

ASSESSMENT ISSUES IN A PROFESSIONALLY ORIENTATED PRODUCT DESIGN COURSE

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ABSTRACT

This study considers the issues that arise from assessing students in vocational courses. Here, the need for authenticity in their assessment activities, such as public performance, may militate against providing a safe and creative learning environment where mistakes can be made without undue consequences. The University of Brighton Product Design programmes utilise a number of methods to cater for this: two of the most promising are discussed here.

Working in groups and group assignments are realistic and valid, yet provide intrinsic peer support for the participants. Rigorous assessment of group work and individuals within them is often seen as problematic, but a well-developed process of eliciting the contribution to give robust individual assessments is described, with a discussion of the team and students' perceptions.

For assessment of individual projects, research into the use of the creativity suite (part of InQbate, the CETL in Creativity at the University) highlighted the stress that assessment can bring, and the effects of the assessment process and environment. Two extremes of assessment were used (informal small group / presentation in a broadcast studio), and the student and staff views collated.

Finally, a way forward is proposed, where and reflective use of appropriate and realistic assessment is used to develop students' coping skills. The influence of emotional intelligence and a staged engagement of students in emotionally challenging activities is shown to be consistent with effective professional formation.

Keywords: assessment, group work, professional course, trauma, stress, emotional safety,

1 INTRODUCTION

The University of Brighton has an acknowledged reputation for providing vocational courses, and within this culture the accreditation and development of the students' professional skills is considered vital. In the portfolio of four Product Design courses, the orientation towards their professional development and personal growth is delivered through project based work and real-world simulation. This "learning by doing" approach ensures that the knowledge is actually applied and understood.

The role of assessment is critical in this context, which means that these must match the course ethos and delivery. Assessment also dominates the students' focus so must be seen to be relevant, rigorous, valid, fair and transparent [1].

In practice this means that the assessment of a student's professional skills becomes a large part of the assessment procedure. In addition to the more traditional assignments

and tests, students might for example be required to successfully deliver proposals, presentations, exhibitions and reports to a public audience then defend their work through dialogue and critical analysis. These activities can usually be seen to be relevant and valid, while transparency is easily dealt with through clear (and sometimes negotiated) criteria for the assessment.

The need for authenticity in these real-world aspects can, however, lead to tensions within a learning environment. This is a more genuine experience than many “remote” activities and there is obviously a heightened level of emotional engagement in public performance. Students will often do better work for presentation to their peers than they would if it was just handed in for staff to grade, but there is a real fear of failure in front of peers that can easily inhibit creativity and risk taking which is essential to extend their learning. Whilst many students may be more nervous or weaker in an examination environment at least they are able to keep their feelings confidential. Within the public arena, these fears and weaknesses can be magnified.

It is essential to retain the professional format, but how can we balance the realism with a safe learning environment? In the Product Design Portfolio at the University of Brighton, the course team has approached these tensions in two main ways. Firstly, there is significant group work, where students can share the responsibilities and support each other in assessment, although here the issue then becomes that of assessing individuals within a group assignment. Secondly, research is underway as to how the possible trauma from realistic public performance can be reduced.

2 GROUP WORK

Within industry, designers will often work in teams to solve problems and develop new products. Team working is therefore a realistic professional scenario, as well as a useful academic exercise where students can reinforce each other’s confidence and creativity, share responsibility and synergistically achieve outcomes. Team working is an opportunity to practice group dynamics skills and team roles, with good communication and shared expectations strong indicators of success [2].

The assessment of teamwork is however notoriously problematic. The final outcome of a group project is likely to require the development of disparate pieces of work from group members and their accretion into a cohesive and cogent entity. Team members have to apply significant critical skills about individual’s work components and peer assessment is therefore implicit. A minority of students also fail to engage in the group and prefer to attempt a “free ride”, which can be extremely divisive and demoralising for the rest of the group if they are seen to “get away with it”. Their demand for fairness requires staff teams to tackle this aspect head on.

Many courses will ask for annotated reports, with the contributions from different authors indicated, but the synergetic or leadership aspects then become problematic: who gets the recognition for that? If a section is heavily edited by the team, to who is it assigned? Alternatively, assessors may have a set of individual interviews or assessments with team members to judge their achievement of component outcomes, but this is an onerous task and discourages the use of group assignments. The team members, however, have already implicitly assessed each member’s components, so eliciting their views can be extremely effective. Evatt [3] discusses a number of ways that this has been done successfully, but still identifies problems with getting to a ‘true’ individual grade.

Many lecturers are reticent to use student peer assessment within a summative context, where the marks count. There is a fear of losing control over the process and the view

that the students do not have the required level of expertise to make accurate judgements. However, careful choices about what is assessed and its value can counteract these fears, as shown in the following case study [4].

2.1 Dragon's Den scenario

This assignment required groups of students to propose an innovative product with an associated business plan. This was then presented to a panel of experts, including invited entrepreneurs, who had an opportunity to question the team. The panel judged whether the proposal was good enough for possible funding. The group earned a mark directly from a set of criteria that had been negotiated earlier, assigned by the module team using their professional expertise.

To share all these marks, the staff team had to elicit the true situation from the teams themselves. They were asked to confidentially categorise all the team members (including themselves) in terms of "contribution" (a quality measure) and "effort" (a quantity measure), simpler criteria that were well within their expertise. It was explained that these categories were to "help to inform the staff team" as to how the marks would be distributed, and that any apparent collusion or untruth would mean that their evaluation would be ignored. By asking for a confidential evaluation, social pressure on team members to "all give equal" is avoided and a more realistic range achieved.

