

Examining Graphic Design Students' Attitudes toward Participative Assessment in Studio-Based Learning

Eric Francis Eshun^{1*} Patrick Osei-Poku²

1. Department of Communication Design, KNUST, UPO Box 50, KNUST, Kumasi, Ghana
 2. Department of General Art Studies, KNUST, UPO Box 50, KNUST, Kumasi, Ghana
- * E-mail of the corresponding author: efeshun.art@knust.edu.gh

Abstract

This study examines the potential impact of the development and implementation of innovative assessment practices in graphic design studio to improve teaching and learning and to foster creativity development among communication design students in a higher education. The data were collected from communication design students at the Kwame Nkrumah University of Science and Technology in Ghana. An action research which used qualitative method to capture students' perceptions of the use of peer assessment in various aspects of studio critique. The conclusion reached is that while the introduction of peer assessment option may be time consuming for staff to develop, the benefits of an enhanced student-centered approach to assessment may be well worth this investment in time. The results should be of interest to those academics who are concerned with assessment of creative product in art and design schools and its impact on students' achievement.

Keywords: Participative assessment, assessment, peer assessment, studio-based learning, qualitative study

1. Introduction

Peer assessment is considered key in formative assessment as well as summative assessment (Bostock, 2000; Prins et al., 2005; Li et al., 2008; Cestone et al., 2008; Wilson 2002; Wood, 2009; Li et al., 2010). Ballantyne et al (2002) and Bostock (2000) posit that peer assessment encourages students to become critical, independent learners as they become more familiar with the application of assessment criteria and develop a clearer concept of the topic being reviewed. It is believed that peer assessment can promote student accountability, student responsibility towards their peers' learning (Cestone et al., 2008), encourages excellence, skills and deepens learning (Li et al., 2008; Ballantyne, Hughes, and Mylonas, 2002); provides increased positive feedback (Peatling, 2000; Kwok, 2008; Diefes-Dux, & Verleger, 2009); supportive, advisory and corrective (Bay, 2011) with positive effects on student satisfaction (Wong & Ng, 2005; Khabiri et al., 2011) and learning effectiveness (Prins et al., 2005; Khabiri et al., 2011) in different disciplines in higher education.

In assessment used for formative purposes, peer assessment is considered 'uniquely valuable' because it motivates students to be more careful in the work they do, it amplifies the student voice in the learning process, and their learning is improved (Black et al., 2003). Peer assessment is also a valuable assessment for learning procedure because student learning is promoted as they take on the roles of teachers and examiners of each other and students find it easier to make sense of assessment criteria if they examine the work of other students alongside their own (Black & Wiliam, 2006).

1.1 Peer Assessment in Studio-based Learning

Art education without assessment is much like a horse ridden without reins. There would be no cues to provide direction or reinforcement. The horse, unchecked, may go nowhere or wander everywhere in the process. Assessment in design education is an ongoing activity; the studio pedagogy supports the use of formative assessment continuously during design discussions, critique and evaluation of final product. When peer assessment is adapted in assessing creative process and product, valuable feedback is generated, students express contentment, builds self-confidence among others. Informally, this allows for discussions, active engagement and feedback of students

with each other and with lecturers. Formally, it provides for the presentation and the grading of projects on completion. Students have to take the responsibility to interact, as a lack thereof will reflect in the work that is produced.

Eshun's (2011) study "suggests that the benefits in relation to student learning outweigh the administrative and staff commitment difficulties encountered when using peer assessment in large groups". Many authors report peer assessment as the best way to assessing group work activities (Cheng & Warren, 1997; Conway et al., 1993; Falchikov, 1986; Gatfield, 1999; Goldfinch & Raeside, 1990). Race (1998) and Bostock (2000) argued about the usefulness of peer assessment in learning and listed its advantages as follows:

- Peer assessment gives students a sense of belonging to the assessment process and fosters their motivation;
- Peer assessment encourages a sense of ownership of the process in a sense that students feel they are a part of the evaluation process;
- Peer assessment improves learning;
- Peer assessment makes assessment a part of the learning process;
- Peer assessment helps students identify their weak and strong points;
- Peer assessment helps students recognize assessment criteria;
- Peer assessment provides better quality feedback;
- Peer assessment gives students a wider variety of feedback

