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Abstract

This paper discusses the impact of a specially developed assessment and feedback system implemented within a second year industrial design module at Coventry University, UK.

The 'Assessment Buddy' system was developed in response to the need for a successful assessment and feedback method that could cope with the complexities of a creative subject, and also in response to the need to address student dissatisfaction with assessment and feedback as evidenced by the regular UK National Student Survey.

The findings from student focus groups and questionnaires show that the system offers the opportunity for a more flexible approach to the assessment of creative subjects and also speaks to best practice as outlined in the NSS Student Charter.

At the time of writing the Assessment Buddy system is embedded in the second year assessment procedures for the automotive design course, and is being introduced into Year 3, with plans for Year 4 to follow.

Key words

action research, industrial design, Curriculum development, assessment

Introduction

To guard against a tendency to stifle creativity through assessment methods that 'measure what is measurable [which] leaves innovation and creativity out in the cold' (Kimbell 2002) there is a need for assessment methods within higher education that can cope with the complexity of marking within creative disciplines. It is widely acknowledged that assessment and feedback within creative disciplines can be problematic not only because judgements are subjective and are thus 'complex and elusive' (Orr, 2010), but also due to the intertwined nature of the work. As Eca (2002) points out:

...artistic process is often a continuous development of all skills, understandings and criticism, it would narrow the concept of an artwork to limit it by the fragmentation of the performance in separate units of achievement just because it is less problematic to assess.

The need to address this complexity, especially when faced with a high number of assignment submissions, means art and design tutors are often faced with the time-consuming task of marking each on its individual merits. Because of the creative complexity, this often cannot be achieved successfully by using a standard assessment form that privileges summative marking. Therefore, summative marking schemes offer little value within a discipline that contains ambiguous terms such as 'creativity' and 'originality' (Davies 2003).

This difficulty is reflected by Charyton and Merrill (2009) within engineering design, and resulted in the development of bespoke assessment tool, and Cowdroy and Wiliams (2006) who found themselves in the position of having to take time to establish clear assessment criteria for their design course in order to satisfy an Australian University's demand that assessment criteria was not based on tacit knowledge.

To address the need to more accurately assess creative work within a reasonable time-period, Brian Clough, a Coventry University tutor, designed and developed a new assessment method, entitled 'Assessment Buddies'. Implemented during a studio 'crit' with a second-year cohort of industrial design students in 2009. Subsequently fine-tuned, the Assessment Buddy system is now in its third iteration, and this paper explores how successful it has been both with a student cohort who experienced the original and then with a cohort who experienced the finetuned system in 2010. In addition, there is a consideration of how well, or not, the system addresses the need for clarity of assessment in light of negative feedback around assessment from consecutive National Student Survey results (Orr, 2010), and also how it maps against the best practice outlined in the NSS Student Charter.

Assessment Buddies

The Assessment Buddy system was originally introduced during an assessment week for the 'Automotive and Transport Design Specialist Skills' module in 2009. The

system was loosely designed to reflect industry practice, in that designers tend to present to a variety of Directors - chief, studio and design - which results in a discussion debating the merits of the concepts presented. This discussion ultimately leads to a way forward due to the identification of a common theme and favourite image. (Clough et al 2010)

Before the assessment week began each student was assigned two other students who would act as 'assessment buddies' whose job was to make notes during the tutor feedback. Once the assessment session was complete, the buddy and the tutor would agree that the notes reflected the assessment accurately. These notes were then photocopied and a copy given to the presenting student. Approximately three weeks after the event, the student would then receive the summative mark for his or her piece of work.

Subsequently, some teething problems were identified with this first iteration of the Assessment Buddy system (Clough et al 2010). To address these, the system was fine-tuned and focus groups were carried out with the (now) Year 4 students to assess the original system and with the (now) Year 3 students who experience the finetuned system.

Findings

Year 3 students

The original group of students (now in year 4) who experienced the original iteration of the Assessment Buddy system, were asked about what they perceived as feedback, good or bad. They felt that it should be constructive, and also balanced: if not, then there could be a tendency to lose confidence.

I think it needs to be balanced as well – if there's too much criticism you don't feel great at the end of it

In addition, good feedback was felt to involve signposting as to how disparate bits of work linked up which enabled the students to see their work as a 'whole', such as how a 'bit of surfacing' affected the entire design.

This cohort of students did recognise how difficult it could be for tutors to assess a creative piece of work and that sometimes subjectivity crept in, depending on which tutor was doing the assessing. Faced with differing opinions, these students had begun to develop their own 'internal filters' where they would inculcate and assess tutor feedback and subsequently form their own opinion as to what worked.