The categories were ranged on a 0 – 5 scale, where 0 implied non-attendance, 3 signified reactive but reliable participation and 5 indicated a pro-active dynamism. A table of each student's evaluation of the team members highlighted any anomaly or collusion, which could then be discarded. The ratio of each student's "worth", when compared to the team average, became a share factor for that individual, applied to their team's mark.

The students were not assessing each other, and the staff had significant veto powers to ensure rigor. The system only operated on the differences in the team's evaluation of each other, not their subjectively perceived level: all 5s or all 3s still gave an equal share. This also disengaged the students peer evaluation from the marks themselves. An individual, single-page, confidential statement of relevance was used as supporting evidence and was marked separately as a critical and reflective piece of work.

Aspects and issues that have arisen from our experiences include:

- Underperforming students soon learned that their results rely on their own performance as perceived by the group;
- "Good" teams showed enhanced responsibility to the group above the individual;
- This was an efficient and effective way of assessing large classes;
- The method was particularly appropriate as the task was open ended;
- A few teams had "splits" where blame was due to mismatched expectations;
- Tutors spent some of their saved time focusing on personality or group dynamics problems.

3 STRESS IN ASSESSMENT

An ongoing research project is underway that uses funding, expertise and facilities from the InQbate; Centre of Excellence in Teaching and Learning in Creativity project (CETL) to investigate how environments and procedures can be used in assessment. An emergent issue of poor performance due to student stress has proved to be a significant early outcome, and has become a focus for further investigation. Occasionally, very

stressful assessment processes just teach some students a hatred of the situation they are in!

Another way therefore to protect the creative learning environment is to control the levels of stress (or, in some cases, trauma) throughout the student experience. The aim is to ensure that there is emotional engagement in their attainment and progress, but to build up their confidence in a staged way. The following case study demonstrates the comparative approach.

The Creativity Centre at the University of Brighton was used for one of a pair of final year short, individual projects that had a similar structure and were both carried out within an 8-week period. It was set up so that groups of 5 students worked together to support each other on their own projects through weekly Action Learning Sets (ALS) [5]. Each student was given a virtual presentation space running concurrently with their fellows. The assessment team then just re-orientated their focus on specific students when they were to be assessed by a short presentation and dialogue. The procedure was discretely recorded through webcams and a small video camera left unattended on a tripod.

The other assessment was a far more challenging and alien environment. It took place in the University broadcast studio, with lights, 3 cameras, editors and directors and formal studio procedure. Each person was then delivering to camera with a team of observers and another student team as operators in front of them. There was no opportunity to question their presentation: they were completely responsible for their output, so could not be prompted by staff dialogue.

These two extremes of assessment formality were then evaluated by the tutors and a student questionnaire, to elicit their perceptions and feelings. A number of interesting aspects have come to light, and further work is underway to further understand its significance. These include:

- All students found the broadcast studio worrying or stressful;
- Presentation techniques dominated their thoughts in front of the camera;
- Almost all students seemed to relish the opportunity to deliver to camera in retrospect;
- The element of dialogue and quick feedback was missed in the presentation to camera;
- Teams also enjoyed taking on the studio crew roles;
- The recordings have since been accessed by a number of students wishing to reflect and improve their performance;
- Even though the presentation and communication aspect was only a small proportion (1/5) of the overall mark, the students took it seriously, especially in the studio;
- Delivering in the Creativity Centre was easier with the work of others also being displayed concurrently;
- Being assessed in an informal setting, with their ALS was appreciated;
- The closer that the observers sat to the virtual display space, the more intimate and relaxed the interaction became, indicative of Hall's studies regarding 'human personal space' issues [6].

These findings are supported by observations in the courses Independent Study module. The module is based on a learning agreement, and has students developing their own programme, delivery and assessment (including detailed criteria) in negotiation with their tutor. Their choice of assessment mode can empower them and reduce the stress

involved in the process, whilst a deep understanding of their own criteria leads to greater success [7].

4 CONCLUSIONS

There is an emerging body of knowledge that looks towards new teaching methods to reflect the changing landscape of students within the educational system. The authors have reflected on an increasingly professional environment, and the role of two issues aimed at effective assessment.

The problems of group working are well defined, and the issues outlined by the course team are not new [8]. Because of the problems there may be tendencies to use less controversial assessment methods. However, the course team argue that students must become competent at dealing with realistic scenarios they are likely to encounter in their future, particularly in professional and vocational courses. Tutors must therefore look again to finding the means to make this form of assessment work. This assessment of students in small groups also allows them to support each other which is very important if there is significant emotional challenge implicit to the format. They can also learn from each other and develop critical skills in terms of self and peer evaluation. If they are engaged on a shared group project, this expertise can then be used by staff to inform their marking of individuals within the team. The peer group method exemplified in the Dragons Den Case study of course works better when the group working process becomes a part of the course assessment regime rather than reserved to isolated modules and subjects.

Tutors may also wish to reflect on the emotional context within assessment as a mechanism for relieving the tensions within this type of assessment. The value of a student's emotional intelligence in performance generally is an emerging area of understanding [9]. However, tutors should seek to better understand the significance of this within the focussed area of assessment. Students need to develop their coping skills: reflecting on these experiences delivered within the course is essential. However, care needs to be taken to ensure that there is some staging or that the risk to their degree is significantly less than the perceived exposure. An effective strategy has the assessment and its criteria disconnected to the emotional engagement of delivery to an informed and possibly critical public.

Course teams should be delivering a mix of realistic scenarios with engaging assessment of their learning. Work is now being carried out where students are assessed in their support groups as if negotiating the next stage to their project. Assessment is close and informal in the early and developmental stages of the work, but grows to become a final public show, so they are encouraged to experiment but only expose themselves when the project is complete.

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