On the contrary, other researchers are signing caution that care must be taken in the application of peer assessment in the design classroom due to its potential to 'kill' the intrinsic motivation which is so important in the problem identification and response generation phases. Amabile (1996) argues that extrinsic motivators (such as assessment) focus on individual's attention on the reward/punishment and generate a feeling of 'being controlled' that decreases the personal satisfaction associated with completing the task (Deci, Gilmer, and Karn 1971; Deci, 1975). It has been argued that teacher assessment is not sufficiently valid and that students are in the better position to assess their own or each other's work (Race, 2001). The legality of peer assessment has largely been evaluated by students in different studies where majority of students find the assessment fair and improves communication, group skills and rewards work (Crockett & Peter, 2003; Strachan & Wilcox, 1996; 1998). Pond et al. (2007) report some issues with peer assessment scheme in general. The intense attitude a student could bring in marking their peers and the influence of individual dislike were highlighted.

In response to the current challenge of assessing large class-size in studio-based programme, the purpose of this study was to explore the use of peer assessment in communication design in enhancing the employment readiness and career preparation of communication design students. This article reports on a case study of the development, implementation and evaluation of the scheme, and provides an account of the student experience. _

2. Methodology

Description of the Study

Data were gathered as part of a larger study of metacognitive processes undertaken with second-year students enrolled in the Bachelor of Art (Communication Design) programme at the Kwame Nkrumah University of Sciences and Technology, Kumasi. Only the qualitative results of the peer assessment portion of the study were reported here.

2.1 Course Setting

The Graphic Design (DAD 251/2) is a required graphic design studio course for second-year students of the Department of Communication Design. The course has a special significance in the entire communication design curriculum because it is the introduction course before opting for a major as communication design students, and

aims to provide students with the technical skills of graphic design, use of application software and design evaluation. Project-based learning approach and portfolio assessment are thought to be the underlying frameworks that will suit the course best. It is a three credit course, which lasts 14 weeks.

2.2 Participant of the study

The participants were full-time second year undergraduate Communication Design students at the Kwame Nkrumah University Science and Technology in Ghana. The students were duly registered for DAD 251 Graphic Design I and DAD 252 Graphic Design II courses respectively during the 2010/11 academic year. One hundred and forty students out of a total school population of 546 were sampled for the study (Student population within the Department as of 2010). Sixty-two were female (mean age: 31.5, SD: 8.7, range: 19–46) and seventy-eight were male (mean age: 22.3, SD: 3.5, range: 19–26). All participants who volunteered to respond to the interview were invited for data for this paper.

1st Cycle

August 2010 - September 2010:	Education on Alternative Assessment
September 2010 - November 2010:	Implementation of Studio Procedure
November 2010- December 2010:	Implementation of Alternative Assessment on Design Studio Projects Data Collection Evaluation of Project
January 2011 – February 2011:	Writing of Final Report

2nd Cycle

January 2011:	Development of Instructional Rubric
February 2011 -April 2011:	Implementation of Studio Procedure
April 2011- May 2011:	Implementation of Alternative Assessment on Design Studio Projects
May 2011:	Data Collection
June 2011	Evaluation of Project

2.3 Procedure

The Unit

The creative process and product were peer-assessed but moderated by the instructor and counted for 50% of the total marks. Students were given guidelines on grading criteria and were asked to complete a rubric for a) individual performance for formative feedback only, and b) product presentation for summative feedback. In addition to the product presentation, each student was required to write a 500-word critical evaluation of the research and peer assessment in graphic design studio and designer's journal. These were instructor assessed.

Timetable management

The structure of the first semester timetable has been changed slightly to accommodate the flexible approach required by the peer assessment scheme. During studio critique, 2 hours have been designated 'Assessment and Feedback time'. Also available in the same slot are discussion, design previews and teacher commentary and feedback. Groups of students are allocated 6 hours a week during the 12-week semester.

Anonymity

One of the primary concerns of the study was to expose student to how to handle criticism and evaluation of design concepts by non-designers. Since in real-life design studio situation designers always interact with difficult clients. Assigning assessor and assessee was the teacher's task. Throughout the process students were encouraged to eschew under dealings, bias and favouritism rather they were supported to be tactful, truthful, frank and fair to themselves.

