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The Collaborative Crusoe

Lindy Richardson, Programme Director Textiles

Edinburgh College of Art, University of Edinburgh, UK

Abstract

In an increasingly competitive world, as educators we are becoming more aware of the need for design students to be actively encouraged to work together on projects rather than graduating as individual designers whose experience has been a singular linear path through education. This paper explores an experimental approach to design whereby individuals co-create design work and subsequently analyse then reflect on the results before beginning to further develop their design ideas. The project initially facilitates arbitrary layering of different individual's patterns overlaid on one another in textile prints. This experience is subsequently built on through analysis of this haphazard layering. Collaborative prints are created through considered layering with each layer authored by different individuals but brought together as a whole pattern by teams or couples of students. In this intervention, by breaking down the ownership of each component, designs become a shared resource and whilst this proved a contentious issue at the outset, the barriers of physical, emotional, intellectual and artistic ownership were quickly demolished during the workshop. For this project negotiation and collaboration were a necessity in order to move on, with a richness of results both visually and educationally, not always possible to achieve as a lone designer.

Keywords: Collaboration, Co-operation, Peer Learning, Design

Background

Traditionally the Fashion and Textiles industry promotes individualism. As pathway leader of the Textiles Department at Edinburgh College of Art (ECA) I have become increasingly aware of a growing culture of an obsessive individualistic approach to learning with a general unwillingness to share. Students are highly competitive as is reflected in many spheres of the fashion industry with the ruthless personal ambition that this engenders. The main thrust and focus of the programme is on the individual's personal development of a unique collection and portfolio. Focal points of the department calendar are Exhibitions, Fashion Show, Degree Show and assessments. This quantitative approach to assessing learning places the value judgements on the outcomes of the learning and teaching as opposed to on the learning itself. Since achievement rates and the reputation of the departments are excellent with international recognition, awards and prizes, high calibre degree results, high levels of student employment and apparent student satisfaction, the programme is perceived as extremely successful. Applications are very high and places on programmes are prized.

The courses are vocational and the students are trained to go out and survive in what is a cut-throat and competitive industry. Many of them are very ambitious and have been competing for success since high school and strive to get into this department, so they are therefore highly competitive individuals before they even get here.

Robert Gillan, Head of Fashion, ECA (personal conversation)

A range of approaches to teaching is currently employed with one to one teaching and group critiques, both formative and summative, being most commonly used alongside tutorials and assessments. The staff and students within the area are fully aware of the work being produced by their students and peers, and as a community they support and encourage, observe and constructively criticise. In the critique situation the students and staff are invited to judge, comment and philosophise on one another's design work and ideas. Other than verbal comments, no commitment is required of the person making the remark.

Introduction to Project Theories/Aims and Objectives

This case study suggests that with greater involvement in one another's design processing on a practical level in addition to the theoretical integration, through the current 'Crit' system, the students will develop a deeper connection and understanding of their peers' approach to design and in turn their own. Through practical interaction as opposed to solely observing other student work on a verbal or written level, and by 'buying into' the other students' design work and making design decisions and changes themselves to the development of each other's work, students become more fully involved in a mutual understanding. The focus of the interactions between the students, and the richness of the learning taking place within this process, will stimulate a qualitative approach to learning by both staff and students.

This action research project promotes an interactive collaborative and co-operative culture within the department as opposed to a solitary and competitive culture.

There has been extensive research carried out on group engagement, peer assessment and peer feedback, where students have been encouraged to engage with one another,

reviewing their peers' approaches and outputs often in relation to their own practice and understanding. Gibbs (1992) observed action research projects based on Boud's (1989) principles about peer assessments, Boud recommends students gain more from tackling the task of assessing their peers as well as self-assessing, gaining insight through repeated experience. Gibbs observes that peer assessing, with students marking the approach of other students to problems, enables a richer learning experience. Some students observe others using better strategies than their own, whilst others experience the opposite. Reflection on this process is a basis for developing personal future strategies for approaching similar problems. This also gives the students a platform for developing and refining their perceptions and critical analysis, which helps them to embed judgments more fully.

Whilst informal peer reviews and feedback are relevant in this project, with the benefits described by Gibbs, the main thrust is the material integration of student learning and engagement on an experiential level. In not only assessing their peers' work from a theoretical perspective, but also integrating themselves more fully on a practical level the student broadens their own experiences. Through interacting and influencing the further development of their peers' approach to the design, the student will inevitably be more fully engaged in experiencing the problem.

This constructivist approach to learning and teaching where the learner creates their own knowledge and understanding, has its roots in experiential learning and problem based learning.

