Abstract

This paper reports on the findings of a “tertiary stage” intervention initiative conducted by the Faculty of Business at Charles Sturt University targeting “at-risk” primarily distance students. The aim of the intervention was to improve student outcomes for those students who were repeating a subject that they had failed previously via the provision of academic advice and guidance delivered over the telephone. Improved student outcomes could be expected to lead to improved progression and retention. Results of the investigation showed higher retention and success rates for students who experienced the intervention when compared with repeat fail students who did not receive the academic advice.

Introduction

Student success and retention have become increasingly important issues for higher education providers (Tinto, 1987, 2006; Kift, 2008; Nelson, Clarke, Kift, & Creagh, 2011). Aside from moral and ethical considerations around duty of care, low retention rates also result in significant loss of revenue to institutions (Simpson, 2004; Lowis & Castley, 2008). Retention rates in open and distance education have generally been lower in comparison with full time, internal study (Simpson, 2004). The Bradley Review of Higher Education in Australia in 2008 (Bradley, Noonan, Nugent, & Scales, 2008) and the subsequent uncapping of higher education places necessitated the widespread introduction of a number of intervention and support strategies in universities to assist students in remaining and succeeding in their studies. Wilson (2009) and others (e.g. Tinto, 1987, 2005; Simpson, 2004; Kift, 2008; Nichols, 2010) advocate the need for any intervention strategy to be part of a multi-pronged, systematic, whole of university approach. Wilson (2009) recommends institutions develop primary prevention strategies (early interventions to develop students), targeted or selective prevention strategies (i.e targeting particular at risk cohorts such as indigenous or international students), secondary prevention strategies (e.g. intervening if students fail to submit an assessment) and lastly, tertiary prevention (targeting students who have failed).

While early (i.e. primary and secondary stage) interventions are seen as more effective in student success and retention (Tinto, 1987, 2005; Kift, 2008; Wilson, 2009), tertiary intervention strategies targeting failing students should not be overlooked. This paper reports on the findings from a tertiary stage intervention strategy conducted by the Faculty of Business at Charles Sturt University (CSU) which consisted of academic advice in the form of a telephone interview. Students targeted for the intervention were those who were repeating a subject that they had failed at least twice previously. The aim of the intervention was to improve student success in their studies and thus improve student progression and retention.

Literature
Provision of academic advice and support is well recognised as an effective intervention strategy to: improve student success and retention (Terenzini & Pascarelli, 1980; Tinto, 1987); decrease time to completion (Tinto, 2005); improve the students’ feeling of being valued (enhanced self-efficacy); and enhance students’ ability to manage their studies (Moxley, Major-Durak, & Dumbridge 2001). Lowis & Castley (2008) even allude to a “Hawthorne effect” occurring as a result of interventions (i.e. students improving because someone is interested in them). Many early studies on the use of interventions focused on traditional on campus, full time, often residential students receiving face to face advice (Terenzini & Pascarelli, 1980; Tinto, 1987). Later studies investigated the benefits of academic advice for commuting students (McArthur, 2005) and distance students. For example, Shin (2010) demonstrated that institutional transactional support (i.e. contact, advice and support) delivered via telephone can be vital to academic success and course completion for distance education students. Simpson (2004) cites a number of studies (Rekkedal, 1982; Case & Elliot, 1997; Visser 1999; Chyung 2001) which used telephone calls, postcards and short messages as effective motivational intervention strategies to address retention in distance education environments. Similarly, Sweet (2011) found that telephone contact between faculty and distance students influenced student commitment and persistence. Nelson, Quinn, Marrington & Clarke (2011) found that the impact of a student to student intervention at QUT, when targeted at students with unsatisfactory academic performance, significantly increased the chance of these students being removed from the “at risk” list and of progressing to the end of the subsequent semester of study. However, in the majority of these studies the intervention was either a student to student intervention, or a primary, secondary or targeted prevention strategy. Our investigation sought to evaluate the effectiveness of a tertiary stage academic intervention in improving the success and retention of students.

**Methodology**

CSU is a regional university spread across 6 campuses. The majority of students (67%) are enrolled part time and study as online/distance students. Internal students are also increasingly enrolled in mixed mode (i.e. taking some subjects internally and others by distance). As mainly distance students, they tend to be time poor and face competing priorities with the majority having work and/or family commitments. The attrition rate for distance students within the Faculty of Business at CSU is approximately 35%. The distance mode of study and resultant lack of connection with a physical environment can reduce the feeling of belonging to the university. In addition, work and family commitments, time, loss of career direction, lack of connectedness and poor self-efficacy have all been identified as impediments to success at university (McArthur, 2005; Kift, 2008; Wilson, 2009). The hypothesis being tested therefore was: that the provision of academic advice delivered to distance students repeating a failed subject would result in improved outcomes for students and hence greater progression and retention rates.