2.4 Peer Assessment Procedure

The procedural guidelines followed by Wadhwa, Schulz & Mann (2006), Kearney and Perkins' (2011) Authentic Self & Peer Assessment for Learning (AASL) model and Salamon's (2008) were reviewed. Assessment model to suit graphic design studio project. These guidelines outlined the timeline for the procedure, students and instructor's responsibilities, and processes for submitting, distributing and moderating work. Information relating to the rationale and procedure for implementing peer assessment was presented to students by the instructor. The steps have been presented in Fig. 1 and discussed below.

Step 1: Development of Instructional Rubric

The students cooperated to develop the assessment criteria and the assessment rubric. By the end of the semester, the students were using the vocabulary of the rubrics. It gave them a clear idea of what the teacher expected of them. The students realized it was their responsibility to meet the criteria laid out by them.

Step 2: Design Brief and Instruction for Rubric Presentation

Since students needed to be prepared and equipped to use the rubric in the assessment and critique of design works independently, they practiced on model exercise to acquaint themselves the technicalities using the rubric to provide feedback and peer assessed independently.

Step 3: Research

Working in groups of six, the students worked on a design project. They researched and brainstormed on topics, developed a chosen theme, and developed an outline for a text, image and colour. The students were encouraged to recognize and emulate good concepts, typography, and colour. This independent design study provided good opportunities for the students to work independently. They were given an opportunity to re-write their responses (feedback). Students completed several responses to the design briefs this way.

Step 4: Project Submission

In the subsequent studio, the students exhibited their designs. The exhibition served as a source of motivation and many weak students always drew inspirations from the more challenging concepts. The exhibition made the learning more 'real' for the students. The students gained self-confidence and seemed to have gained some self-esteem. The forum offered the students the opportunity to reflect on their own work-in-progress. Interventions were provided to help weak designs.

Step 5: Evaluation Stages

The students used the rubric to peer and self-evaluate their work-in-progress. Though some students managed to use the rubric, others had various challenges such as writing feedback, giving verbal feedback and difficulty in presenting their design solutions in class. Such students were given further support to improve their presentation skills.

Figure 1

The evaluation stages offered the students opportunities to interact, question and examine the design solutions offered by the assessee. The assessors are blindly assigned to peer assess and give feedback. The class discussed the assessors' feedbacks, where necessary interventions are made and the marks moderated by the teacher. The peer-moderated criteria sheets were returned to students, while the individual peer-assessed criteria sheets were retained and used to inform the action research process. Final peer-assessed criteria sheets were all submitted to the instructor.

Step 6: Feedback

Providing feedback in the creative process and formative summative is so important to help students correct and refine their design solutions. Consequently time was devoted to help the student to learn how to give feedback. Some students were receptive to advice and responsive while others demonstrated no effort to incorporate these suggestions. The formative assessment was a positive approach in improving student performance over a project time.

Step 7: Review

Having regular review sessions within the creative process helped the final evaluation session. The reviews helped in the students' project completion rate; worked collaboratively; language and terminology control and usage. Most of the students in the class saw progress and were delighted to show their design solutions to their peers.

After every peer assessment session, we met as a class to discuss the project and the way-forward. The feedback to the students was crucial to the learning process. We were able to close the gaps in the studio pedagogy by these actions especially in scaffolding knowledge construction.

Step 8: Final Evaluation

The final evaluation phase offered the possibility of providing design students with the potential for their own empowerment. Through participating in peer assessment, they could voice their opinions on educational and design issues of concern to them, and indicate the conditions that could affect their future participation in the studio practice. In the assessment process, then, design students were enabled to construct their own knowledge. This situation represented a change in epistemological focus that contrasted with their usual positioning within the educational system as receivers of the knowledge transmitted by the dominant personality – the teacher, which usually reflects the cultural values of the students. Their participation as knowledge creators helped to contribute to their empowerment, on the foundation of the interconnectivity of power and knowledge.

Step 9: Self Evaluation

The students were given the opportunity to contribute to their assessment by also commenting on their designs. They could object to the criticism of their peers although they might not be necessarily right or fair to themselves or the assessor. Very often that leads to the next step of the process, which involves the teacher, the assessor and assessee to dialogue. The teacher's role changes to become a model or arbiter.

Step 10: Instructor Moderation

The instructor kept the facilitator role and intervened whenever parties disagreed on facts. The use of re-mark was not encouraged for a simple reason – abuse. It seems that despite their fears, students were reasonably accurate in interpreting the criteria, using the rubric and conducting evaluation.

