

Improving perceptions of good teaching in large first year groups through peer assisted learning.

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Abstract

Peer assisted learning has been successful in improving student engagement, transition and student performance. However there is little or no evidence that peer assisted learning improves the perception of good teaching. This paper reports on the successful implementation of peer assistance that improved first year student perceptions of good teaching.

Introduction

Student evaluation of their university experience is now common practice in Australian universities (Dalton & Denson 2009). These evaluations are intended to provide first hand insights into the quality of university facilities, programs, courses and teaching staff. Various scores and scales have been developed to summarize and analyse student opinions on the ability of academic staff to teach, explain, provide feedback, show empathy with student issues and be enthusiastic and committed. Over the last several years, broad dissemination of such good teaching scores, and benchmarking the comparison of such scores between institutions and within disciplines, has meant that the evaluation of university teaching in Australia has become quite public. This paper discusses action taken to address persistently low teaching scores in a large first year accounting courses¹ at a Melbourne university. A peer mentoring initiative was introduced in 2009 to improve the first year experience of students and thereby attempt to improve low teaching scores in this course. The initiative, known as the Teaching Assistant Project, resulted in significant improvement in the teaching scores for semesters one and two 2009.

¹ The University involved in this project uses the term course to describe what may commonly be known as a subject.

Background

Since 2003, the student data gathered as part of the Course Evaluation Questionnaire (CEQ) and Graduate Destination Survey (GDS) processes has consistently shown that the accounting discipline, taken as a whole and compared to other business and non-business disciplines, receives relatively poor scores. This paper reports on the successful implementation of a peer assisted teaching and learning program that improved first year student perceptions of teaching practice.

The first year course used for this paper is Introductory Accounting. Like many first-year business courses Introductory Accounting has very high student numbers (which can be in excess of 1,000 students in a semester). The student cohort is complex and consists of diverse multicultural groups and students with prior accounting education and/or experience. Introductory Accounting does not require prior study of accounting. As a result some students will study Introductory Accounting with no prior accounting studies. All business students at this University are required to study this course. In addition, many students from other disciplines will study this course as an elective.

Amongst such broad cohorts, the rationale for any individual's decision to study an accounting course must be correspondingly diverse. Also, there would be a broad spectrum of learning styles, and a wide variation in the amount and type of personal interaction between staff and students required by and desirable for students. The values across which individuals differ included ethical perceptions, understanding of business practice, personality stability, ambition, career orientation, achievement focus, conformity index. The sheer numbers in the student cohort means that there must be an enormous spectrum of abilities and approaches in learning styles, prior educational experience, expectations and individual motivation levels. These factors are well known by accounting educators. Similar to numerous other academic discipline areas, accounting educators have investigated a broad range of factors that can impact on students' perceptions and ratings of their educational experience, including:

- students' personal skill in and preferences for different styles of learning (Gow et al. 1994, Beattie et al. 1997).
- the manner of academic behaviour (Trigwell & Prosser 1991, Griffiths, Papastrat, Czekanski & Hagan 2004, Jackling 2005).
- teaching methods used (Barnett 1990, Leveson 2004, Heikkila & Lonka 2006).
- variations in motivation of students (Geiger 1992, Baumgart & Halse 1999, Lucas 2001).
- institutional reputation and status (Caldwell 1997, Mok 2000, Beeson & Kissling 2001).

In the large-class course being discussed here, numerous teaching and learning initiatives had been tried over the last few years but none seemed to make a substantial positive impact on student evaluations of this course. This included the introduction of: help desks, problem demonstration lectures, on-line quizzes, non-assessable tests in the first few weeks, non-assessable hand-ins of tutorial work, providing suggested solutions to all tutorial problems at beginning of semester to allow students to immediately check their work and to do extra exercises, staggering the release of suggested tutorial solutions to encourage students to complete work prior to checking answers.

In the face of continued, low perception of teaching an alternative strategy was required. Clearly, while teaching staff had actively responded to issues raised in student evaluations, success in improving student perceptions of good teaching might require action not explicitly linked to staff-led changes. In line with this thought, peer-assisted learning was selected as the

initiative to trial and fund in an attempt to generate significant improvements for good teaching scores in this course.

Good teaching practice includes the total learning experience provided by Universities who provide a range of additional services above the scheduled program to improve student progress. However many students are reluctant to use these services as they have unrealistic perceptions of their own abilities (Darrock & Rainsbury 2009) or they do not seek timely help (Dembo & Seli 2004). It is likely that students who receive additional help without seeking it, or without a mature re-assessment of themselves, will benefit by embedded assistance.