Experiential learning

David Kolb (1984) describes experiential learning as a social process based on carefully cultivated experiences. His theories are developed from historic educational theorists Dewey, Lewin and Piaget along with Kolb's contemporaries Maslow, Rogers and Erikson. Experiential learning advocates learning through *doing* and for maximum impact should be linked with a theoretical base and understanding. The learner and their experience are central to this theory.

Kurt Lewin's concept of learning promotes the combination of theory, concrete experience, followed by reflection and assimilation to initiate new hypotheses and fresh implications for future development. Kolb describes Lewin's approach: '...its emphasis on *here and now concrete experience* to validate and test abstract concepts. Immediate personal experience is the focal point for learning... When human beings share an experience, they can share fully, concretely and abstractly' (Kolb, 1984, p.21).

Kolb describes the process of learning through experience in the Kolb learning Cycle.

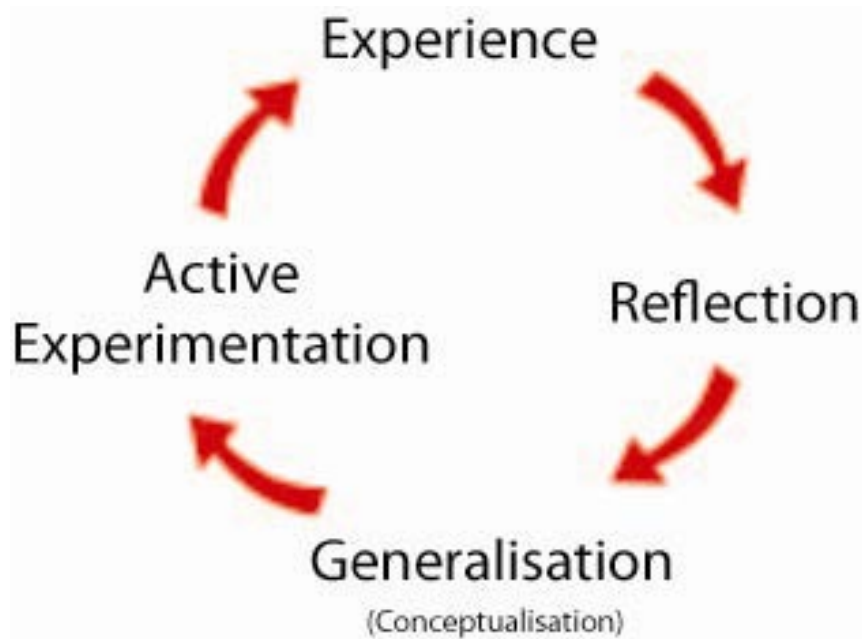


Figure 1 The Kolb Cycle

In this case study it is suggested that by expanding the concrete experience to a sphere wider than a student's own isolated perception of this experience to include a practical more integrated understanding of their peers' perception of the same encounter will further enrich this process. Reflection on a second student's further development of a first student's initial direction also offers relevant scope for discussion. This intervention unlike Gibbs (1992) suggests students exchange design projects during the process of development, in a similar way to developers, in contrast to settings of summative assessment.

Problem based learning involves the learner finding solutions to the problems they will face in their professional lives through their own investigation and experience, as opposed to relying on theories espoused or knowledge handed on by their teachers: '...the learner is directly in touch with the realities being studied...It involves direct encounter with the phenomenon being studied rather than merely thinking about the encounter or only considering the possibility of doing something with it' (Keeton and Tate, 1978, p.2).

On reflection, these experiences can be taken to inform the progress and development of the individual learner. The experiences may be intellectual, practical and physical or all of these. In the project described the students are encouraged to engage both with the problems faced *and* with one another on an intellectual, practical and physical level, deepening their approach to learning further and encouraging fuller engagement in the process. Students engage in productive enquiry together. This directly reflects the expectations of most fashion/textiles designers in industry. Few graduates will be sole designers holding exclusive control of outcomes.

Group dynamics and peer support will also be improved through fuller integration, understanding and appreciation of one another's practice. However, colleagues have cast

doubt on the project with fears that the students are far too selfish to hand over their own work to those whom they regard as competitors: 'The reality of this industry is that it is competitive and cut throat anyway. Your biggest problem is in changing their mind sets and attitudes' Robert Gillan, Head of Fashion, ECA (personal conversation).

The Practical Project

The project itself involved a mixed group of textile design students. Each individual designed two patterns based on a predetermined grid system to ensure that all patterns were consistent in size for over layering. Each student also mixed up their own choice of colour pigments to print with. All of these colours and prints would eventually become a group resource, which until this project would have been an alien idea to these often competitive students. Through a series of carefully designed exercises interjected with discussion and reflective feedback sessions, the project facilitated and encouraged sharing.