As recipients of the first iteration of the Buddy Assessment system, unsurprisingly this cohort of students had experienced problems:

I think when the buddy system first came...there were quite big problems with it.you would have people being buddies on the Monday and presenting on the Friday and so not only have they got extra days to do their work but they also knew exactly what to present

Also, this cohort were expected to present and buddy in same-day sessions and found that because they were concentrating on their own presentation, being a buddy somewhat of a distraction. In addition some buddies, once they had carried out their own presentation, did not turn up for subsequent sessions:

I found that not all the buddies did turn up; once someone had their presentation whether it was at the beginning of the week or the end, they didn't go to their buddy session, so I had to fill in twice for somebody else.

The original feedback form was also problematic as the space to write down notes was quite small also some buddies disliked writing down negative feedback, or in some cases wrote down their own opinions:

Worst still is when people completely miss the point of what the buddy system is and write their own assessments or opinion – this lecturer here giving you their opinion is actually just decoration, but actually 'you fellow student, what do you think?

Further, there was a disconnect between the feedback received on the assessment day and the summative mark in that some were (often negatively) surprised by the latter, possibly because the only 'record' of the session they had was in their own memory coupled with the feedback form.

Despite these problems, this cohort did feel that the Assessment Buddy system was a huge improvement on the more traditional 'pin up and leave' system, in particular in relation to the interactive conversation they were able

to have with the assessment tutors. Some went as far as to say that it highlighted how poor a feedback mechanism the pin up and leave system was:

Much better than the pin up and leave: in fact it highlighted it – it wasn't that much of a problem until we started doing the buddy system just how crap it is to do the work, put it on the wall and just leave it and then come back and get a nod or a shake about whether it was OK

In addition, due to the comprehensive nature of the formative feedback received during the Assessment Buddy session, these students had begun to disregard their summative marks in favour of the value of comprehensive feedback:

I want to get a half decent degree and passing it would be handy but I am more concerned with my attributes and what I have learnt and how I have developed over the four years rather than a 70% mark.

However, one of the biggest advantages of the Assessment Buddy system was felt to the 'immediate feedback' aspect, although they found, despite the system being loosely based on industry practice, it was more complicated than that they had experienced during their third year work placements:

When I got into industry there was a 3 week sketch phase; here you would never be able to do that, but basically they just wanted to see how many ideas we could chuck out in a certain time period – take as long as you need, put as many ideas as you have got on the table and then we will go through them and see which ones are worth developing

Nonetheless, they did acknowledge that that a crit within industry had a different focus in that it was aimed at developing ideas for eventual production, in contrast to the University, where the crit was aimed more at their personal development as designers.

The teething problems identified by the above students - buddying and presenting in the same session, buddies not turning up, the feedback form being too small, a disconnect between the feedback and summative mark, and the lack of a session backup – led to a redesign of Assessment Buddy System. Specifically, the 'buddies' became volunteers, rather than conscripts, with guidelines specifying that they undertake a commitment to the task regardless of when they were presenting, with the 'pay-off' being access to all presentations during the week. They were also freed from buddying during their own presentation session. The feedback form was also redesigned to include 'positive', 'OK 'and 'negative' categories, and an audio recording of the session was to be provided within one week of the crit, followed by the final summative mark seven days later. The module was then underpinned by 'round-table' tutorials throughout the year, which allowed the students to share methodology, provide mutual support and engage in 'light' critique.

Year 3 students

The second group of students (now in year 3) who experienced the fine-tuned version of the Assessment Buddy system, were also asked what they understood by feedback. There was a general consensus that good feedback focused on how to move forward successfully. Good feedback was also seen by some students as being part of one-to-one tutorials that allowed an interaction of ideas, especially if there was access to more than one tutor to allow the expression of a range of opinions.

The students also felt that 'negative' feedback, where appropriate, was useful, as long as it remained constructive. In contrast, 'bad' feedback was seen as containing summative marks with little or no explanation: I think the worst bit of feedback I had was with the [...] module and we were all sent a letter with a sheet of adjectives on that they circled... it was just not very personal to your project

As with the Year 4 students, this cohort also recognised how difficult it could be to assess work within a creative subject, especially within a course that accommodated different course titles: this meant that different weightings needed to be given to pieces of work, such as a package drawing, or an illustration.

The round-table studio tutorials given in the build-up to assessment week were also felt to be useful, in particular in terms of crafting presentation skills.