Data Analysis

Responses to all open questions about peer-assessment and concise observations of focus groups were collated into a single document. Raw data themes, in the form of direct quotations, functioned as the essential unit of analysis. In keeping with the context of qualitative research, inductive data analysis strategies were used with themes and categories emerging from the data rather than the data being grouped into pre-determined categories (Creswell, 2002).

3. Results

Focus Group

A survey was done of all the students in the beginning of the school year. The result of those surveys was used to choose seven focused students of various graphic design abilities and varying attitudes towards graphic design. Another survey of all the students was done at the end of the semester in order to examine student attitudes and their self confidence about using peer assessment in graphic design. A search for any trends or changes in attitudes overtime was employed. This allowed for valuable feedback on what students like and dislike about using peer assessment in graphic design studio, and how they could be helped to be successful.

The inductive data analysis procedure resulted in the identification of six themes. Two of the themes are positive perceptions of peer assessment in studio-based learning (SBL) – increased responsibility for others, and improved learning. Four of them reflect negative student perceptions – lack of relevancy, challenges, discomfort, and effects on the SBL process. While the literature supports five of these themes, the final theme which encompasses the potentially negative consequences of implementing peer assessment on the SBL process has not previously been described. However, Eva (2001) hypothesized that this effect may become evident in SBL tutorial groups when peer assessment is implemented.

3.1 Perceived Benefits of Peer Assessment

The positive consequences of constructive criticism were reported on several occasions by participants. Students felt their peers were in an appropriate position to judge their performance as functioning members of studio-based learning group. Various views were shared the students regarding the role of peers in improving learning, some of the views are captured under subheadings:

Increased responsibility for others

Some were about technical skills and comprehension strategies. The students have the following comments:

“I’ve learned strategies to help me work and learn faster. It has helped build my confidence in being honest and also express my opinion freely.” – Student C

“I personally think it helps us to learn from our colleagues. From the assessment, it helps me to know about what is important in a graphic design. Peer assessment helps me to prepare adequately for all studio project given because I know the criteria.” – Student E.

Student interviews showed that even the assessees had developed a sense of responsibility toward how partnership helped with their peer assessment. The following were some comments:

“When you’re talking it makes you have more ideas and if you have a partner assessor it makes you feel more confident.” – Student B

“When you’re working... when you’re designing it’s like you’re learning at the same time. You always have to talk to yourself and your friend about something new.”

– Student H

“I can freely express myself without looking on my shoulders.” – Student E

Improved learning

Some of the students echoed their thoughts of many students when they said:

“The assessment helped me to understand the use of colour to effectively communicate my intentions.” – Student D

“Peer assessment helps my designing because it gives me more information; it makes the texts more understandable.” – Student G

“My confidence level in graphic design has reached an unprecedented level of late. Thanks to peer assessment.” – Student C

“Now I can go to sleep and wake knowing the expectation of each design task...the rubric is an amazing tool.” – Student F

3.2 Immediate benefits

The depth of learning and the quality of the research and process have been outstanding and all students expressed their gratitude for being able to experience peer assessment. Some students illuminated about various activities and skills that complimented and were acquired during the assessment process.

For example, some students said:

“Peer assessment is fun. It is a good attempt. It involves me in the decision-making process in the class/studio. The process helps both the assessor and the assessee. My confidence has increased and I can now assess or judge other students’ works.” – Student D

“It equips me with skills in assessment” – Student A

Long-term benefits

They also noted the improved attitudes of the weaker students and the effects on creative behaviour:

“I have become a smarter guy; I don’t wait for someone to tell me about the expectations.” – Student A

“I think assessing buddies is good because my integrity was on the line. I have to approve my virtues and justify my confidence.” – Student G

“I can now stand to be counted; I make sure I prepare adequately for studio because I will require to assess a peer.” – Student G

“Thank you for helping me learn to talk about design, and now I can look forward to be a good design critic.” – Student B

3.3 Criticisms of Peer Assessment

Likewise, the students noted that the assessment process generated other perceived counter-productive attitudes from either initial reservation, inadequate preparation or lack of interest in students been involved in the assessment process. They expressed varying views notable among them are the following:

Lack of relevancy

Others had a more overt reaction; these students tended to be negative towards the peer assessment, possibly because they felt that their privacy was being invaded. It may be that they felt unable to use their peer assessment to reflect on important, personal issues:

“My sketchbook and my learning are absolutely personal to me and I don’t feel comfortable with sharing that with someone apart from the teacher.” – Student E

Irrelevant criteria

Some students failed to see the relationship between the criteria on the feedback sheet and the aspects of SBL rubric they were expected to assess.

