PTAS Project Report  (for SMALL PROJECT GRANTS)

Project Title: Enhancing Engagement with Media Hopper Replay – A Comparative Study

Principal Investigators : Dr Dave Laurenson and Dr James Hopgood
School / Department : School of Engineering

For further information, please contact: Dave.Laurenson@ed.ac.uk or James.Hopgood@ed.ac.uk

Grant recipients are expected to submit a brief report at the conclusion of their project which outlines briefly the following: nature of work completed; outcomes; benefits to student learning/student experience; dissemination activity (where relevant – actual and planned) and how the activity could inform future work or be transferred to other subject areas in the University. The brief report will be published on the IAD web pages.

Brief Report (maximum 500 words)

What did you do?
The study considered three courses within the same subject stream in Engineering, taught to three different years. One course was delivered in Semester 1 (DSA); the remaining courses (SAC2 and SAC3) were delivered in Semester 2.

In two of the courses (DSA and SAC3), the effect of a live demonstration of the system was evaluated by monitoring usage of the system prior to, and following the demonstration. The aim of this is to test the hypothesis that students are more likely to use the advanced facilities of Media Hopper Replay (MHR) if they are demonstrated to them than by learning the capabilities through experimentation.

The importance of sectioning (segmenting and indexing) lecture content was examined through two mechanisms: provision of a detailed summary and an index into the MHR content using timestamps for each lecture (SAC3); and segmentation of content into short (up to 12 minute) videos covering single topics uploaded to Media Hopper Create (MHC) (SAC2). The use of these was compared with DSA where neither approach was used.

What did you find out?
With regard to the first hypothesis, the results of the demonstration in DSA and SAC3 were inconclusive when compared with the third course, SAC2. While in DSA the live demonstration was well received, in SAC3 the students indicated that they were unlikely to use the advanced features. Out of a class of 90 students in DSA, only 2 made notes on lectures, with only one of them writing more than a few words. In SAC3, four students out of a class of 60 used the notes facility, with two of these writing more than a few words. In the control group, SAC2, no student used the notes facility at all. The result is that the notes facility, even when encouraging its use through demonstration, is only being used by a very small minority of students studying in this subject stream.

When considering flagging of confusing content, in SAC3 only 8 flags across all the lectures were placed in DSA only 7, and in SAC2 (the control group) one flag. Again, demonstration does appear to have some positive influence in uptake of the advanced features, however given the size of the classes, they are not being actively used by students.

We conducted feedback on the lecture sectioning by questionnaire for evaluating the appeal of different forms of content. Where no form of indexing was used (DSA), students indicated that the service was excellent to good, but when asked about finding material they wished to view rated it as good to average. For SAC2 and SAC3, where support for finding content was given, the comments on quality of the standard
MHR service and ease of use were marked down more, and were particularly negative when rating the ability to find specific content. These same students indicated that they found the indexing/segmentation of content to be a significant improvement. The perception of service quality is naturally coloured by experience, and it is clear that students who experience more segmented content find this significantly more useful, and as a result are more negative about the standard offering. These findings clearly support the hypothesis that the provision of segmentation or indexing is of benefit to the students.

**How did you disseminate your findings?**
We have presented the findings at a MHR open event which has been captured and published in MHC.

**What have been the benefits to student learning?**
Students have benefited from the division of material into smaller sections, aiding revision. The process of splitting the content was given to the students, so some of them also benefited from the act of summarising the material, and sectioning it into smaller chunks.

**How could these benefits be extended to other parts of the university?**
Where pedagogically appropriate, students can be used to divide up content and summarise material, however this would only cover a limited number of use cases within the University. In order to benefit a much wider audience, the University would need to invest in automatic sectioning/transcription services to support indexing, splitting, or summarising content within MHR.

**Who can be contacted for further details?**
Dave.Laurenson@ed.ac.uk or James.Hopgood@ed.ac.uk
Financial statement (please delete as appropriate):

This project has utilised the funding awarded to it by the PTAS adjudication committee and the Principal Investigator or School Administrator appropriate can provide financial statements showing the funding usage as and when required by the UoE Development Trusts who may require it for auditing purposes.

Please send an electronic PDF copy of this report to:
   Email: iad.teach@ed.ac.uk