Experimental design was utilised in the study to measure the effectiveness of the academic intervention (the independent variable). Student performance in their repeat fail subject could not be used as the dependent variable because during the process of intervention the student and/or academic staff member may have decided that the student should not continue with the subject. For this reason GPA was used as an indicator of success (Nelson et al., 2011b). The GPA of the students was recorded both prior to the intervention and at the completion of the subsequent semester of study. The study used a non-probability judgement sample i.e. all
students within the Faculty of Business who were enrolled in a subject that they had attempted and failed on at least two occasions previously (N = 199). Students were sent an email indicating that their Course Director would like to contact them to discuss their enrolment in the repeat subject. Students were asked to make contact with an officer to set up an appointment time for the telephone discussion. A follow up email was sent 7 days later to students who had not responded to the initial contact. If students did not respond by the deadline date identified in the second email, the Course Director then made a decision as to whether they should remain enrolled in the subject. Those students who did not respond to the intervention effectively acted as a control group for the investigation.

In total, 134 students (67%) responded to the email. A telephone appointment was then arranged and conducted with their relevant academic Course Director. As mentioned, the focus of the intervention was on the provision of support, advice and direction with an aim of retention and success. Students were asked to discuss their prior performance and any barriers which were inhibiting their ability to progress and succeed. Depending on their responses, students were then directed to support services, counselled about career aims and directions, and given advice regarding subject and/or course selection and progression. The student and Course Director finally made a decision as to whether the student should continue in the subject and devised strategies to maximise success.

At the end of the session, once results were finalised, all students who passed the subject were sent a congratulatory email. This was viewed as an important step in maintaining the perceived transactional presence and building self-efficacy.

Findings & discussion

The largest proportion of the students who received a telephone call had not progressed beyond first year (i.e. completed 8 subjects at CSU). The majority (60%) were studying by distance education with a further 31% studying as mixed mode students. Only 26% of students were enrolled in a full time load. The reasons students gave for their previous failure in the subject generally supported the findings in the literature i.e. that distance students face competing demands for their time in terms of work and family commitments (McArthur, 2005; Kift, 2008; Wilson, 2009). However, a significant finding was that students in the earlier stages of their study (first year) were more likely to report problems/dissatisfaction with their chosen course of study and were more likely to withdraw/cancel from their course and not transfer to another course of study within the faculty or university. This underlines the importance of this type of tertiary stage intervention in providing advice to students regarding their chosen course of study, subject selection and other discipline issues during the first year. Students in the later stages of their study (2nd or 3rd year) were more likely to report a problem which was preventing them from progressing and/or completing a specific subject. Health problems were only reported by a very small number of students in this study.

Table 1 summarises the results of intervention. Of the treatment group of 134 student, 47% (n = 63) showed an improvement in their GPA at the end of session. In terms of retention, at the end of the academic year, 9 out of 134 students (7%) were excluded from the university and a further 14 students (10.5%) withdrew from their course (and did not transfer to another course within CSU). Effectively, this means that 82.5% of the students (n = 111) were retained within the Faculty, including 18 students (14%) who transferred to a new course within the faculty. Subsequently, 23 students (17%) graduated (3 with a lower award).
By comparison, of the 65 students who did not respond to the email, 28% improved their performance at the end of session. By the end of the academic year, 45% of this latter group had been excluded from the university, withdrawn from their course of study or had abandoned their course, leaving 55% retained in the course.

<table>
<thead>
<tr>
<th>Total Sample size</th>
<th>Intervention (Treatment)</th>
<th>GPA improved 47%</th>
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<tbody>
<tr>
<td>199 students</td>
<td>134 students</td>
<td>Retention 82.5%</td>
</tr>
<tr>
<td>No intervention (Control)</td>
<td>65 students</td>
<td>GPA improved 28%</td>
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<tr>
<td></td>
<td></td>
<td>Retention 55%</td>
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Table 1: GPA and retention rates for treatment group versus control group.

Limitations & conclusions

The possibility that other factors such as a change in work, life or family situation may have influenced student performance cannot be excluded. The non-random nature of the groups also impacts on the validity of the study. A self-selection bias is also apparent in the group who responded to the email and experienced the intervention. It is arguable that this group were more motivated to perform well in their studies than the control group who did not respond to the emails.

Our study found a correlation between the provision of academic support directed toward failing students and improved academic performance and higher retention. This finding is similar to the results reported in Nelson et al. (2011b) that an intervention can positively influence the achievement and enrolment status of students exhibiting unsatisfactory academic performance. Thus, while it is acknowledged that early stage interventions are extremely important in addressing retention and enhancing the potential for student success, it seems that even late stage tertiary interventions can be beneficial to students and institutions. Further, the finding that students in first year were more likely to report dissatisfaction with the course than students in later years suggests that there may be different factors more likely to impact on success at different stages of a student’s academic life. This area was not a focus of our current research and needs further investigation. Overall, we believe that the intervention was a worthwhile activity which enabled us to re-direct some students to alternative courses, encourage others to focus on their career and work/life needs and even assist some to graduate or exit with a lower award.

Questions to Audience

What tertiary stage interventions has your institution developed? Have they been successful?

What other initiatives have been trialled with Distance Education students.
References