“The assessment criteria are lengthy and not helpful to me to improve on my work... more especially, when I have to use it to assess a peer.” – Student X

Skeptical attitudes

When questioned about the assessment process a number of attitudes became apparent. A number of students already had some misgivings:

“I think that most students are serious about the assessment process, while a few others are passive and not committed.” – Student A

“One of the things that affected me about the peer assessment was [another] student’s comments about it such as ‘what’s the point doing the teacher’s work for him.’”

– Student F

Challenges

This diverse range of views supports earlier suspicions that some students were more inclined to reflect than others. For instance, student B suggested that:

“I want change...and trying the peer assessment for the very first time sapped my energy. I think some people felt they were forced to participate which resulted in it been unpopular because people don’t like, necessarily having to analyze everything that they do.” - Student H

“A couple of the students are lazy and refuse to engage the assessee in detail discussion. They are snappy about the process and award grade without doing due diligence on the assessee’s work.” – Student C

“I realised that lack of cooperation on the part of some assessors will be detrimental to the whole process.” – Student G

Lack of motivation

A minority of students expressed that a dislike for peer assessment is attributable to apathy. One individual’s comment highlighted the nature of this perception:

“From the very beginning I asked the rationale behind that exercise.” – Student M

“I feel like I mainly do that for the teacher.” – Student J

‘Newness’ of peer assessment

After the studio presentations most students felt a mixture of relief and pride. This is shown by some of the students who said:

“Personally, I think the peer assessment in the studio critique is a wonderful and novel idea that has ever happened in my entire education in general and graphic design in particular.” – Student C

“I think it is a good way of going about studio critique. First I was reluctant in doing research, but now I find it easy. It has also helped me in my public speaking.”

– Student A.

Discomfort

The frustration of involving students in the assessment process was expressed in various ways.

“It is hell to go through that sheet of paper with a tall list.” – Student F

“It’s a big waste of time...” – Student K

Problems with objectivity

It was clear from the student interviews that how the students approached peer assessment was influenced by their perceptions of bias within the studio which they were working. The interviews also suggested that there was a notion that students felt under pressure to satisfy their buddies:

“It just had to write down something in a way that someone would be happy....” – Student C

“There is no transparency in the way some colleagues assess with the rubric”

– Student M

3.4 Effects on the Studio-Based Learning Process

Some serious reservations about the negative impact of peer assessment on the integrity and interactive functioning of the SBL group were demonstrated in this research. Both students and instructor revealed their concerns that the cordial relationship and atmosphere devoid of rancor may be compromised by peer assessment. One student commented:

“It is obvious some people will go after others. They will definitely be mean to them and that will affect the extraordinary relationship we enjoy in the class. By not having to rate my peers, (we could) learn in a friendly, free environment. We could ask questions without fear of embarrassment.

Within their SBL, students need to feel free to socialize and hypothesize, to ask questions, raise objections and request clarification of points raised by others in order to create a dynamic learning environment. Some students accepted that the collaborative learning within their graphic design studio, so dependent on affable working relationships, could be disrupted by ill-feeling and hatred brought about by negative peer evaluations. This suspicion was also observed by the instructor:

I would not like to see a serious competition develop in a SBL.

... We should feel comfortable to express our ideas, opinions, ask questions, and generally just have a go without a fear of being assessed by a peer.

These potentially negative end results were not only acknowledged by students and instructor experiencing peer assessment, but were anticipated by students as well. One student expressed his expectation:

The lack of a threatening studio environment is what allows us to discuss ideas and concepts without fear of being assessed or judged. In the peer assessment environment we are experiencing, feeling safe and respected in your class is paramount... this would be sacrificed by the new scheme that asked you to assess your friends.