Good teaching has been identified as a major issue to predict student satisfaction (Ginns, Prosser & Barrie 2007). However the use of peer tutoring as part of the perception of good teaching does not appear to be researched. Cor et al. (2007) showed that student accomplishment was related to both academic ability and satisfaction with their degree. Use of integrated peer assistance would be likely to improve both predictors of accomplishment, and, evidence of good teaching practice.

The value of peer assisted learning is well known. Boyd (2007) reported on the depth of research into social support theory that has been used to explain the advantages and success of student mentoring, while in a typography of peer tutoring, Topping (1996) discussed the depth and effectiveness of peer tutoring prior to 1996. In recent research, Van der Meer (2009) and Van der Meer and Scott (2008) pursued the changes in student perceptions with peer-assisted learning. This project looks at perceptions of good teaching when peer assisted learning is embedded into tutorials.

The University uses a survey to evaluate the student perceptions of all its individual courses- Course Evaluation Survey (CES). It is administered at least once every year. There are 20 questions with a five-point Likert Scale. It is generally based on the Graduate Destination Survey. Within the CES there are six questions to evaluate teaching. Student responses form the Good Teaching Scale (GTS).

The six questions are:

- The teaching staff are extremely good at explaining things
- The teaching staff normally gives me helpful feedback on how I am going
- The teaching staff in this course motivate me to do my best work
- The teaching staff work hard to make this course interesting
- The staff make a real effort to understand difficulties I might be having with my work
- The staff put a lot of time into commenting on my work.

Responses that either “agree” or “strongly agree” are accumulated from the six questions into percentages, out of all responses, to calculate the GTS. The CES contains one question on the overall satisfaction of the student with the course. It described as the Overall Satisfaction Indicator (OSI) and asks students to rate their satisfaction with the course. The GTS and OSI scores for 2006 to 2008 are reported in Table 1 and the GTS and OSI for the College2 are provided in Table 2.

² At this University the term College refers to what is commonly known as a Faculty

Table 1: Results of Good Teaching Scale and Overall Satisfaction Indicator in Introductory Accounting 2006-2008

| Results | 06 | 07 | 08 |
|---------------------|------|-----|------|
| GTS | 32% | 36% | 43% |
| OSI | 47% | 37% | 32% |
| Surveys Completed | 997 | 296 | 407 |
| Enrolment Numbers | 1141 | 953 | 1036 |
| Percentage Response | 87% | 31% | 39% |

Table 2: Results of Good Teaching Scale and Overall Satisfaction Indicator in the College of Business 2006-2008

| Results | 06 | 07 | 08 |
|---------|-----|-----|-----|
| GTS | 47% | 52% | 57% |
| OSI | 56% | 58% | 64% |

A comparison of Tables 1 and 2 demonstrates that students had a relatively low perception of the teaching and low satisfaction with the course as compared with the aggregated College results over the same period. It should be noted that the lecturers and tutors involved in this course were teaching and coordinating in other courses where the GTS and OSI was significantly better. This indicated that individual, teaching quality was not the issue. Also, a range of changes to the teaching practice and assessment regime had been introduced into the course without significant improvements in perception of good teaching. It was clear that a major change was necessary that resulted in additional resources being required.

Funding for improving the good teaching score in large courses was made available by the University. A proposal to use final year students as paid, teaching assistants to improve the student experience through use of student peers in teaching, was approved and implemented in 2009.

The Project

Teaching Assistant (TAs)

Four meetings were held with the coordinator and teaching team of Introductory Accounting to develop learning and teaching strategies to devise a proposal for funding to improve perceptions of good teaching. Strategies discussed included extra tutors in lectures to assist interaction; extra tutors in tutorials to provide more immediate assistance, reduced tutorial sizes, increase the number of lecture streams to reduce class sizes, and provide help desks and workshops. After much discussion the Teaching Assistant (TAs) project was agreed. A TA is a final year accounting student with a GPA of 3 or above (distinction / high distinction average) who expressed an interest in being part of the project. An initial email was sent to all final year accounting students who met the GPA requirement seeking an expression of interest. TAs were then allocated to specific tutorials and consultation hours based on their time availability. Each tutorial had a tutor and a TA.

Rationale for TA Project

The main purpose was to improve the student experience as evidenced by the GTS. The College provided student support but this tended to be focused on target groups, e.g.,

Improving perceptions of good teaching in large first year groups through peer assisted learning, Nuts and Bolts

international students. This project was to target all first year students. The underlying principle was to provide first-year students with a contact person who was interested in the individual student's welfare. Fellow students were an obvious choice.

The TA project required the TA to commit to a minimum of two hours a week for the entire semester. One hour was to be spent attending the tutorial and the other hour served a variety of purposes (explained later in the paper).

