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Title Fair assessment of team assignments in business communication and architecture

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Abstract

In this paper we outline a successful teaching and research collaboration between two instructors with backgrounds in business communication and architecture, and a third former engineering instructor now working within a teaching/learning division. The team worked together to implement and research a pilot program which focused on students who used self and peer assessment (SAPA) software whilst working on a team assignment as part of their respective university courses. The SAPA data were then used to individualize student scores for their respective team assignment tasks. This paper starts by briefly describing the project before reflecting in more detail on the successful nature of cross-faculty team itself.

Conclusions are drawn to suggest explanations for the team's success which may provide helpful insights for other cross-disciplinary collaborations.

Key words: self and peer assessment, teamwork, groupwork, cross-disciplinary collaboration, cross-faculty collaboration

Within higher education, cross-faculty and cross-disciplinary collaborations are rare, no doubt largely due to the location of academics within discipline and faculty based structures. When collaborations do occur they are frequently problematic, even when the collaborators stem from closely related disciplines (Jeffrey 2003). However collaborations are increasingly seen as necessary in a world where real-life problems inconveniently tend to span disciplines, and within academe where the increasing need for greater specialization must inevitably reduce the range of any individual's skills. The following case study presents a reflective, ethnographic analysis of an ongoing collaborative project by a cross-faculty team which included a lecturer in business communication, a lecturer in architecture and a lecturer in teaching and learning, formerly from engineering. It has been published with the aim of contributing to the improved understanding of the structures and processes necessary for effective cross-faculty collaborations.

Outline of the Collaborative Project

The team is involved in a project evaluating prototype online self-and-peer-assessment (SAPA) software, originally devised during a three-year research program. The current project is piloted the SAPA model in a large business communication course and in three different architecture/building courses in a different faculty. A combined total of nearly 2000 students will be involved, whilst they participate in collaborative team assignments. Under the banner of 'Fair assessment and effective reflective learning', the project aims to determine the accuracy of the SAPA model; compare the benefits of different reflective components of SAPA across cohorts and disciplines according to differential experimental conditions; determine the nature and extent of collusive and thus unfair online peer assessment; and to evaluate the practicality and effectiveness of an online SAPA model for complex courses with large, multi-modal, multi-campus, multi-instructor enrolments. The total project is to cover three phases over three semesters, with the administration to students of voluntary

questionnaires designed to elicit their perceptions of team assignments. Data has thus far been collected for one semester and when completed will be analyzed statistically according to the different experimental conditions and student demographics.

Given our funding constraints, it was necessary to act quickly to gain ethical clearances enabling us to publish from our research findings and to introduce software refinements so that SAPA fitted the differential learning and assessment requirements of the different disciplines. Data entry processes were modified to save time and to enrich our capacity to draw analytical conclusions. Student teams were formed, students trained and entry questionnaires administered. Initially a small percentage of students, particularly those studying in off-campus mode, required individual assistance by an instructor or IT technician. The two course instructors displayed trust in each other's abilities to assist their own students and refer them to the technician when appropriate. Exit questionnaires were administered after completion of the team assignment tasks.

The Development of our Team

The project focused on student reflections of their team experiences, on acknowledging team processes in addition to team products and on the use of software to assist the fairness of subsequent assessment. Ironically, our own reflections of our collaborative research team emerged as constituting an unexpected, but nonetheless fascinating and highly valuable research outcome, our team experiences in many ways echoing those of our students. Despite our diverse disciplinary backgrounds and the need to resolve more than our share of unpredicted problems, our collaborative team proved to be both functional and effective, producing useful insights into the experiences of student teams and rich research data.

We began as a collection of individuals but became a team, whose members shared understanding and allocated first priority to team rather than individual goals (Schaffer et al.

2006). Despite the complexities of their physical separation on campuses located 100 kilometers apart, (Moore n.d.), we communicated frequently and successfully, and our team progressed through the five typical phases of team development.

Orientation. The three of us were introduced by a mutual colleague due to our common interest in the individualization of student grades within team assignments. We jointly applied for internal university funding to extend the project from architecture cohorts to include the large, complex business communication cohort. Agreement was reached that the architecture lecturer who had first initiated the project should be Project Leader.

Conflict. Once funding was granted the team needed to work quickly to make specific implementation decisions. It had originally been envisaged that within the large business communication cohort, teams might be given the choice of what type of feedback they preferred. Whilst constituting a clean experimental design, this option was considered unacceptable by their lecturer because it would result in incomparability of assessment. Further discussions produced the realization that the biases inherent in self-selection could skew the exit questionnaires and thus our research findings and that there were possible short and long term advantages to those students who were able to access their peer feedback throughout the life of the team (Topping, 1998).

Brainstorming. The experimental design was a pivotal issue with the potential to derail the entire project. However it forced the team members to recognize the importance of goodwill, and to think laterally and creatively to devise a new solution acceptable to all.