It was made clear from the outset that this project was not assessed. By removing this extrinsic motivational factor, the students were given the opportunity to participate fully without the constraints and anxieties of assessment, and thus hopefully diverting their attention towards an interest in the learning material itself, i.e. intrinsic motivation.

During the three day project the anticipated learning outcomes were:

1. to employ reflective thinking throughout their design process in order to refine and plan for future designing.
2. to value the learning process itself without always focussing on the outcomes or product.
3. to recognise the benefits of practical interaction with their peers' design process in a group setting, breaking down barriers of ownership and encouraging co-operative and collaborative learning.

In order to establish a base for analysis a series of discussions were organised through a preparation day with the intention of:

- gathering data on the students' understanding, conceptions, beliefs and values concerning working together
- ensuring smooth running of the project
- presenting and discussing concepts and hypotheses about the experiences the students would be exposed to.

These sessions were made up of four mixed groups of six students from first, second and third year, textiles technician, part time member of staff and the author. Participants had a 20 minute discussion with each of the groups, which was subsequently transcribed, with the main points of the discussions focusing on similar issues, thematically described below.

Previous experience working with others in groups and crits

When asked about prior experience of working with other students a first year student felt that until now his experience was as follows:

“...drawing and design education has been very linear. I am working on my own. I work side by side with the other students but I am still working on my own.”

The Critique

Most of the groups discussed their encounters with ‘The Crit’ offering both positive and negative comments on the effectiveness of group crits. On discussing her impact on other students at a formative critique a first year stated:

“This means that your input (verbal) influences their final design. I found this more useful than a final (summative) crit as they (formative crits) can be helpful for what you *should do* rather than what you *could have done* (summative).”

A third year student had been involved in an earlier intervention, which encouraged students to engage with the work they were criticising on a practical as well as an intellectual level – the theme of this action research project.

“You can look at something and have an opinion but until you use it and actually do it you don’t necessarily learn from it. When you become physically involved your opinion can change.”

This is an important comment, which supports the hypothesis that the practical as well as intellectual involvement with the design development of others can yield huge benefits.

Collaboration

In response to a question relating to working with other students a second year said the experiences had been:

“...positive. Looking and being engaged with other people’s work enables me to see more in my own work, prints, brings new design ideas, helps me to be more confident with experimenting as well.”

This student clearly sees the benefits of a range of different approaches to working *with* her peers rather than just alongside them as experienced by her first year colleague at the beginning of the discussion.

Ownership and plagiarism

This was the aspect which created most animated discussion and genuine concern. In a culture of singular ambition with a drive for recognition of success many of the students struggled to see the benefits of handing their own designs over to others.

“It feels like someone else is taking over. It feels a bit like interference. This is mine and no-one else can touch it. It kind of feels like loss of ownership.”

“I think it will be hard to let go of my ideas and almost ‘give’ them to someone else, but I think it will be highly beneficial.”

This confirms that students currently have compound reservations about the benefits of sharing their design work in the way being suggested and prevalent in the professional world of practice.

There is currently heightened concern about plagiarism and copyright or ownership within the higher education sector. Students are given a session at the start of each year concerning the seriousness of plagiarism and all of them sign declarations to confirm that all of the work they hand in for assessment (both written and visual) is their own. There are obvious issues here with regard to collaborative and group work, which must be discussed and resolved. With such raised anxieties students risk becoming overly concerned with ‘borrowing’ in order to develop and recreate something new, thus stifling their creativity. Some students voiced their anxiety about loss of value to the artwork if it is worked on by another person and questioned who should take the credit for the resulting work. Project expectations were described as being comparable to music sampling where the artist extracts elements from other composers and splices them together to create his own piece. An animated discussion ensued about copyright and ownership. The group came to the conclusion that as long as everyone was credited the copyright should remain with the artist who collated the elements. Due to the practical organisation of the project with the screens all coded and numbered this became the case.

Expectations and predictions

There was a general agreement that most people were happy to share techniques and voice opinions about other people’s work but were not so confident about sharing the work itself.

After the group discussion each of the students was given a pre-prepared form with the following questions, giving them a separate platform to voice personal opinions and expectations as individuals with additional time for further consideration and formulation of ideas.

These two questions were to establish the students’ previous experience in order to identify any shift or movement in their understanding and/or approach after the intervention.

