Creative Critique in Visual Communication: Effective Feedback in Design Projects Through Voice-Centred Studio-Based Communication and Online Delivery

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Introduction

Creative review and critique in visual communication education is critical to the knowledge construction and learning associated with creative design project outcomes. If we accept that the objective of design critique is to construct knowledge around a design project, then the deconstruction of the design critique - to inform the process of giving and receiving effective feedback - is a priority, particularly in the rapidly evolving virtual and online environment of contemporary education.

Giving and receiving feedback is relatively under researched (Higgins, Hartley & Skelton 2002). Most studies of students' perceptions and experiences of feedback in higher education have focused on written feedback (Maxwell 2005). Limited research has been undertaken in the art and design fields and in alternative mediums. Bennett (1997) reports the process and outcomes of a research project that tackled the problem of giving quality individual feedback to design students working in large studio groups. Dong (2005) presents research describing how design teams construct knowledge around the design artefact using language-based communication. Cruikshank (1998) describes the implementation and evaluation of the use of video as a method of delivering feedback to art and design students. Conanan and Pinkard (2001) investigated design students perceptions of giving and receiving asynchronous feedback to each other in the online learning context.

The established practice in art and design schools is authentic project based assessment, reflecting real-life activities. Judging and commenting on aesthetics, style or creative elements is highly contestable and is an emotionally charged event that can make giving feedback difficult. Often work is at a developmental stage and has not been viewed before. The face-to-face design critique can be challenging for both the students and the teacher. The teacher has to give feedback that is encouraging and motivating, that may contain negative elements, often without adequate time for reflection and preparation of a response prior to the feedback interaction. Brookfield (1990, cited in Bennett, 1997, p.11) describes the task of giving feedback as 'one of the most difficult, demanding and complex tasks a teacher has to face'.

The learning and teaching environment is being transformed by online delivery. Most visual communication educators are familiar with the general principles defining effective feedback, particularly in the face-to-face context, but the application of these principles, especially in the online context, is not as well conceptualised. It remains challenging to achieve the interpersonal interactions associated with effective oral feedback, especially when the partners are distanced.

A theoretical checklist and guidelines for giving feedback on design student learning products was reported at ACUADS 2004 (Taylor & McCormack, 2004). This paper builds on this work to report fourth year graphic design students' perceptions of the effectiveness of these guidelines in two feedback contexts: face-to-face feedback and feedback that was pre-recorded on an iPod and electronically delivered to the student as a digital voice file.

Method: an action inquiry process

Action inquiry facilitates the teacher as researcher to reflect on their teaching, and through the stages of this reflection, to discover ways to improve their teaching and the learning of their students. The process of action inquiry consists of a number of phases: initial reflection, planning, action and further reflection. Investigating an aspect of teaching practice often involves the teacher/researcher in a number of cycles of these phases (McNiff & Whitehead, 2002).

The action inquiry reported in this paper was undertaken within the context of the fourth and final year of studies in the subjects Graphic Design (GD) 4.1 and 4.2 of the Bachelor of Graphic Design course at the University of Canberra. The principal objectives of this final year of study are: preparing students to reach a suitable level to enter the profession; preparing an individual graduating professional portfolio; developing student abilities to work independently; refining students' communication skills; and producing creative and individual project works. Throughout the fourth year program, the lecturer facilitates, rather than performs as a didactic teacher. As a 'consultant' and sometimes as a 'client' the teacher acts as a sounding board and gives verbal feedback to the student. Verbal feedback can occur in formal or informal situations.

The context of formal oral feedback in the graphic design 'crit' is the focus for this paper. Six cycles of reflect-plan-act have been undertaken (Table 1). The results reported here are drawn from Cycles 4 and 5.