From its inception, TAs were regarded as part of the teaching team, and as such were required to attend the tutorials and to follow the instructions of the tutor. TAs assisted in various ways:

- they helped students understand course content and the application of theory to problem solving activities
- they worked collaboratively with the tutor to support teaching practice. For example the TAs may show workings for a practical activity on the whiteboard as the tutor explains the activity. This allowed the tutor to engage more directly with the students and was able to quickly assess students' understanding of the topic under discussion.
- as students were working on an activity in the tutorial the TA and tutor were able to interact with students offering assistance as required and developing a rapport with the students.

One of the TA duties for the second hour each week (the consultation hour) was to be available for student support. Students within each tutorial were asked if they would like to be contacted by the TA outside of class hours and those who agreed, provided a telephone number and times. The TA was located in a class room and available to assist students. If no students attended the consultation hour the TA telephoned students in their tutorial following up on their progress in the course and whether they were settling in to the university as a whole. The TAs were required to keep a log of their support activities which was used for further feedback to the course coordinator.

The teaching team believe the TA project would help improve student experience and the perception of good teaching as TAs are:

- accessible to all students regardless of whether they were good academically or struggling;
- available to new students to enable communication with final year students who understood first year issues and could help;
- embedded in tutorials with access and assistance outside of tutorials which provided both academic and social support and;
- offer new students the experience of seeing academics and students (TAs) work well together.

Development and implementation of the TA Project

Final-year accounting students with GPAs above 3 were invited to participate in the project. Over 60 students were contacted with 27 committing to be a TA. They were paid \$25 per hour for all work including training and attendance at meetings. A three hour training session was organised with both TAs and academics. During semester there were regular meetings with TAs and academic staff.

Findings and Results

CES Surveys with students were conducted in week 10 of a 12 week teaching semester. The project was successful as indicated by improvement in the GTS and the OSI in 2009. Table 3 reports the results of the CES survey in 2009.

Table 3: Results of Good Teaching Scale in Introductory Accounting 2006-2009

| Data | Introductory Accounting | | | |
|---------------------|-------------------------|-----|-------|-----|
| | 06 | 07 | 08 | 09 |
| GTS | 32% | 37% | 32.0% | 55% |
| OSI | 47% | 52% | 43% | 68% |
| Surveys Completed | 997 | 296 | 407 | 547 |
| Enrolment Numbers | 1141 | 953 | 1036 | 993 |
| Percentage Response | 87% | 31% | 39% | 55% |

There is a substantial increase in both the GTS and OSI for the IA course. Comparisons between 2008 and 2009 show an increase of 23% in the GTS and 25% increase in the OSI. Table 4 reports the results of the aggregated CES survey for the College in 2009.

Table 4: Results of GTS and OSI in College 2006-2009

| Results | 06 | 07 | 08 | 09 |
|---------|-----|-----|-----|-----|
| GTS | 47% | 52% | 58% | 58% |
| OSI | 56% | 58% | 64% | 63% |

Comparing the results for the college in Table 4 with the IA course in Table 3, the improvement in IA does not appear to be a college-wide trend but related to the individual course.

The teaching methods and assessment regime remained the same as in 2008. Two questions were added to the CES Survey regarding TAs. These are reported in Table 5 with responses.

Table 5: Results of Additional Questions on TAs-2009

| CES Question | Percentage who agree |
|--|----------------------|
| The TAs helped me with my work | 55% |
| The TAs helped me settle into University | 33% |

Student responses to the TAs was positive; 55% of students believed that TAs helped them with their work.

Discussion and Future Research

The success of the TA Project is an exciting teaching initiative. The responses of students, TAs, staff and many others indicates the fundamental approach of having fellow students mentoring each other is successful in improving perceptions of good teaching. Evidence to date, as indicated by the GTS, shows that TAs improve the first year experience of students, particularly when embedded in tutorials and having both informal and formal follow-up contact. Further research into the link with peer assisted learning and the perception of good teaching is needed as this study suggests a strong, positive correlation which would encourage

the transfer in funding away from teacher-led initiatives to peer-assisted learning. A significant issue is funding. The project was supported by a special university grant in 2009. The success of the project has been recognised and funding was again awarded in 2010. This helps meet the challenges outlined by Wilson (2009) in embedding a successful and sustainable first year programme that improves the student experience.

