PTAS Project Report   (for SMALL PROJECT GRANTS)

Project Title: Supporting Criteria-Based Marking

Principal Investigator : Paul Anderson
School / Department : Informatics

Team members : Susan Rhind, Anna Wood

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Brief Report (maximum 500 words)

What did you do?

- Made software and documentation freely available, including a PMark web service available to all University staff: https://ease.sweb.inf.ed.ac.uk/dcspaul/pmark/master/pmark.cgi/server

- Evaluated the software on three Informatics courses.
  Interviewed markers and mark-scheme designers.

- Evaluated the software on one vet course.
  Compared the criteria-based scheme with the existing additive scheme.

- Extended the software to provide a web interface & other features, including generation of "explanations", and online marking forms.

- Produced video on criteria-based marking literacy for students.

- Supervised two student undergraduate projects on aspects of the PMark software.

What did you find out?

- Working with explicit, detailed criteria forces the designer to think carefully about the assessment criteria and their relationship to the course objectives. This takes more time and effort than might be expected, but is a valuable exercise in its own right.

- Both staff and students can have difficulty in changing perspective to a scheme which non-compensatory. This requires "buy-in" from the staff, and explicit assessment literacy for the students.

- The software generally works well: the web interface, including the forms provides a compete marking workflow - it produces grades which are explainable in terms of explicit criteria, and supports large numbers of criteria, rules and students in a very flexible way. It avoids unwanted compensatory effects which occur when summing marks from large numbers of small criteria and

is capable of being more consistent and easier for markers to use than an additive scheme, particularly with large courses and multiple markers.

- The software is capable of identifying specific weaknesses in the results, both for individual students and overall cohorts, although the "explanations" for the resulting grades require care in their interpretation and presentation. It would be useful if the software were capable if identifying individual strengths as well as weaknesses.

How did you disseminate your findings?

- Talks in Informatics & the Vet School.
- Learning & Teaching Conference talk.
- Learning Technology Community talk.
- VetEd Conference poster.
- Two University workshops on PMark.
- Public web page with materials and service for University staff

What have been the benefits to student learning?

- Fairer assessments with marks which are explicitly related to the assignment objectives and more consistent, especially with large classes.

How could these benefits be extended to other parts of the university?

- The software and documentation are freely available (see above).

- A number of workshop participants have shown interest in using this approach and we expect there to be some use in other schools during this academic year.

- We would be prepared to consider further workshops & possibly to provide some support for any further applications or development.

Who can be contacted for further details?

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The University of Edinburgh

Principal's Teaching Award Scheme

Financial statement:

This project has utilised the funding awarded to it by the PTAS adjudication committee and the School Administrator (Fiona.Williams@ed.ac.uk) can provide financial statements showing the funding usage as and when required by the UoE Development Trusts who may require it for auditing purposes.

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