Table 1. Cycles in the action inquiry process

Cycle 1:Reflecting on Verbal Feedback	
Reflect	Reflection on student feedback prompted a reassessment of verbal feedback practice.
Plan	Literature search to identify principles for giving constructive verbal feedback.
Act	Observe experienced colleagues feedback interactions.
Cycle 2: Developing a checklist	
Reflect	Reflect on the 'fit' between principles identified in the literature and colleagues' feedback practice. Analysis of personal strengths and weaknesses.
Plan	Synthesis of outcomes of literature search, observations and self-analysis into a checklist of key words/phrases characteristic of constructive verbal feedback.
Act	Test the checklist in a design 'crit'. Questionnaire to collect students' perceptions of feedback interaction.
Cycle 3: Practising f2f feedback	
Reflect	Reflect on student feedback and revisit the literature to refine list of key words and phrases into personal checklist for giving verbal feedback.
Plan	Use the checklist to guide face-to-face feedback interactions in the subjects GD 4.1 and 4.2 in 2004.
Act	Following submission and marking of projects two classes of students were given individual face-to-face feedback in class time. A questionnaire gathered students' perceptions of the feedback.
Cycle 4: Trialing electronically recorded and delivered feedback	
Reflect	Reflect on analysis of students' feedback, look for new insights, evaluate limitations and refine checklist. Reflection on the demographic characteristics of graphic design students, and on-going review of the literature on learning preferences, suggested that the majority of graphic design students were millennial learners (born in or after 1982) (McMahon and Pospisil, 2005). Learning preferences of millennial learners are characterised by use of technology, expectation for flexibility and immediacy, and importance of achievement.
Plan	This reflection suggested electronically recorded and delivered feedback might more closely match the learning preferences of today's graphic design students.
Act	Trial the refined checklist in GD 4.1 and GD 4.2 in 2005 in both face-to-face and electronic contexts.
Cycle 5: On-going investigation of electronically recorded and delivered feedback	
Reflect	Reflect on 'fit' between checklist (theory) and practice (electronic, face-to-face) as suggested by 2005 student feedback.
Plan	Continue to practise electronically recorded and delivered verbal feedback in GD 4.1 in 2006.

Act	Feedback recorded on an iPod and emailed to students as a digital voice file. End of semester questionnaire emailed to students to gain students' perceptions of the effectiveness of the feedback and the advantages and disadvantages of the electronic feedback context.
Cycle 6: Sharing reflections	
Reflect	1. Do students report differences in their perceptions of the delivery of face-to-face and electronic feedback on design projects? 2. What do graphic design students and their lecture perceive to be the advantages and disadvantages of electronically delivered feedback on design projects?
Plan	Reflection on question 1 to be shared with colleagues at ACUADS, 2006 and responses to question 2 with colleagues at ASCILITE, 2006.

Action inquiry cycles 1, 2 and 3 were undertaken during 2003-2004 and have been reported elsewhere (Taylor & McCormack, 2004). A checklist for giving constructive feedback (Table 2) was developed over the first two cycles.

Table 2. Personal checklist for giving constructive feedback

Feedback is given with respect
Feedback is neutral, not labelled.
Feedback is descriptive, not evaluative
Feedback is specific.
Feedback is prioritised
Feedback should focus on the positive
Feedback is focused on what is actionable
Feedback is an interaction

In Cycle 4 (2005) and Cycle 5 (2006) the research continued with final year graphic design students, and a design lecturer. During these two years the design class had a blended mode of delivery, combining online and traditional face-to-face studio learning and teaching processes. In both the traditional and the electronic critique procedure, the teacher responds to the submitted visual communication project work with a verbal critique, or oral feedback, that is directed to the individual students to listen and respond to, with design amendments as a formative assessment activity. In the usual studio situation, the teacher speaks directly to either groups or individual students about their project work. In the electronic critique procedure, the feedback is recorded on an iPod and then distributed to students as a digital voice file, using the Omnium online delivery system (2005) or via email (2006). The Omnium online delivery system was not available in 2006.

Students' perceptions of verbal feedback constructed using the checklist (Table 2) and delivered in two modes (face-to-face and electronically) were gathered using paper surveys (2005) and an emailed questionnaire (2006). Common questions on both these surveys were:

Table 3. Common questions on 2005 and 2006 student surveys

Did the recorded verbal feedback emailed to you help you learn? YES / NO
In what ways did the feedback help you learn?
Did you listen to the feedback more than once? YES / NO
How many times did you listen to the feedback? 1 / 2 / 3 / 4 / more often
The feedback was given with respect
Unsatisfactory ❑ Satisfactory ❑ Good ❑ Very Good ❑ Excellent ❑
The feedback was neutral, not labelled
Unsatisfactory ❑ Satisfactory ❑ Good ❑ Very Good ❑ Excellent ❑
The feedback was descriptive, not evaluative
Unsatisfactory ❑ Satisfactory ❑ Good ❑ Very Good ❑ Excellent ❑
The feedback was specific
Unsatisfactory ❑ Satisfactory ❑ Good ❑ Very Good ❑ Excellent ❑
The feedback was prioritised
Unsatisfactory ❑ Satisfactory ❑ Good ❑ Very Good ❑ Excellent ❑
The feedback was focused on the positive
Unsatisfactory ❑ Satisfactory ❑ Good ❑ Very Good ❑ Excellent ❑
The feedback was focused on what is actionable
Unsatisfactory ❑ Satisfactory ❑ Good ❑ Very Good ❑ Excellent ❑

Students' responses to the common questions in the 2005 and 2006 surveys (Table 3) are analysed in the following section. The lecturer's reflections on delivering feedback in the face-to-face context and electronically follow the students' perceptions.