References

- Barnett, L J (1990), 'Power-Culture Dominance in the Academy'. *Change*, Vol. 22, Issue 3, pp.36-40.
- Baumgart, N & Halse, C (1999), 'Approaches to learning across cultures: the role of assessment'. *Assessment in Education, Principles, Policy and Practice*, Vol. 6, Issue 3, pp.321-339.
- Beattie, M (1997), 'Fostering reflective practice in teacher education: Inquiry as a framework for the construction of a professional knowledge in teaching'. *Asia-Pacific Journal of Teacher Education*, Vol. 25, Issue 2, pp.111-128.
- Beeson, S A & Kissling, G (2001), 'Predicting success for baccalaureate graduates on the NCLEX-RN', *Journal of Professional Nursing*. Vol.17, Issue 3, pp.121-127.
- Bond, D (2007), 'Student engagement in a first year accounting subject'. *Paper presented at AFAANZ conference 1-3 July, Gold Coast, Queensland*.
- Boyd, J (2007), 'From Lost to engaging in uni life: How a pilot student mentoring program is assisting first year students'. *Paper presented at the 2005 Pacific Rim_First year in Higher Education Conference, Queensland University of Technology*.
- Dalton, H & Denson, N (2009) 'Student evaluation: what predicts satisfaction?' *Student Experience, Proceedings of the 32nd HERDSA Annual Conference, Darwin 6-9 July 2009* pp.100-110.
- Darrock, A & Rainsbury, E 'When perception meets reality: helping students understand their need for learning support in a first-year accounting course'. *Student Experience, Proceedings of the 32nd Herdsa Annual Conference, Darwin Australia 6-9 July 2009* pp.561-566.
- Geiger, M (1992) 'Learning styles of introductory accounting students: an extension to course performance and satisfaction.' *Accounting Educators' Journal*, Volume 4, Issue1, pp.22-39.
- Gow, L, Balla, J, Kember, D & Hau, KT (1996), *The learning approaches of Chinese people: a function of socialization processes and the context of learning*, in Bond, M.H. (Ed.), *The Handbook of Chinese Psychology*, Oxford University Press, Hong Kong.

- Griffiths, M J, Papastrat, K, Czekanski, K & Hagan, K 2004, 'The lived experience of NCLEX failure'. *Journal of Nursing Education*, Vol. 43 Issue 7, pp.322-325.
- Heikkila, A & Lonka, K (2006), 'Studying in higher education: students' approaches to learning, self-regulation, and cognitive strategies', *Studies in Higher Education*, Vol. 31, Issue 1, pp.99-117.
- Jackling, B (2005), 'Analysis of the learning context, perceptions of the learning environment and approaches to study: a longitudinal learning accounting', *Accounting & Finance*, Vol. 45, Issue 4, pp.597-612.
- Kieran, P & O'Neill, G (2009), 'Peer-assisted tutoring in a chemical engineering curriculum: tutee and tutor experiences'. *Australasian Journal of Peer Learning*, Vol. 2, Issue 1, pp.40-67.
- Leveson, L (2000), 'A phenomenographic study of individual approaches to teaching in higher education', *paper presented to the Accounting Association of Australia and New Zealand*, Hamilton Island, 2-4 July.
- Lucas, U (2001), Deep and surface approaches to learning within introductory accounting: a phenomenographic study, *Accounting Education*, Vol.10, Issue 2, pp.161-184.
- Mok, K H & Lee H H (2000), 'Globalization or re-colonization: higher education reforms in Hong Kong'. *Higher Education Policy*, Vol.13, No.4, pp.361-377.
- Monem, R M (2007), 'Does access to tutorial solutions enhance student performance? Evidence from an accounting course'. *Accounting and Finance*, Vol. 47, Issue1, pp.123-142.
- Topping, KJ (1996), 'The effectiveness of peer tutoring in further and higher education: A typology and review of the literature'. *Higher Education* Vol.32, No.3, pp. 321-345.
- Trigwell, K & Prosser, M (1991) 'Relating approaches to study and quality of learning outcomes at the course level'. *British Journal of Educational Psychology*, Vol. 61, No. 3, pp.265-275.
- Van der Meer, J & Scott, C (2009), 'Students' experiences and perceptions of peer assisted study sessions: towards ongoing improvement'. *Australasian Journal of Peer Learning*, Vol. 2, Issue 1, pp.3-22.
- Van der Meer, J & Scott, C 2008 'Shifting the balance in first year learning support: from staff instruction to peer learning primacy'. *Australasian Journal of Peer Learning*, Vol. 1, pp.70-79.
- Wilson, K 2009 'The impact of institutional, programmatic and personal interventions on an effective and sustainable first-year student experience'. *Paper presented at the 2009 Pacific Rim First year in Higher Education Conference*, Queensland University of Technology Brisbane Australia 29 June-1 July 2009.

Nuts and Bolts Session

1. Introduction and Brief Discussion 10 Mins
2. Questions for Groups- 10 minutes
Sustainability of Project
Improved Communication strategies for TAs and students
3. Round up and Group Discussion 10 minutes