

A MULTI-INSTITUTIONAL TRIAL OF A PEER ASSISTED TEACHING SCHEME: POSITIVE CHANGES IN COURSE EVALUATION SCORES

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Abstract Summary: The Peer Assisted Teaching Scheme (PATS) provides a structured yet flexible approach to reinvigorating teaching practice in a supportive and collegial environment. This paper reports on the experiences of the multi-institutional trial of PATS conducted in five Australian universities and provides valuable information to academics and academic developers considering such a scheme.

Keywords: peer assisted learning, Professional Development, student evaluation

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A changing Higher Education environment

In the rapidly changing global higher education sector, providing a quality educational experience to students increasingly matters, particularly where massive and ongoing changes in the higher education sector have led to increasing sessional staff and increasing numbers of students from low socio-economic backgrounds (Devlin and Samarawickrema 2010). Students want quality teaching and with growing competition to attract local and international students, quality teaching has become a focus. Academic teachers have traditionally not received formal training in teaching, and although support for quality teaching and learning is increasing through centralised university schemes, these schemes are often criticised.

A recent Australian study suggests that just over a third of academics have never undertaken any form of training in university teaching (Bexley et al. 2011) and many academics are therefore left to learn to teach as they go (McInnis 1999).

Despite this, teaching quality is increasingly attracting attention from universities worldwide with many universities now looking for ways to ensure the quality of teaching and learning, through professionalising their academic teaching staff. Universities may place pressure on academic teaching staff to perform well in their teaching, as measured by student evaluations of courses (SECs), yet not always be well supported by their institution to ensure high quality teaching.

PATS: An approach to continual professional development

The Peer Assisted Teaching Scheme (PATS) is a new form of teaching and learning professional development for academic staff to enhance teaching quality. The scheme provides a structured framework to reinvigorate courses through collegial input and guidance via a process that incorporates goal-setting exercises, peer observation of teaching and analysis of informal student feedback. The process follows seven tasks that a teaching academic works through together with a knowledgeable peer. In addition, workshops covering various aspects related to teaching are offered during the scheme.

PATS was initially designed to address low student satisfaction with the quality of Information and Communication Technology (ICT) courses¹ in the Faculty of Information Technology at Monash University in Victoria, Australia. Demonstrated improvements in the level of student satisfaction with courses in the 2009 pilot scheme led to a trial of PATS across seven disciplines at Monash University in 2010, supported by an Australian Learning and Teaching Council (ALTC) Teaching Fellowship grant. In 2012, the Council of Australian Directors of Academic Development (CADAD) funded a trial expanding the scheme across five other Australian universities and in 2013 PATS was

¹ The term *course* is also called a *unit*, a *subject*, or (in New Zealand) a *paper*. The term *course* will generally be used in the remainder of this paper.

rolled out at twelve universities and two private higher education institutions nationwide as part of an Office for Learning and Teaching (OLT) funded National Senior Teaching Fellowship.

In this paper we describe the PATS process and present the following findings:

1. report on the changes in the course evaluation scores of courses before and after they were included in the PATS; and
2. outline common focus areas for course improvement.

Findings showed considerable increases in course evaluation scores in the majority of courses, suggesting that the teaching changes made by participants had a positive effect on actual student experiences. Teaching academics targeted a wide variety of areas for improvement. This experience of the multi-institutional trial of a peer assisted teaching scheme provides valuable information to academics and academic developers considering such a scheme to reinvigorate teaching practice and improve course evaluation scores.

The PATS process

PATS is open to all academics wishing to improve or reinvigorate their unit. The PATS process follows seven structured tasks that academics work through together with a knowledgeable peer before, during and after the completion of a semester. The process is outlined in Figure 1.

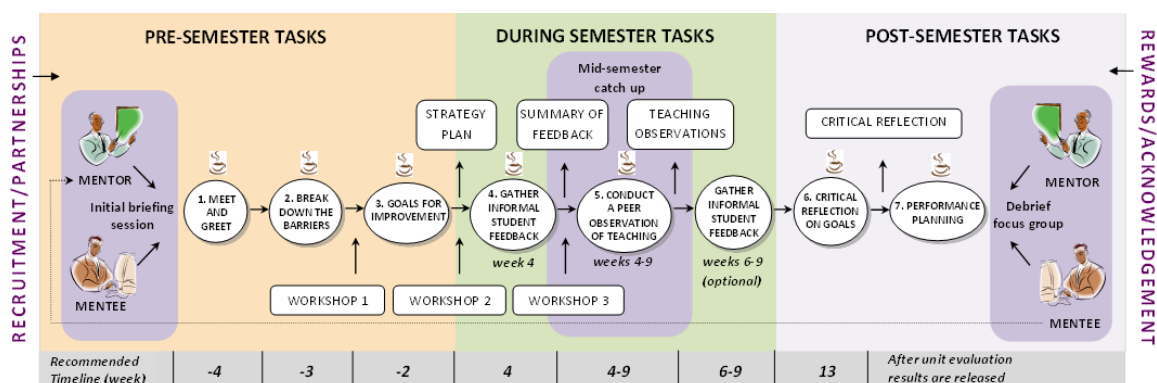


Figure 1 The PATS process (PATS 2014)