4. Discussion

Much of the data is congruent with findings in all disciplines of higher education. The study posted a remarkable positive impact of the use of peer assessment in students' studio-based learning in school and the potential of equipping them for life-long learning after school. From the study, it could be deduced strongly that the provision of assessment criteria to students could enhance their learning experience in the studio. Students' remark about using criteria to prepare for studio critique and lectures improved on their problem-solving skills, helped in their communication skills and to understand and grasp the design concepts easily and effectively. These findings harmonize with Ehmann's (2005) study findings and in agreement with Craddock and Mathias (2009) where participants considered that peer assessments and feedback were essential both for judging work and for permitting learning to become a logical outcome.

The students in the study report used the peer assessment to become independent learners and self-initiated work in addition to using the criteria to regulate their learning. These findings corroborate many aspects of Andrade's and Du's (2005) study report in areas such as academic self-regulation, goal-setting and planning. When the students overwhelmingly approved the use of peer assessment in the graphic design studio and claimed it helped them improved on their practical skills, learning and the understanding of the subject and prepare for lectures and studio

adequately. These findings endorsed conclusions drawn by Craddock and Mathias (2009) that “the provision of assessment options enabled students’ individual learning needs to be more fully addressed and reduced the level of anxiety associated with the assessment. It is anticipated that such an assessment strategy would benefit not only students with specific learning difficulties but all students who have the opportunity to become motivated and satisfied via their active involvement with assessment process”.

Overall, the results indicate that the students have quite positive attitudes toward using assessment rubric in peer assessment. This supports the findings of Ballantyne et al. (2002) claiming that students improve in interpersonal and negotiation skills through peer assessment. This is consistent with the teacher’s observation that the students who were engaged in the exercise exhibited more enthusiasm than other students when they were engaged in the exercise. This supports Ballantyne et al.’s (2002) claim that inexperience could be partly overcome by introducing practice sessions or prior peer assessment training at the beginning of the semester. This is very necessary to forestall any challenge. As also observed from classroom activities and casual comments passed by some students, some felt they were doing the teacher’s job for him or peers were incompetent when it comes to assessment. The assessment criteria gave them the lead in learning and executing their graphic design projects (Venables and Summit, 2003).

From the analysis of the interviews, this study has identified several conditions that are critical to the successful implementation of peer assessment in graphic design studio. It is best to provide peer assessment lessons in the beginning of the first year to allow students to build up their competencies in using peer assessment and incorporate practice sessions to familiarize students with the process of peer assessment. These sessions should include access to exemplars such as ‘inadequate’, ‘satisfactory’ ‘good’, ‘very good’ ‘excellent’ and ‘outstanding’ work plus feedback (oral and written) on students’ performance as assessors. Early introduction of assessment criteria and rubric are vital for smooth implementation of peer assessment in higher education. When first-year students gain experience in using assessment criteria for learning and peer assessment, they will be more comfortable in using this technique in subsequent years of studies. This project shows that if peer assessment is introduced to first-year studios, it will stand a greater chance of succeeding; hence the process needs to be structured very carefully and implemented thoroughly to deepen its appreciation.

The introduction of instructor moderation will be a valuable addition to the development of the peer assessment. This will address students’ concerns relating to the perceived “prejudice” in assessment of creative products in creative arts (Eshun & de Graft-Johnson, 2011) to their benefit and lack of enthusiasm in participating in developing and effective rubric that aligns the curriculum, learning outcomes and assessment. Consequently, it will enable instructors to monitor the nature and quality of students’ learning processes and outcomes.

Touching on reliability and validity of the use of peer assessment in formative assessment in the design studio, the students unanimously agree that transparency is very crucial to the successful use of peer assessment. This lends credence to Langan’s and Wheeler’s (2003) claim that transparency had a significant positive impact on raters’ ability to implement the peer assessment. In addition, students should be prevailed upon to understand the significance of adopting a reflective approach to peer assessment, not a judgemental approach. Otherwise, they might simply focus on ticking inappropriately, without seeing how they can improve on their own work based on what they see in the work of their peers. These findings also endorsed conclusions drawn by Craddock and Mathias (2009) that some students are disillusioned and frustrated by the introduction of assessment options.

5. Conclusion

The results from this study support and extend research in higher education on the positive and negative perceptions of students about peer assessment. However, the qualitative data, gathered through ethnographic enquiry, presents a more in-depth representation of student attitudes to the introduction of peer assessment into a Studio-Based Learning course within a art school.