Results

Students' perceptions of feedback

In both the face-to-face and electronic feedback contexts students responding to the surveys felt the feedback helped them learn (Table 4). Only five of the sixty-five students (face-to-face Class 2 2005) receiving face-to-face feedback reported that the feedback did not help them learn. Students receiving face-to-face feedback felt:

> *I learnt much about the layout and I think the suggested feedback will add to the design* (student face-to-face class 1).

> *There was good direction provided by the feedback was helpful, the designer was not left without ideas of where to go next* (student face-to-face class 1).

> *Makes you think about work in different ways – this is a learning experience* (student face-to-face class 2).

> *Helped with definitions of the layout and ideas to further the progress* (student face-to-face class 2).

Table 4. Students' perceptions of learning through feedback

Did the feedback help you learn?	Yes (%)	No (%)	No. of respondents
Face-to-face class 1 2005	100	0	31
Face-to-face class 2 2005	80	15*	34
Electronic feedback 2005	100	0	20
Electronic feedback 2005	100	0	15

*Two students did not respond to this question

All students who received electronic feedback felt that it helped them learn (Table 4). These students felt:

It gave me ideas to change things into different applications to create more of an impact with the pieces (electronic feedback 2005).

*It alerted me to things I needed to addre*ss (electronic feedback 2005).

Enabled me to assess the areas that needed to be worked up so as it can potentially be stronger (electronic feedback 2006).

It gave me positive ideas on how to fix things up to make the final product that bit better (electronic feedback 2006).

When the feedback was pre-recorded and delivered electronically, a majority of respondents listened to the feedback more than once (70% in 2005 and 80% in 2006) (Table 5).

Table 5. Number of times students listened to recorded feedback

Number of listenings	Electronic feedback 2005	Electronic feedback 2006
1	4	3
2	6	6
3	7	2
4	1	3
More often	0	1
total	20*	15

*Two students did not respond to this question

Listening to the feedback multiple times allowed the student to return and reflect upon their design project and make considered amendments.

> *The (recorded) feedback allows me to review and re-assess my work, after hearing the constructive feedback from my tutors. The main advantage is to be able to have a record that I can go back to at any time* (electronic feedback 2006).

Students are often distracted by a particular point and the stress of the moment, and can miss priority points, in face-to-face feedback situations. Recorded feedback addresses these issues.

> *Being able to replay the message again and again alerted me to the things I needed to address* (electronic feedback 2005).

> *I feel that it has allowed me time to assess what has been said and how to deal with the reaction to my work* (electronic feedback 2006).

In each face-to-face context most students agreed the feedback had been given in accordance with each checklist item (Table 6). In fact, for only one item in each of the face-to-face feedback contexts, did a student feel the feedback was unsatisfactory (item 6 in class 1 and item 5 in class 2).

None of the 2006 students receiving electronic feedback felt the feedback was unsatisfactory and only one 2005 student responding to the survey felt the feedback was unsatisfactory on items 3 and 4 only. While all students felt the checklist item, 'Feedback was prioritised', was at least satisfactory, only forty-six percent of the 2006 students responded to this item with a 'very good' or 'excellent' response (Table 6). There may have been a disparity between what the teacher and student perceived as priorities. The feedback needs to be clearly linked to the assessment criteria and a joint understanding of the criteria must be established with the student cohort. Perhaps another contributing factor for this anomaly was that this survey was conducted on a summative assessment item, rather than a formative assessment item, as had been the case in the other contexts. Certainly this unsatisfactory result needs investigation and to be given further attention in on-going classes.

