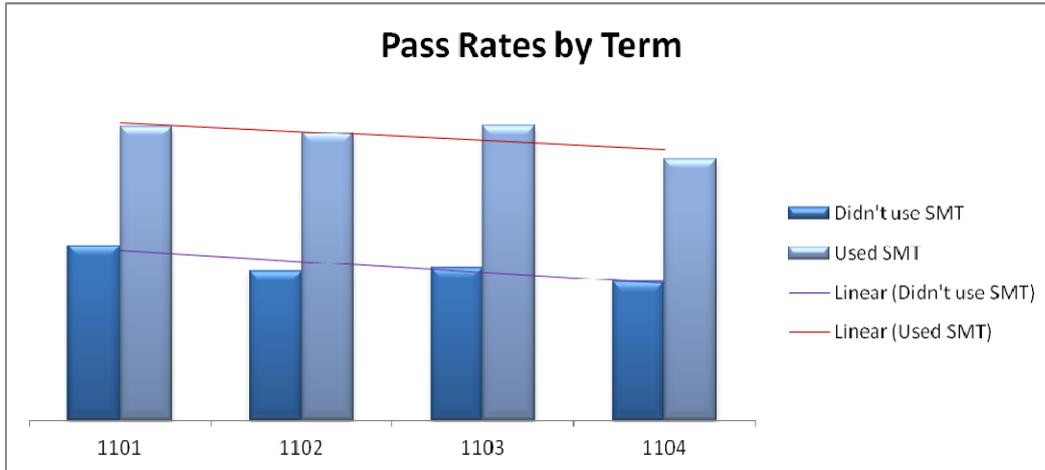


Figure 4 – Pass Rate by Term (2011)

As can be seen from Figure 5 below, the impact of Smarthinking usage on pass rates is particularly dramatic for those students undertaking their very first study period with OUA. The first study period is a crucial one in terms of student retention.

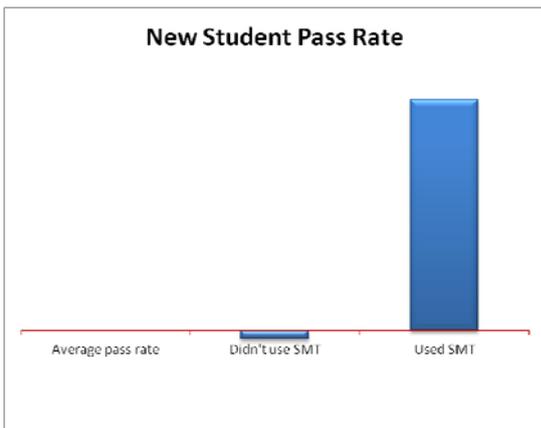


Figure 5 – New Student Pass Rate

In terms of actual grades, the incidence of High Distinctions and Distinctions was approximately double amongst the cohort who used Smarthinking compared with those who did not use Smarthinking (Figure 6).

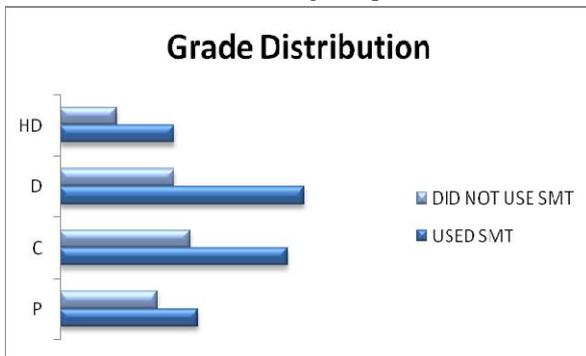


Figure 6 – Grade Distribution

Attrition rates of those who used Smarthinking and those who did not, were also measured against the average OUA attrition rate. Attrition is measured by the number of withdrawals from units after the start of each study period. This comparison demonstrated that non-Smarthinking users were slightly above the average attrition rate, whereas Smarthinking users were significantly below the average attrition rate. As can be seen from Figure 7, there was a much higher rate of completion of units amongst those students using Smarthinking.

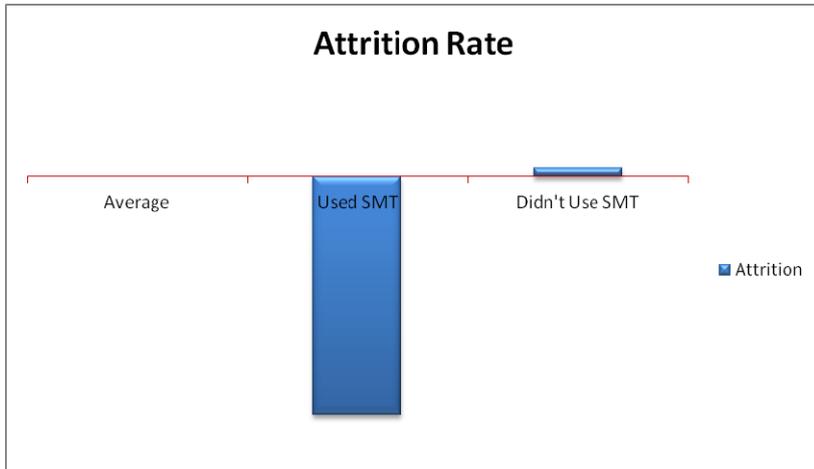


Figure 7 – Attrition Rate of SMT users versus non-SMT users against the OUA average

Conclusion

It is the responsibility of all of us involved in the education of online learners to ensure we have the means in place to encourage and support online students, to assist them to develop a sense of identity as students, to feel that they belong to the learning community, to remain engaged and connected with their learning and to achieve their academic potential.

The effective use of appropriate technology, both educational and social, plays a highly significant role in achieving these goals. As demonstrated, OUA is using a range of technologies to engage and support our students. Analysis of student data is providing us with clear evidence that our online academic support strategies are making a difference to students' academic achievement. In the words of Tinto:

Student success does not arise by chance. It is the result of an intentional, structured, and proactive set of strategies that are coherent and systematic in nature and carefully aligned to the same goal (Tinto, 2009, p.10).

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