- Do you have prior experience of engagement with the design development of other students? Please list indicating context.
- Have these past experiences influenced your own design processes in either a positive or negative way, and if so how?

The following questions were to establish the self-assessment of design and practical abilities, which provided a basis for comparison after the intervention.

- Would you consider yourself confident with using an extensive range of colour and overprinted repeat patterns?
- Would you consider yourself confident with using an extensive range of textures, marks and imagery in print? Please explain.

This question opened up a record of any preconceived expectations and an opportunity to identify predictions or possibilities not already pinpointed in the discussions or pre-populated questionnaires.

- What hopes/expectations/aspirations/predictions do you have for this workshop?

The combination of the questionnaires and the recorded discussion provided a sound body of pre-intervention material for analysis. On reflection, the written questionnaire did not provide an opportunity for the students to record their anxieties in relation to ownership and plagiarism.

To ensure the project worked efficiently, it was necessary to standardise aspects of the process. Students had to work within a prescribed measured grid system to guarantee the overprinting repeat system would correspond. They were asked to create two designs which could be printed one on top of the other or separately. Individuals were assigned a number to keep track of which prints were being combined, thus affording credit to the original designer of the screens mentioned earlier with relation to ownership and plagiarism.

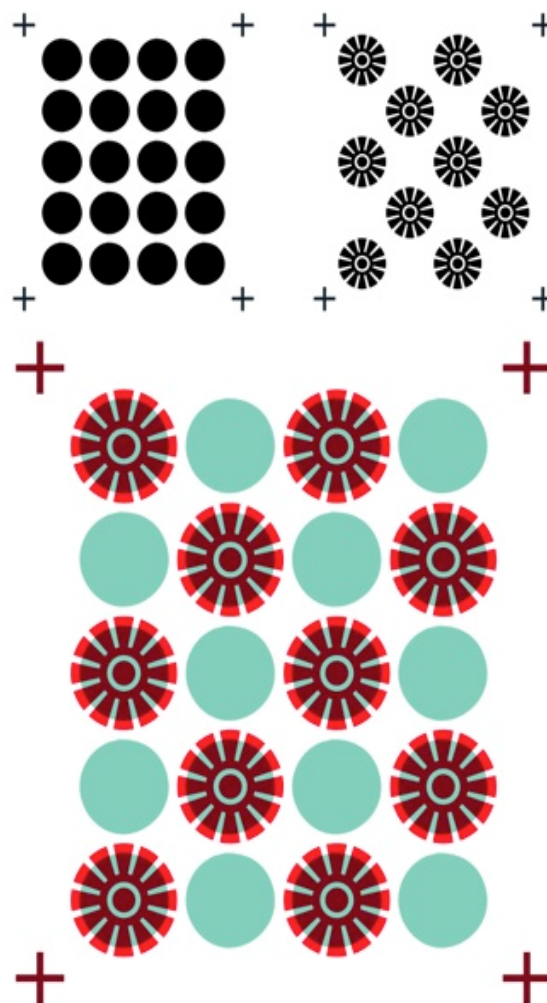


Figure 2 Example of the format and layering of designs

Two screen designs in black (above) with crosses which when lined up and overprinted provide the coloured print below.

Students were asked to provide a colour palette of three pigments. We therefore had 50 potential designs and 75 containers of colour to work with as a group.

DAY 1

Used to create the designs and expose them on screen

DAY 2

The day began with a series of practical exercises to establish the content of designs and the use of colour. It was important that the students felt comfortable with the technical process in order to engage fully at a deeper level. It was essential not simply to give them a series of tasks but to integrate and involve them on an intellectual and practical level from the outset to ensure that there was a lively and dynamic atmosphere. The day was interspersed with meetings, which looked at the work produced to encourage discussion and reflection. Based on the theory of experiential learning David A Kolb (1984) describes the learning cycle in four basic parts (see Figure 1).

All elements are cyclical. It is therefore important to build in time for the all of the stages of the cycle encouraging the students to move through the cycle with reflection, conceptualising of the learning taking place, experimentation and planning, then exploring the newly developed concepts as a result of the previous experience. They have therefore placed themselves at the point of beginning the cycle again with a new concrete experience. My role as a facilitator to learning was, and indeed is, to prompt and nudge the students into moving around the cycle. To gain the most from the day with regards to encouraging reflection and observing students' own thoughts, reactions and personal observations, it was therefore good practice to work with individuals, pairs, and groups of students in discussion, and to hold a plenary session in order that the full group was able to contribute and reap the benefits of each other's encounters, experiences and interpretations. Observations were noted throughout the day and the final discussion at the end of the day was recorded and transcribed for analysis.

