OPEN ONLINE ASSESSMENT: KEEPING THE TUTORS HONEST!

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Abstract

Tutors often find it difficult to mark consistently across all students in their classes. Students will occasionally complain about marking inconsistencies noticed when they compare assignments. The task of maintaining consistency in marking becomes much more difficult when all students can openly see everybody's solutions, marks and tutors' comments. This task becomes even more difficult when the marking of tutors from other classes is also available to be seen openly.

This case study describes a learning environment that had four tutors in four separate classes with a total of 85 students. Students were required to post solutions to an online area and provide self and peer assessment to other teams' solutions, which may have been in other tutorial groups. The tutors then marked these, and comments and marks were openly presented for all students to examine and reflect on. This put a great demand on the tutors to mark in a consistent manner, and provide consistent feedback. Strategies used to help provide consistency and reliability are discussed, as well as problems encountered.

Keywords

E-learning, online assessment, peer assessment

Introduction

A challenging impact of the adoption of Information & Communication Technology (ICT) in tertiary education is the increased transparency that can be afforded to students with regard to assessment standards. While learning gains cannot be proved, many researchers remain optimistic about the positive educational outcomes of using technology within learning environments (Alexander & McKinzie, 1998; Collis & Moonen, 2001). They contend that "what can be claimed at a general level is that students experience new forms of learning, that instructors are making new types of contacts with their students and that new resources and types of learning activities are occurring". Other researchers would say that what determines the educational value of ICT is how it is used in practice (Schacter, 1999). Whether these new learning activities have arisen out of new curriculum approaches and can lead to innovative assessment practices is a matter of importance to online educators and instructional designers.

Seeking to optimise the potential of the information dissemination and collaboration tools available in the online environment, the authors have rediscovered strong motivators for developing rigorous objectivity and common understanding amongst tutors with respect to assessment of student work. This has come about in a mixed mode environment (face-to-face and online) where students in different tutorial groups are required to assess each other's work online and also encouraged to reflect on the marks allocated by their own, and other tutors to the various submissions. This strategy has resulted in much debate occurring amongst students as to the various constructions and the relative merits of peer contributions,

plus some unforeseen complications in student evaluation of the varying standards and requirements of the different tutors. The challenge faced by the tutors in this situation was to ensure consistency in marking and feedback, without having recourse to exhaustive cross-checking.

Case Study

IMM 3228 "Project Management Methodology" is a final year unit with a strong emphasis on collaboration, teamwork and practical activity, run in blended mode, with lectures, tutorials and online activities for both individuals and groups. This year, the unit ran with the 85 students divided at the outset into four different classes, each assigned an individual tutor. The classes organised themselves into working teams to develop a group project, typically an online multimedia product, over the course of a semester. Regular assignments build a suite of necessary project management materials while the teams worked towards the delivery of a real product.

The online component of the unit is accessed via a virtual Project Office (Figure 1). This portal provides access to unit information, detailed assignment requirements and marking criteria, lecture presentation slides and notes and a rich array of resources including tools, templates, web links, short streaming audio & video presentations, email discussion forum and noticeboard. These resources are organised into categories corresponding to project phases and project management tasks. Students are also required to submit their group assignments electronically through the online project office and are encouraged to use online personal goal-setting and peer performance review tools.

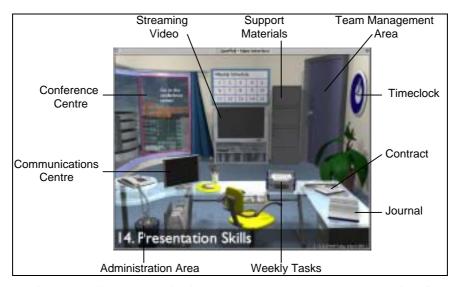


Figure 1: Virtual Project Office - a portal to learning resources, communication tools, submission upload and peer review

Once assignments have been submitted, the groups are allocated three other submissions which they must evaluate, comment on and allocate a mark (Figure 2). These student-allocated marks are not counted in the final marks but are used to promote reflection and analysis by the students themselves. Students and tutors reported significant benefit from the following process:

- Research and develop solutions for authentic problems. Support was through the weekly lectures, online resource centre ("Filing Cabinet" in Figure 1), textbook and readers. Solutions were required to
 be grammatically well structured, have the correct focus and content (quality of the facts and
 research), properly referenced and synthesised into a logical argument. Tutors would discuss the
 problems in class and also discuss each reading to help students focus on the required content;
- Post solutions onto an on-line area ("Conference Centre" in Figure 1) by a certain date/time. This included a self-assessment mark that ranged from (1) no or weak effort (2) poor or below average (3) ok or average (4) good or above average (5) excellent or high standard

- Assess the work of three other groups i.e. give marks and comments, the same as the self-assessment scale. The feedback and marks given here was anonymous, so students were able to give honest feedback without fear of offending peers. The peer assessment was stated as a course requirement in the syllabus, and students would be penalised if they did not complete it by the due date;
- Students would then receive feedback from three other groups (anonymous) and a mark and feedback from the tutor; and
- Students then had the opportunity to reflect on the solutions, marks and comments of all other student groups, and either post comments on the bulletin board, or approach their tutor about the allocated marks.



Figure 2: Marks assigned by tutor, peers and self, are visible to all

Comments received included: "We were unhappy with the mark we received until we reviewed team X's assignment and realised where we went wrong"; or "having reviewed team A and B we realised that our cost projections were quite weak and needed to be changed".

To help ensure consistency in marking between tutors, the course coordinator sent each tutor a copy of his marking and comments of the best and worst solutions in his group. Given the extensive volume of assignment submissions, it was not possible to conduct exhaustive crosschecking of marks between tutors prior to posting results. However, tutors did have a standard to which they marked, and also exemplars of comments given by the course coordinator. This helped tutors mark more consistently, as not only were they marking to the same assessment criteria and weightings, but also had a standard of work to compare with (Brown, 1994; Davies, 2000).

On occasion, students took issue with the marks allocated by different tutors to other groups on the basis that they too had assessed these assignments and they believed that inappropriate marks had been awarded. Inevitably these observations were made in the light of the mark allocated to them by their own tutor but they also had the effect of prompting the tutors to review their marking standards and endeavour to achieve a common understanding of the requirements and the standard expected.

Conclusion

The learning environment provided an open online assessment system that allowed all users to view solutions, marks and comments made by other students and tutors. This promoted reflective practice and many students often queried their results on comparing marks allocated by different tutors. While every reasonable effort was made to ensure consistency in marking between tutors, the transparency and ease of access provided by the online learning environment "kept the tutors honest" by allowing students the freedom to quickly compare solutions and allocated grades.

To help maintain consistency of marking, the course coordinator would firstly mark the work of his students, and then distribute it to the other tutors to help in establishing a marking standard. This helped in moderating marks and promoting consistency across the different tutorial groups, although students would often still make complaints. While this created extra work for the tutors and the course coordinator, it can be argued that positive educational value was obtained by implementing such a system. Students were able to self assess their own work, peer assess the work of other students and then reflect on how accurate they were by comparing assessments from other students and the tutor. Being able to obtain multiple perspectives to solutions given for the set problems and reflecting on comments and marks made by others is a key element of a constructivist learning environment, and can be argued helps students construct knowledge.

This model of assessment is new, and the authors believe that with further modification can be implemented in a more effective manner to help ease the workload on tutors, as well as maintaining consistency in marks.

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