E-galleries for Image, Audio and Animation Design Work: blending face-to-face critique with anonymous uploading to create student portfolios

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Case study overview
When undergraduate students are developing their skills in designing user interfaces to computer-based systems incorporating a range of media such as images, audio and animation, it is common to produce paper prototypes and for these to be used in formative evaluation with users and submitted in a portfolio of work for assessment. Systems thinking approaches have long advocated the use of drawings and images to facilitate communication about design (Checkland & Scholes, 1990) and, in pedagogic terms, reflective practice and peer evaluation are regarded as essential transferable skills that should be encouraged at an early stage in a study programme. The e-gallery was designed to allow students to complete weekly design tasks, upload them to a server, participate in a critique session the following week and use this constructive, critical feedback to revisit their designs. The portfolio of work was thus built up gradually throughout a semester.

Rationale
Creating and maintaining a culture of attendance at modules has been widely recognised as important in improving module results (Allen & Webber, 2006). In 2001-02 it was decided to introduce a single portfolio assignment for the level 1 module (15 CATS), MU104 Digital Media Design (referred to as MU104 hereafter), comprising a set of ten tasks representing particular design exercises. These were introduced in a lead lecture with the student work forming the critique session for the following week. This short timescale not only meant that the material was fresh in the students’ minds, but also that if a student was absent for one session, then there was relatively little impact on their progress in completing all the tasks.

Implementation details
The curriculum material was analysed into fairly distinct elements; for example, the initial elements were based on a set of simplified graphic design principles for the visual novice (Williams, 1994):
• alignment;
• proximity;
• contrast;
• repetition.

A simple design exercise was set in each of the first four weeks that gave practice at applying one, two, three and finally all four principles. These were set in a relevant context for the students, namely branding for a company engaged in website design that would need to work on paper and screen.

In the first week, the exercise was introduced in the first part of the session and the students spent the practical time using the software to apply the design principle to the content provided for a poster. They were then encouraged to complete the work during the self-directed time and use the upload facility on the module website to send their semi-anonymous image file to the server. The filename used was based on the student's university registration number that is known only to the student and appears on module lists. The tutors then reviewed the gallery content (usually about 60 in total) online and downloaded suitable images to illustrate potentially generic positive and negative points for the critique session.

In the second week, the students were divided into groups of four and discussed an image displayed anonymously on the large screen. In a plenary, comments were then elicited from the groups and summarised by one of the tutors with encouragement for all students to revisit their work in the light of what they had noticed about the design.

The use of student numbers in the filename had several benefits. Firstly, most of these students had no experience of peer critique and were understandably nervous of having their work 'judged' in this way, so the student number offered a degree of anonymity in the critique session. Secondly, if any technical problems were detected by staff, such as large file sizes or wrong formats, it was possible to email the student concerned and offer timely advice before any final submission of assignment work. This was much more efficient and effective in terms of ensuring that students submitted appropriate assignment work for assessment.

Figure 1: Activity process
Evaluation from students and External Examiners

The student evaluations have been very positive in terms of enjoyment of the module and the developing social network and its support for different generations. For instance, comments have included:

‘I liked time for the portfolio and the friendly atmosphere.’

‘The lab sessions were useful for sharing ideas and enhancing skills.’

‘The extra time for uploading was great as I could do it (upload) from home. I have family responsibilities and it’s hard to come in every day.’

There was evidence of a growing level of reflective thought, for example:

‘I wasn’t sure at the start what the standard was for our work but the crit sessions helped me understand as we went along.’

‘I have learnt to think about the layout of my work more using the design principles.’

Staff noted an improved rate of assignment submission compared with a parallel module with two coursework assessment points. It has also been noticeable that the standard of presentation of written work has improved in all assignments for students who have completed this module.

Conclusions

This activity and similar ones have been used at all levels of the undergraduate Multimedia Degree programmes where 2-D or 3-D designs, animations, audio presentations or videos form part assignments. In the final year, students develop potential designs for the electronic and traditional promotional marketing material for the end of year exhibition.

Building on the success of this activity, a revised version of the e-gallery has been implemented in Adobe Flash with a MySQL database of uploaded items and PHP as the server-side scripting technology. This will allow tutors a more flexible method of providing feedback using drawing tools and also allows the allocation of assignment marks to assist the external examining process with bar charts of mark distributions and descriptive statistics. This is in the process of a formal evaluation study.

References


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