Participants meet with their peers throughout the process to discuss the seven tasks involved. Three of these tasks occur before semester starts, two during semester, and two after the semester is completed. In Task 1 'Meet and Greet' participants establish the partnership. Task 2 'Break down the Barriers' is used to focus on the barriers participants perceive are standing in the way of making improvements to their teaching. In Task 3 'Goals for Improvement' participants are asked to set goals and strategies to reinvigorate their teaching practice. In Task 4 'Informal Student Feedback' participants are asked to gather informal student feedback. Task 5 'Peer Review' invites both participants to complete a peer observation of teaching in. Task 6 - 'Critical Reflection' asks that mentees critically reflect on their teaching and course. In the final task, Task 7 - 'Performance Planning' participants are required to capture both the qualitative and quantitative changes in their performance as it relates to teaching improvement, educational leadership and education standing.

Changes in student evaluation scores

In the trial we report on here, five universities across Australia participated in the scheme: Monash University, The University of Newcastle, Griffith University, University of the Sunshine Coast, and Edith Cowan University. The results are drawn from 41 courses across these universities. Of the 41 courses, 26 courses had “before and after” data and were therefore able to provide comparisons. Our results show:-

- **Monash University:** Of the 9 courses, 7 had before and after data. In all but two instances, increases were recorded ranging from +0.3 through +1.9. In one instance a slight decrease was recorded (-0.1), and in one other instance no change was registered.
- **The University of Newcastle:** 7 of the 9 courses had before and after data. In all but one instance increases of between +0.4 and +1.2 points were recorded. In one instance, a decrease of -0.3 was recorded.
- **Griffith University:** 7 of the 12 courses had before and after data and all increased between +0.1 and +1.0.
- **University of the Sunshine Coast:** 5 of the 8 courses had before and after data and all increased by between +0.1 and +0.7.
- **Edith Cowan University:** Although none of the 3 courses had before and after data, the overall scores range from respectable (+3.3) to very high (+4.3).

The results of the student evaluations of courses which took part in the 2012 multi-institutional trial of PATS demonstrate widespread and sometimes considerable improvements after the scheme had been in place during a semester. In summary then, of all 26 courses with comparable before and after data, 23 (88%) showed an increase in SECs, with an average increase of +0.6. Two courses showed slight decreases in overall satisfaction scores while one course did not register a change. One further course did not receive a score due to too few student responses, although overwhelmingly positive student feedback was collected.

Educational focus areas

In order to understand how these positive changes in SECs came about, the areas that academics with positive SECs focussed on in their teaching improvement were explored. A thematic analysis revealed that academics focussed on seven main educational areas:

- **Teaching improvement** - centres on enhancing the academic’s own performance as a teacher and improving their skills, including technology proficiency.
- **Course enhancement** - addresses the course structure and content, the choice of topics and relevance of material to students, as well as the delivery method.
- **Better assessment** - three themes: the design and specification of the assessment task, the creation of a fair and clear assessment rubric, and the provision of quality feedback to students.
- **Engaging learning activity** encompasses in-class activities to promote student engagement.
- **More efficient administrative processes** - centres on the administrative aspects of teaching rather than pedagogy.
- **Relevant resources** - addresses the currency and relevance of resources supplied to students.
- **Student engagement** - aims at changing the students’ behaviour.

Through a high level of engagement and reflective practice in these key areas, academics' goals for teaching improvement were achieved resulting in the implementation helping both the students and the participants.

Conclusion

A peer assisted teaching program such as PATS offers an innovative and collegial framework where academics can assist each other in improving their courses by tailoring their efforts on educational focus areas that are in most need of attention. The trial reported on here shows how PATS was effective in raising overall satisfaction scores on SECs across five Australian universities. The SECs for the courses taking part in the 2012 multi-institutional trial of PATS demonstrate widespread and sometimes considerable improvements after the scheme had been in place during a semester with 88% of the courses with before and after data showing improvements in SECs and an average increase of +0.6.

The results presented in this trial then suggest an alignment between a teacher's efforts to reinvigorate a course and the resulting increased student satisfaction with courses and increased SECs. The improvements recorded for this peer assisted teaching trial will be of interest to academic teaching staff and academic developers more broadly as a way of fostering staff and student engagement in their courses and increasing SEC scores.

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