Emergence. The collaborative solutions created by the research team transformed the experimental obstacle into an improvement. The research project was extended by one semester to achieve three comparative cohorts: (i) SAPA with both quantitative and qualitative feedback; (ii) SAPA with no feedback; and (iii) no SAPA. Revising the program

resolved concerns of research integrity, funding restrictions and comparability of assessment. The team members were clearly developing trust and understanding.

Reinforcement. The project then continued swiftly and successfully. The two instructors gathered questionnaire data and implemented and managed SAPA with their different student cohorts, with the teaching and learning instructor monitoring our progress and offering constructive suggestions.

So we had indeed become a team. The next question to examine is just how effective that team was.

Was the Collaboration Effective?

At the end of the first four-month phase, our project was on track, on time and within budget. We had collected rich data from a large number of students regarding their perceptions of the assessment of team assignments, including feedback on their experiences with SAPA. and SAPA data was used to individualize student scores. During this first phase the team managed to produce three conference papers on different aspects of the project as well as an interim internal report.

A technical procedural error was then discovered which threatened both the continuation of the project and our ability to use the data already collected for external research publications. Phase two of the project was delayed for several weeks before this issue was eventually resolved. In hindsight the error had escaped our notice because we were such a successful team, pleased to have overcome our early experimental design dilemma, and delighted in the complex but smooth conduct of the project. Our twin objectives of working together harmoniously and achieving our research goals had caused us to experience groupthink and to suspend our previously more objective critical thought processes. Rather than serving as a source of implosion, this unexpected obstacle tested our collective resolve,

required us to reaffirm our common belief in the value of the project and to provide strong emotional support for each other through some extremely difficult moments.

Why was the Collaboration Effective?

As our team had functioned effectively, it may be helpful for others contemplating such a collaboration to consider the reasons for its success. These included our differential resources, skills and experiential contributions to the team task, as well as fundamental beliefs we clearly shared.

The architecture lecturer had spent several semesters devising and developing the SAPA software tool with his own students and had also published papers relating to his research findings (Tucker in print, Tucker & Reynolds 2006, Tucker and Rollo 2006). He also provided access to a server accessible to all students involved in the project and associated IT support. The business communication lecturer had presented a paper on effective team work (Fermelis 2006) but far more critically provided access to a large, complex, multi-campus, multi-mode cohort with multiple instructors. She provided practical suggestions for student preparation prior to their teamwork experience and communication enhancements to SAPA documentation and the software program itself, with the aim of granting students greater independence in using SAPA. The third member of our team provided expertise for ethics applications and also access to influential decision-makers within his teaching and learning division. The small size of our team also helped us to avoid the possibility of counter-productive cliques developing. Furthermore three members made it easier to maintain ongoing and effective communication.

The unifying bond between the three members was undoubtedly our common commitment as dedicated teachers. First, we were all highly reflective in our own teaching, accustomed to continually refining and improving the teaching/learning experiences of our students. Second we were united in demanding that assessment be fully integrated with

student learning. For a team assignment this meant assisting our students prepare for the interpersonal challenges associated with team assignments. Third, we wanted our team assignments to facilitate student development of their own teamwork and interpersonal skills, by encouraging them to reflect, to apply theory and to practise strategies. Fourth, we shared a belief in the need to assess teamwork processes in addition to the written product of that teamwork. Fifth, our wide-ranging prior teaching experiences had developed in us a strong recognition of the unfairness of all members of a student team receiving the same grade. We recognized the importance of students developing the skills to deal with team conflicts, but regarded it as simplistic, unreasonable and unrealistic to expect diligent team members to succeed in forcing lurkers to contribute equally to the team task. The sixth reason why our own team was so successful was that we wanted it to be. Working from the basis of respect, trust and goodwill, we were determined to succeed.

Conclusion

Cross-faculty teaching and research collaborations offer challenges to those involved. However, this paper suggests that stimulating experiences and unexpectedly valuable outcomes are possible for those instructors who take the time to discover each other and to seize upon opportunities to work together. Not only can such collaborations provide otherwise unattainable benefits to our students, they also offer the chance for instructors to expand own horizons beyond the limiting confines of our discipline-based positions within university structures.

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Biographical Information

JAN FERRELIS

Jan has made significant contributions to the strategic priorities of Deakin University. She has received university and national awards for her passionate teaching of business and academic communication, and her efforts to improve the learning outcomes of international students. In recent years she has worked to improve her research profile and has recently commenced doctoral studies in the area of intercultural business communication.

RICHARD TUCKER

Richard worked for five years in professional practise before completing his PhD in architecture in the UK. Although he is an Early Career Researcher, he has been awarded many research grants and teaching prizes and has already built an impressive publication record. He is particularly interested in architectural teaching and learning in relation to design projects and in collaborative research projects focusing on group design tasks.

STUART PALMER

Stuart has recently joined the Deakin Institute of Teaching and Learning following twelve years with the School of Engineering and Science at Deakin. He is an active researcher with a range of publications in the areas of online teaching and learning, assessment, group work and reflective learning. With extensive experience in quantitative and qualitative data analysis, Stuart has an enviable track record which encompassing many completed and successful grant-funded projects