The Exercises

Working within mixed groups of six, students experimented with the following combinations:

- Printing their own screen A with own colour.
- Students were requested to move two spaces clockwise within their groups with their individual colour, printing their screen B on top of the other student's original print. In most cases this was the first time many students had used their own image and colour to print onto another person's work or indeed had someone else print on top of their work.
- Students were asked to repeat this process again. They were encouraged to have a good look at the results of what were arbitrary combinations of print and colour,

considering why they were forming any negative or positive opinions about the resulting layered colours and patterns.

- For the third print students were asked to print their own screen then negotiate within the group and overprint still using their own screen but onto another person's print. At this point they were being asked to use their critical judgement as to which patterns and colours would work well together and to work as a team in discussion.
- Having established movement of imagery around the table they were then asked to place the entire colour into the centre of the table and treat this as a group resource whilst still working with their own screen.
- Finally the most radical departure of the day, the students were asked to use only others people's screens within the group. This was possibly the first time in any of these students' experience of being an Art and Design student that they had been asked to create a piece of work without any of their own marks or imagery. The earlier discussions relating to authorship and ownership were tested.

DAY 3

Having looked back at the previous day's progress and experience, a review of the learning outcomes anticipated for this project and with reference to the student response at the end of day two, it became apparent that the students had not had sufficient time to explore their own images. Initial plans were revised and the day began with:

- An hour experimenting again using individual screens to explore further overprinting and layering with careful attention to colour and print coverage.
- A further hour was devoted to a screen swap, with individuals being asked to directly swap with a partner from a different group. It was important that they seek out different qualities to those on their own screen. The students were asked to look back at the samples they had created with their own screen and consider what had worked in term of over printing, print coverage, colour etc.
- The simplicity of the Kolb cycle (Figure 1) infers that this is a straightforward iterative process with the learner rotating through the full cycle then moving through it again; however in the author's experience, the complexity of learning offers semi rotations, several half rotations adding to one full rotation and a whole host of permutations of this. In order to allow this to happen freely the students must be given space, time and encouragement to act, reflect, act, reconsider, act, reflect and return, in different cycles.
- Having spent an hour with their own screen and then an hour with their partner's screen students were then challenged to work as a team with their partner reviewing both sets of samples, all of which had been created from the same two screens but by two individual designers. From this review they were asked to create at least three samples collaboratively using both screens. Having familiarised themselves and developed the confidence of working with both screens the partners would have

broken down some of the ownership barriers opening the design process up, testing their critical analysis, honesty and openness in pursuit of excellence in designing a collaborative collection as opposed to co-operatively dividing the content and authorship.

Students were reorganised in their pairs at random into groups of eight and given a series of topics to discuss and report back as a collective – this time on a large sheet of paper to record their group thoughts.

- What have you learned or discovered when exploring overprinting with your own screen today?
- What did you learn from using your partner's screen?
- How did the first two sessions this morning affect your approach to the collaborative prints?

Each group's written comments were pinned up in order that all participants could share. The final afternoon session was aptly named free-styling.

All of the students hung up their original traces (screen designs) in the corridor indicating exactly what designs were exposed on the screens. By this stage most were familiar with what screens were available and there were clear favourites due to the flexibility of the designs, well considered composition and repeat, quality of marks and imagery etc. The students were already demonstrating their qualitative judgements in making selections. With no restraints or restrictions they were asked to create four finished samples which they were to present as a collection. This was the ultimate challenge of ownership and authorship. With a choice of 50 designs and 75 colours they were being asked to create four samples they would present as their own collections without having to use either of the screens they had initiated themselves. Two pairs of partners elected to continue with their collaborative work for the final collections.

In the hope of keeping the final discussion groups mixed random groups of six to eight were gathered as they completed their collections, again recording the discussion for transcribing and analysis.

After completion, the students were given another form to complete asking the following questions:

- Has this experience influenced your own approach to design processes for future projects in either a positive or a negative way and if so how?
- Would you consider yourself more or less confident with using an extensive range of colour and overprinted repeat pattern? Please explain.
- Would you consider yourself more or less confident with using an extensive range of textures, marks and imagery in print? Please explain.
- Did you learn what you expected to from this workshop?
- How did you feel about other students utilising you own screens and personal imagery?

- Please list any unexpected learning outcomes from the workshop?
- How could it be improved for future years?

Concluding Analysis

Can fuller engagement of individuals with another's design process, on a practical as well as an intellectual level, lead to deeper learning, whilst improving group dynamics and promoting a less isolated learning culture?