The study design adopted in this research followed many guidelines promoted in the literature. This included, but was not limited to, the use of student-negotiated criteria for assessment, provision of exemplars of performance, and student practice in peer assessment to gain familiarity.

The study has begun to identify and document what constitutes possibility in peer assessment in the learning experiences of communication design students and how teachers foster inclusiveness as an aspect of creativity

development and life-long learning. Though its many features require close examination and the methods used to implement, it deserves wider use in developing teachers' understanding of design students' thinking and actions in studio critique. The researcher-teacher in this study clearly valued the chance to reflect upon his practice, to share his insights with others and to engage with innovative research techniques.

There is the need to recognize that school graduates are likely to need working with to give them skills and confidence in their skills, to become independent, reflective, deep active learners (Boud and Associates, 2010). Increased students numbers in an under resourced and slowly changing art & design academic environment, makes it difficult for teachers to work effectively with individual students, in the way that an art instructor works, despite the fact that more students now need individual attention to enable them grow in a higher education environment. However, making an effort, as described in this research, may be a worthwhile start.

When students take on the role of teacher and partners for learning, the possibilities for learning relationships multiply. Students engage with their peers in ways that adults cannot, and tapping into this break down barriers, motivates and stimulates emotional connections that allow learning to take place.

We are using peer support as a means to develop learning and, in this way, the focus on promoting peer support in studio activities. The concept of peer jurors in the studio assessment is to encourage and tap into group expertise during studio activities. The proposed jurors would have undertaken a thorough study in specific topic and it is assumed that they have better informed view on the subject than their colleagues in class. Finally, the extent of the use of peer assessment in graphic design studio needs to be carefully controlled across an academic programme.

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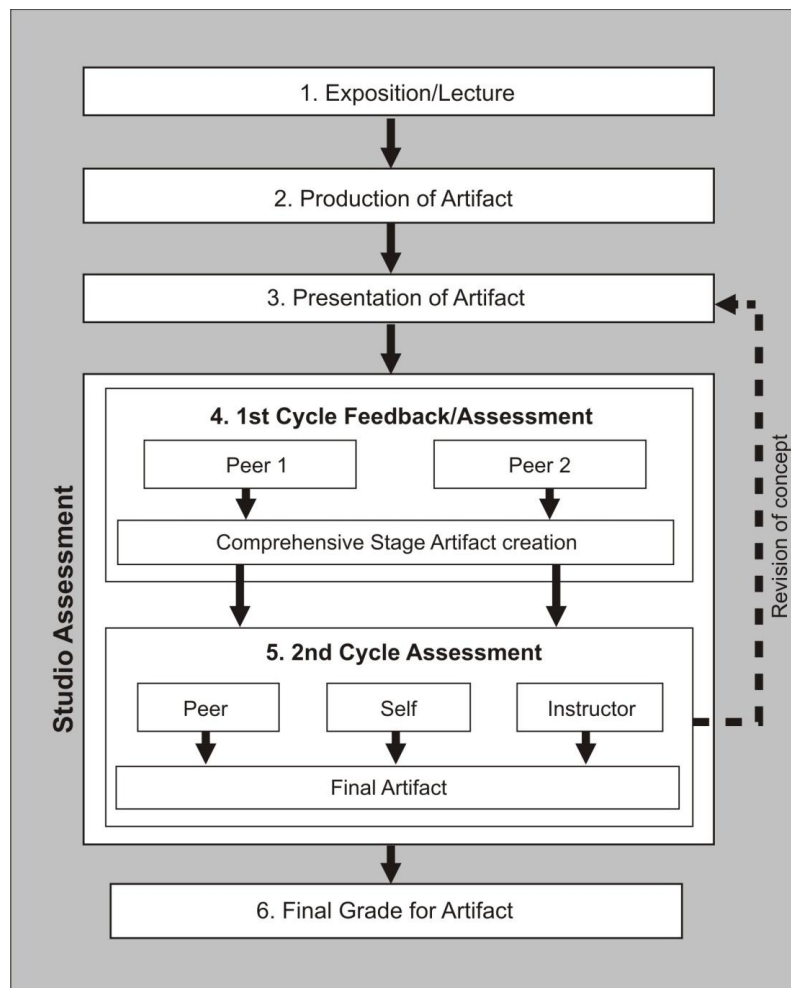


Figure 1: Peer Assessment Delivery Method