Transferring a successful strategy for supporting accelerated nursing students from a small to a large cohort

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Abstract

In 2009 and 2010, withdrawal rates from a Pharmacology unit of accelerated QUT nursing students in the first year of their degree, were higher than for continuing students. The cohort of 216 accelerated students in 2011 had university or non-university qualification or equivalent experience and included domestic and international students. A previously tested intervention was introduced in 2011 to improve retention rates and support all Pharmacology students in their first year of nursing. The intervention involved a community website, on-line tutors and an “O week” workshop comprising information about library resources, effective learning strategies and learning tips from a previous student as well as review anatomy, physiology and microbiology lectures. Withdrawal rates for accelerated students in the Pharmacology unit improved and all students found the workshop and review lectures to be informative and valuable. The intervention was therefore successfully transferred to a large, diverse cohort of accelerated nursing students.

Introduction

Australian universities have introduced accelerated nursing programs in an attempt to decrease nurse shortages (Neil, 2011a). Students entering these programs are granted academic credit for prior learning in a related or an unrelated field or for equivalent life or workplace experience (Commonwealth of Australia, 2002).

Queensland University of Technology (QUT) offers a three year undergraduate Bachelor of Nursing degree at a campus in Brisbane and a small, low socioeconomic status (SES) campus in Caboolture, north of Brisbane. The university also offers a two year accelerated program at both campuses which allows students granted academic credit to enter this course at second year level.

The accelerated students at the Brisbane campus comprise domestic and international students with university or non-university qualifications or equivalent experience. In their first year they complete a second year level Pharmacology unit, together with continuing students that are in their second year of study; they also complete a Bioscience unit that was designed specifically as a first year unit for students with a limited or no background in anatomy and physiology. In 2009 and 2010, withdrawal rates for accelerated students in the Pharmacology unit were higher than for continuing students (Figure 1) or accelerated students in the Bioscience unit.

Neil (2011b) noted that a supportive faculty and student cohort and the acquisition of tertiary skills were important academic factors helping accelerated students complete their nursing program. Students’ confidence in their abilities to succeed in these intense programs was greatly assisted by faculty support (Cangalosi, 2007).
A group of faculty teachers successfully implemented an intervention to support and increase retention rates of a small cohort of 30 accelerated students at the low SES campus (Doggrell, Polkinghorne, Craft, Dallemagne, & Pavasovic, 2011). It was proposed that this supportive intervention be used to assist accelerated students at the Brisbane campus to complete some of their nursing units.

The aim of this study was to transfer a successful strategy for supporting accelerated students, from a small cohort to a large, more diverse cohort of nursing students, to improve retention rates and give support to the students in their first year of study. The withdrawal rates of accelerated and continuing students in Pharmacology and the accelerated students in Bioscience were noted for comparison.

**Methods**

*Community website*

For equity reasons, all students in the Bioscience and Pharmacology units were enrolled in February 2011, on the “Bioscience and Pharmacology for Advanced Standing Students” community website on Blackboard. The students had access to five folders: “Information”, “Getting Started”, “O Week Workshop”, “Resource Lectures” and “Ask Your Tutor”.

“Information”

This folder contains an introduction to and explanation of the activities available on the website.

“Getting Started”

This folder included eChapters on introductory concepts in anatomy, physiology and pharmacology. These were supported by a formative website activity in the form of on-line MCQ quizzes, with feedback for each correct or incorrect answer entered by the students.

“O week Workshop”

All students enrolled in the Pharmacology and Bioscience units were invited to a one day workshop in “O week” (Orientation), February 2011. Recordings of presentations were added to the “O Week Workshop” folder.

![Figure 1. The percentage of students who withdrew from the Pharmacology unit.](chart)

Transferring a successful strategy for supporting accelerated nursing students from a small to a large cohort, nuts and bolts.
“Resource Lectures”

Lecture notes and recordings of the review lectures given at the “O week” workshop were added to this folder.

“Ask Your Tutor”

Students had on-line tutor support for the first three weeks of semester. They could post questions or problems relating to their lectures and these were answered by a tutor using the “Ask your tutor” link.

“O week” Workshop and questionnaire

The workshop presentations included an introductory welcome, an overview of the rationale for the intervention, an introduction to the community website and a synopsis of QUT library resources. The students were given information about employing effective learning strategies to succeed at university and a previous nursing student, given academic credit, discussed how he “survived” the units. Finally two 2 hour review lectures, consisting of introductory anatomy, physiology and microbiology material, were presented.