In analysing the outcomes of this intervention, areas for enhancement were highlighted in the understanding of how students learn in the textiles area at ECA and how they perceive the expectations of both themselves and the staff. One of the main aims in improving learning and teaching, particularly through experiential learning is to encourage students to adopt a deep learning approach, motivated by an interest in the subject matter itself, with a desire to make real sense of the experience, learning and interpreting knowledge so that they have a fuller understanding. This can be referred to as transformational learning, where through reflection and analysis the student has transformed understanding of practical experience into tangible knowledge. The experiential learning offered in this project lent itself fully to encouraging a deep approach by immersing the individuals in the practicality of the project and affording time and focus for observing and reflecting on these processes and their products in order to gain a fuller understanding on a practical, intellectual and aesthetic level. This was further amplified by the full integration of the students throughout the development and design decision making of each other's experience.

In the introduction it was observed that staff and students within the area were over reliant and fixated on the product of learning, demonstrated through the dominant significance of assessment over the value afforded to the learning itself. Through this intervention it was intended to challenge these values in the hope that the students would learn to value the learning process itself without always focussing on the outcomes or product. By removing an element of extrinsic motivation i.e. the assessment, the students were able to relax and fully engage with the project and process without the anxiety of being judged, confirmed here by second year students.

"I feel that I leaned more, I really enjoyed being able to do something fun for myself rather than for assessment."

The comments made were evidence that the assessment and judgmental element of the learning and teaching experience can be inhibiting and restricting. By removing this barrier the students enjoy liberation from the focus being on the product of their learning.

"...Normally I like things to look a certain way. The focus was on the process rather than the finished product. This was strange to me but freeing in a way.

Because the whole project was an experiment it meant I didn't feel everything I did had to look great or be meticulously planned I could treat it as an experiment. There was less pressure, meaning I tried new colours/patterns I may not have, meaning I am more confident now."

“I would consider myself much more confident as there has been freedom to experiment with little limitations during the 3 day block. Taking the pressure off the final print has made room for much more experimentation.”

To employ reflective thinking throughout their design process in order to refine and plan for future designing was the learning outcome that the students found easiest to identify with. Having studied Kolb’s cycle and the variants prescribed by Bawden (1991) and Cowan (2006) the workshops were designed to offer support for reflecting on experience and experimentation throughout. Schon (1991) identifies both reflection *in* action as a thinking process which takes place whilst the activity is going on, and reflection *on* action as a reflection derived from reviewing an experience.

Throughout the intervention students were encouraged to reflect on both their own printing and experience, and that of others, comparing and contrasting and providing an opportunity for influence on their own development both practically and intellectually.

“It was useful to see how they put the imagery together with other screens and other colours. It showed me possibilities that I’d not considered.”

Cowan (2006) suggests a third approach as reflection *for* action, the results of the reflection being anticipatory for the future. This diagram shows the process of learning moving through the stages of learning in, on and for action. The first loop takes into the account previous experience and how this will influence the initial exploratory phase leading to reflection *in* action.

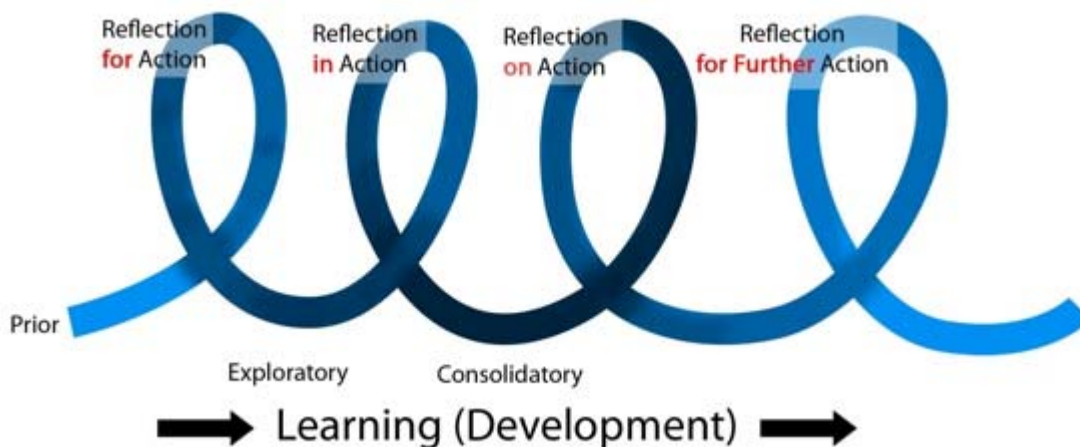


Figure 3 Adaptation of Cowan’s (2006) theory of learning

Reflection for action

The first loop in the diagram is identified as reflection for action. It is important to take into account prior learning and experience or presage in order to actively build upon this (Boud *et al.*, 1993).