In relation to the actual assessment week, the students who acted as buddies appreciated the categories of 'positive', 'negative' and 'OK' on the feedback form as

the tutors made sure to signal them where appropriate. However, sometimes the buddies found it hard to distinguish between the 'positive' and 'OK' comments and also to identify enough points:

There was not always four things in each of those categories - for example, I saw people who I didn't even know were in my year come in to present...and the lecturers didn't have too many good things to say about their work - so in that case you struggled to find four things

The students who volunteered to become buddies during this iteration of the system had the chance to watch all the presentations during the assessment week, and this gave them not only tips on presentation skills, but also tips for their own work.

When it came to these students' turn to present, they found the chance to have a conversation about their work, and thus the chance to explain their thinking to the tutors really valuable and a much better system that 'talking to someone with their head down writing.'

In contrast to the Year 4 students, these students were much less surprised by their summative mark, typically received up to two weeks after their presentation.

Questionnaire

Both sets of students were also asked to fill in an adapted version of the National Student Survey questionnaire, tailored to ask questions about the module, rather than the overall course (see Table 1).

The students were given the options of 'definitely agree', 'mostly agree', 'neither', 'mostly disagree', 'definitely disagree' to a series of 22 questions under headings relating to teaching, assessment, academic support, organisation, learning resources and personal development. An analysis of the results showed that in the Assessment and Feedback section, only 14% of the Year 4 students felt that the assessment arrangements and marking had been fair when compared to the Year 3 students (75%). In addition, only 28% of the Year 4 students agreed that they received detailed comments on their work, as opposed to 75% of the year 3 students.

Conclusion

Both sets of students were clear about what constituted constructive feedback, and showed an understanding of the complexities of assessing within a creative discipline. They also appreciated receiving the immediate feedback that the Assessment Buddy system enabled and felt that it was a much better system than the traditional 'pin

Assessment and Feedback: agreement ¹	Year 3 (%)	Year 4 (%)
5. The criteria used in marking have been clear in advance	50	43
6. Assessment arrangement and marking have been fair	75	14
7. Feedback on my work has been prompt	75	71
8. I have received detailed comments on my work	75	28
9. Feedback on my work has helped me clarify things I did not understand	50	57



But, in common with the Year 4 students, they were also less concerned with the summative mark, and in one case a student didn't bother to check – it was enough to know he hadn't failed.

To be honest I have got to the point where I just don't care about the mark

up and leave' style of crit. In addition, the provision of comprehensive formative feedback appeared to have an effect on the importance that both sets of student placed on summative marks in that they placed less emphasis on the latter.

Further, one of the major advantages of the system for both sets of students was the interactive conversation that the Assessment Buddy system enabled between the students and their tutors.

Another advantage was the facility for the students who were acting as buddies to see the range of work presented by other students on the module, which not only gave them information that could help them with their own work, but also access to presentation skills which would benefit them when they moved into industry.

There were some differences between the two cohorts, most notably between the 'surprise' level on receiving summative marks – the Year 3 students were more likely to be less surprised due to the scaffolding of the feedback through the provision of detailed notes and audio files. However, the Year 4 students, whilst acknowledging some problems with the first iteration of the system, demonstrated a more mature grasp of the need to develop an internal filter when faced with differing opinions from tutors about their work. They also, having experienced work placements, recognised that the Assessment Buddy system was more complex than those in industry, due to the need to progress their personal development as designers.

In terms of the results from the questionnaire about the lack of fair marking from the Year 4 students, this difference could be explained by the lack of the audio file and therefore the students may have had difficulty remembering the feedback clearly. In relation to the lack detailed comments on their work, it is possible that the original feedback form, which did not contain the 'positive, 'OK' and 'negative' categories, and had less space for writing notes, meant that the feedback from tutors was not captured efficiently.

In summary, both sets of students felt that the Assessment Buddy system was a big improvement on the 'pin up and leave' style of crit in that it offered them timely, comprehensive and constructive feedback that they could inculcate into their personal development as designers and take them forward towards their next piece of work. Finally, turning to the NSS Student Charter, the Assessment Buddy system seems to addresses the need for a range of assessment methods and the provision of formative as well as summative assessment and feedback, and perhaps - most importantly - timely feedback (see points 1 - 5 in Appendix 1).

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Appendix 1

National Union of Students Charter on Feedback and Assessment

- 1. Formative assessment and feedback should be used throughout the programme
- 2. Students should have access to face-to-face feedback for at least the first piece of assessment each academic year
- 3. Receiving feedback should not be exclusive to certain forms of assessment
- 4. Feedback should be timely
- 5. Students should be provided with a variety of assessment methods
- 6. There should be anonymous marking for all summative assessments
- 7. Students should be able to submit assessment electronically
- 8. Students should be supported to critique their own work
- Programme induction should include information on assessment practices and understanding marking criteria
- 10. Students should be given the choice of format or feedback