At the close of the workshop, students were asked to complete a questionnaire to evaluate the presentations and lectures. The students responded to a number of statements using a 5-point Likert scale, with responses ranging from ‘strongly agree’ to ‘strongly disagree’. Students who completed the questionnaire entered a raffle to win either a Bioscience or Pharmacology textbook.

Follow-up Questionnaire

A questionnaire was sent by email to all students in the Pharmacology unit in week 11 of the semester and after their end of semester exam. Students were asked to submit comments and reflections on “Getting Started”, including the eChapters and on-line MCQ quizzes, and the on-line tutors.

Accelerated student numbers

Accelerated student numbers and details, including withdrawal rates, were obtained through QUT Virtual, an academic and administrative web portal, and the Student and Academic Management System (SAMS).

Results

Evaluation of interventions

“O week” Workshop questionnaire

One hundred students attended the workshop, however only 41 responses were obtained as insufficient questionnaires were available due to a greater than expected attendance. Most students “strongly agreed” or “agreed “that the information they received was informative and valuable.

Follow-up Questionnaire

Ten accelerated students responded to the questionnaire with their comments and reflections. Those that used “Getting Started” or the on-line tutors found them very useful, whether they
had prior anatomy and physiology knowledge or not. A few students did not use the website as they had sufficient prior knowledge or were not aware of its existence.

**Accelerated student numbers**

The number of accelerated students in the Pharmacology unit varied between 90 and 216 (Table 1). All students in the Bioscience unit were accelerated students. The accelerated students in both units were a diverse cohort of domestic and international students, with either university qualifications or non-university qualifications or equivalent life or work experience (Table 1).

<table>
<thead>
<tr>
<th>Year</th>
<th>Unit</th>
<th>No.</th>
<th>Domestic students</th>
<th>International students</th>
<th>University graduates</th>
<th>Non-university qualifications or equivalent experience</th>
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<td>50</td>
<td>50</td>
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</tbody>
</table>

*Table 1. The number of accelerated students in the Pharmacology and Bioscience units. A breakdown of the percentage of accelerated students with different backgrounds is also shown.*

**Accelerated student withdrawal rates**

In 2009 and 2010 the withdrawal rates for accelerated students in the Pharmacology unit, were 7% and 8.3% respectively; after the intervention in 2011 this decreased to 2.2% (Figure 1). The attrition rate of the continuing students in the Pharmacology unit varied between 1.1 and 4.1% over this three year period (Figure 1). The withdrawal rates for students in the Bioscience unit were 2%, 3.4% and 2.9% in 2009, 2010 and 2011 respectively.

**Discussion**

The “O week” workshop and review lectures were perceived by all those that attended as valuable and informative. The student responses to the end of semester questionnaire were very positive; however it was not possible to infer the value of “Getting Started” and the online tutors due to the small number of respondents. Sending the follow-up questionnaire to students earlier in the semester may have resulted in an increased response rate. Additionally the uses and advantages of the community website could be better advertised to the student cohort. Overall the feedback from the students indicated that the intervention, in particular the “O week” workshop and review lectures, was successful in supporting accelerated students in both units.

The Bioscience unit covered introductory anatomy and physiology material and was designed specifically as a first year unit for accelerated students with little or no background in anatomy and physiology. Withdrawal rates for accelerated students in this unit were very
similar in 2009 and 2010 and did not change in 2011 after the intervention as the unit continued to meet the needs of these students.

The withdrawal rates for continuing students in the Pharmacology unit also did not change; these students had already completed a first year unit of anatomy and physiology so had the pre-knowledge necessary to complete this unit.

The cohort of accelerated students in the Pharmacology unit comprised a large group of domestic and international students with university or non-university qualifications in a related or an unrelated field, or equivalent experience. This is a second year level unit that presupposes certain anatomy and physiology knowledge. However many of these students have no or limited prior knowledge of these topics which may have accounted for previous high withdrawal rates in 2009 and 2010. Support given by faculty teachers in this intervention will have assisted in giving students the necessary confidence to complete the unit.

In conclusion, the intervention was introduced at the start of 2011 and retention rates of accelerated students in the Pharmacology unit improved. Additionally the favourable student responses indicated that the accelerated students in this unit felt supported. The intervention was therefore successfully transferred to this large, diverse cohort of accelerated nursing students.

Questions

1. Can this intervention be used to support accelerated students in nursing courses at other universities?
2. Can this strategy be applied to other units or courses in Bioscience or Pharmacology or to other disciplines?

References