Reflection in action

It is this area, which has been enhanced by the teaching intervention. The student is reflecting both in their own action, that is the decisions they are making during the printing, but linked directly to a design or colour generated by a peer, thus extending their experience in action.

Reflection on action

The reflection *on* action takes place after the experience. As with many learning situations already employed within the department, students were able to reflect not only on their own action, but on the action of their peers. In addition to the traditional observational reflection of their own actions and design development, students benefited from the opportunity of reviewing and reflecting on the design development of peers using designs and colour they had initiated at the outset.

“The way other people manipulated my screen was very interesting and showed me options.”

Reflection for further action

With a more diverse range of consideration and analyses of these experiences, the students were afforded a broader range of approaches directly linked with both the design and colour they generated themselves and the experience of making design decisions using other students' colours and designs, thus offering a wealth of material to reflect *for* future action.

The students strongly confirmed that they had indeed become reflective practitioners, adopting, adapting and confirming their grasp of the activity through observing and reflecting on their own experiences and those of others to form new understanding, aims and ambitions for future progress.

“This experience has influenced my approach to future design projects as I have discovered that the original screen is not of real value but what is done with the screen is what is important.”

“It has opened up a far wider set of possibilities for composition and suitable imagery in my work, and what is possible with a limited palette and screen.”

Based on Kolb's (1984) cycle, the planned inclusion of peers in this approach to learning and teaching is defined by Cowan (2006) as Socio-constructivist Kolb with the added benefits of the sharing of experience not only through observation but also through practical involvement.

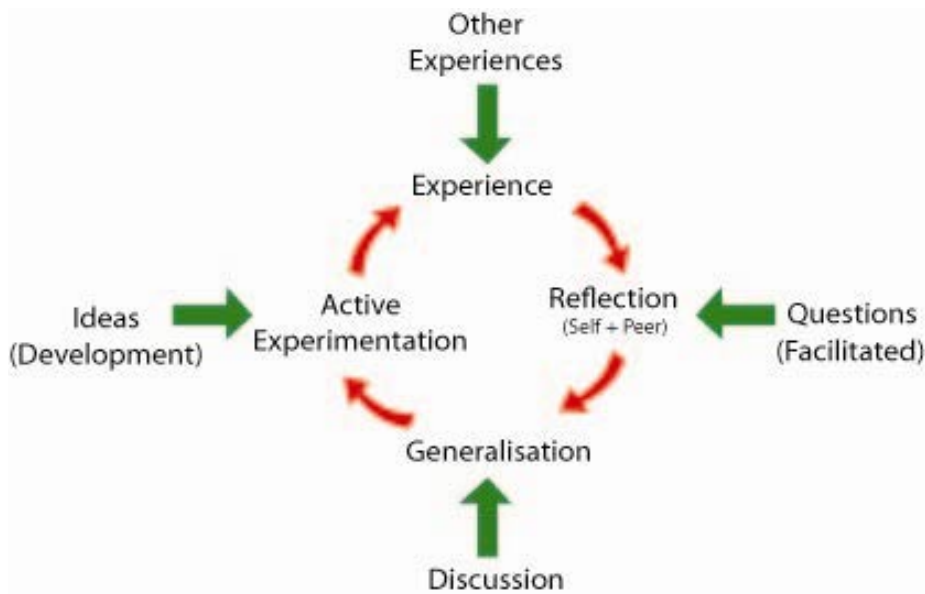


Figure 4 Socio-constructivist Kolb, John Cowan (2006, p.49)

This diagram displays the additional benefits marked by the green arrows, to the Kolb cycle of the group interaction. As a proponent of this approach as opposed to the basic simplistic Kolb approach of analysing the development of understanding through experience, John Cowan (2006, p.50) comments:

Kolb tends to over-emphasize the unit of account in learning by concentrating on the individual, and portrays them as a kind of 'intellectual Robinson Crusoe', someone cast away and isolated from fellow beings. While we feel it is important that learners should be self directed, we also feel that the social processes involved in learning should not be ignored.