Table 6. Students' percent agreement by checklist item

Checklist item and feedback context	Number and % Agreement (codes 4 (very good) + 5 (excellent) on five point scale (1=unsatisfactory and 5=excellent)
1. Feedback was given with respect	
Face-to-face class 1 2005	31 (100)
Face-to-face class 2 2005	27 (79)
Electronic feedback 2005	19 (95)
Electronic feedback 2006	11 (73)
2. Feedback neutral, not labelled	
Face-to-face class 1 2005	29 (94)
Face-to-face class 2 2005	25 (75)
Electronic feedback	20 (100)
Electronic feedback 2006	8 (53)
3. Feedback was descriptive, not evaluative	
Face-to-face class 1 2005	30 (97)
Face-to-face class 2 2005	29 (85)
Electronic feedback 2005	16 (80)
Electronic feedback 2006	9 (60)
4. Feedback was specific	
Face-to-face class 1 2005	27 (87)
Face-to-face class 2 2005	26 (77)
Electronic feedback 2005	15 (75)
Electronic feedback 2006	9 (60)
5. Feedback was prioritised	
Face-to-face class 1 2005	29 (94)
Face-to-face class 2 2005	21 (61)
Electronic feedback 2005	15 (75)
Electronic feedback 2006	7 (46)
6. Feedback was focused on the positive	
Face-to-face class 1 2005	28 (90)
Face-to-face class 2 2005	21 (62)
Electronic feedback 2005	19 (90)
Electronic feedback 2006	10 (67)
7. Feedback focused on what is actionable	
Face-to-face class 1 2005	29 (94)
Face-to-face class 2 2005	30 (88)
Electronic feedback	20 (100)
Electronic feedback 2006	9 (60)

Overall, in both feedback contexts, the checklist was perceived as effective in providing a structure for giving constructive feedback from the perspective of the students receiving the feedback (Table 6).

The lecturer's perceptions of feedback

The outcomes to date of this lecturer's action inquiry suggest that in both the face-to-face and the electronic feedback context, it can be helpful to have a well-developed and well-practised strategy for giving feedback. Using plan-act-reflect cycles to structure an individual's inquiry into feedback practice focuses attention on each of the three phases in giving feedback: the preparation phase (plan), the delivery phase (act), and the follow-up phase (reflect) (Piccinin, 2003). Often the preparatory and follow-up phases can be neglected if the inquiry is not structured and ongoing. That is, the focus is on doing (giving feedback) and the content of the feedback, rather than on the process (plan – act - reflect). Training in the process of giving and receiving feedback could enhance the effectiveness of verbal assessment feedback.

The experiences reported here suggest that there are some additional advantages for the lecturer when the feedback is recorded and delivered electronically. In this context the teacher is able to construct feedback at a time and place that is convenient and avoid the pressures associated with face-to-face feedback where unfortunate surprises may cause discomfort, or negative feedback lead to confrontation. The teacher is able to take a circumspect approach to feedback and edit or elaborate on points as is appropriate.

A challenge for the teacher creating recorded feedback is that the teacher must have a well-developed design vocabulary and be both confident and competent with all aspects of design critique. Recorded feedback can also be a collaborative learning and teaching tool for teachers. Not only can teachers listen to each other's feedback and be more consistent across tutorials, but they can also construct the feedback together in a discussion format and learn from each other. This collegiate approach adds value for the student and teachers in providing multiple perspectives on the design project work and the critique process.

A disadvantage of recorded feedback is that it is a limited interaction. The teacher cannot observe how the student receives the feedback and make any immediate adjustments in the approach and delivery of the message and avoid any unintended reactions. The teacher and students cannot instantly engage in a clarifying conversation.

Recommendations and future research directions

This paper reports fourth year graphic design students' perceptions of the effectiveness of oral feedback on their assessment products in two feedback contexts: face-to-face feedback and feedback that was pre-recorded on an iPod and electronically delivered to the student as a digital voice file. The teacher giving the feedback, and the students receiving the feedback, felt that both learning and teaching was enhanced by using a well-developed and well-practised strategy for giving feedback such as that suggested in Table 2.

Design critique, both in the traditional studio based face-to-face and the electronically delivered context, is a key learning and teaching opportunity to construct creative knowledge. An ability to critique design is an essential professional workplace skill that is not readily taught or learned. Both face-to-face and recorded feedback delivered electronically can contribute effectively to the students' development and acquisition of the design critique skill set.

The outcomes of this action inquiry suggest the adoption of common criteria for delivery of feedback at program and school level. Departments should provide explicit guidelines for delivery of feedback on students' assessed work. The outcomes also suggest that further investigation of the nature of electronic feedback be undertaken and that recorded feedback texts be analysed. Oral feedback plays an important scaffolding role in developing socially held and shared knowledge of creativity and the design artefact. Further development of this practice should be undertaken as a priority. A clearer picture of how feedback relates to learning, the factors that affect how students receive and interpret feedback, how students use feedback, the influence of mode of delivery and receipt on students' perceptions of usefulness of the feedback, and the implications for assessment feedback of the learning preferences of the millennial-learning generation, is needed.

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