Despite involving the students in each other's learning and developing their shared understanding through peer interactions and a fuller integration of their design development, there is a risk of over emphasising the Robinson Crusoe approach to learning. Culturally, there is a deeply embedded desire to quantify, through assessing and recording, analysing and evidencing. We put in place this rich human resource of shared and integrated experience, yet fundamentally we view this as a large group of individual Robinson Crusoes' who are temporarily sharing an island before they return home, with a new knowledge base as a result of their shared experience. Whilst one of the goals flagged up by current pedagogic theories is to develop independent autonomous learners, as teachers and facilitators of learning, it is important that we do not promote independent yet isolated learners. Connections, sharing and mutual support are all important elements in a successful community and it is important not to promote autonomy at the expense of community.

Cowan goes on to say: 'The means by which we experience the world are developed through social contact and our actions and experience are normally shaped through our contact with others' (2006, p 50).

In promoting and nurturing links, shared experiences and individual growth supported by and within the group we encourage an interactive caring and supportive learning community as opposed to a competitive cluster of solitary individuals.

The last of the three learning outcomes defined for this project proved the most challenging of all, and the one which my hypothesis largely hinged on. As stated in the introduction the Head of Fashion pointed out that one of the greatest challenges was to change mind-sets

My aim was to help students to recognise the benefits of practical interaction with their peers design process in a group setting, breaking down barriers of ownership and encouraging co-operative and collaborative learning.

‘Collaboration is a philosophy of interaction and personal lifestyle whereas cooperation is a structure of interaction designed to facilitate the accomplishment of an end product or goal’ Ted Panitz (1996).

A relevant analogy is of the collaborative shipwrecked group of Robinson Crusoes building a series of boats through trial and error and general discussion and consensus then sailing off together into the sunset as a flotilla. The cooperative Crusoes’ work together as a team with a shared goal of using their collective expertise to build one big boat, albeit with a student or staff member still at the helm.

Co-operative learning tends to use quantitative methods to study achievement, looking at the conclusive outcome or product of the exercise, whereas collaborative learning tends to focus more on qualitative approaches by analysing the learning and knowledge developed from the experience.

There is value in both collaborative and co-operative learning and the practical approach of establishing tacit knowledge through initial co-operative learning in mixed year group projects as a possible prelude to a more fully collaborative approach.

In this intervention first year students working in mixed co-operative groups had the opportunity to learn from their older peers sharing specialist textile knowledge and conventions in an inclusive setting and being equal contributors to the group resource. This is confirmed by one of the first year participants who considered that her contribution to the project had been valued.

“I felt proud that they wanted to use my screen and when good print was produced using my screen it felt good to have been a part of it.”

The collaborative approach encourages students and staff to work together with shared philosophies. This diminishes the possibility of one student aiming to better another in order to be ascribed the best tasks common to the co-operative group working collectively towards a shared goal or vision.

In this intervention by breaking down the ownership of the screen imagery and the colour palettes the basic materials for design development became shared resources and whilst this was a contentious issue in the preparation day discussions the barriers of physical,

emotional, intellectual and artistic ownership were quickly demolished during the workshop. Negotiation and collaboration were a necessity in order to move on. Sharing was vital.

“I did not expect to so easily let go of ownership of my own screen design.”

“I can’t believe how invaluable this has been and how much I have learned, how I have detached from my screen and embraced other people’s.”

The shared ownership of the resources generated by the students themselves opened up a more social approach to the three days without hierarchy, promoting sharing and inclusion.

“I didn’t expect to enjoy using other people’s screens as much as I did. It was the best part for me.”

The greatest fear voiced on preparation days was the loss of ownership of individual designs and the copyright and plagiarism issues entangled in the minds of the participants. These issues were discussed with many colleagues. Almost all hold reservations of this approach to teaching Art and Design students, as it is such an alien concept in a competitive culture of individuality promoting innovation and unique-ness. However, conversely, student feedback suggests:

“...I hadn’t expected it to be so easy to consider the owner of the print to be the person printing and not the designer of the screen. I suppose before the workshop I would have considered the screen a more important factor than the way it is printed but I have realised this is not the case.”

The other member of staff assisting in the workshop days also pointed out through her observation of the students that:

“They became more aware and developed a deeper appreciation of other styles realising that sticking too rigidly to what they know and believe to be ‘their style’ can be restrictive” (Fiona Moon, part time lecturer).

As a positive by-product of the group work, the department enjoyed a much fuller integration across year groups.

“More comfortable working in the print room and with other years. Previously idea would have been intimidating.”

Jackson (2008) describes students moving from engagement to engrossment and then to full immersion in an experience. This three day intervention was backed up by ensuring that the students had time and were encouraged to return to their experience and evaluate its effects on their thinking and planning for further action, in readiness to begin another spiral in their learning (Figure 3). As one student commented:

“...it has broadened my mind.”

Conclusion

Statements from the participating students confirm that the aims and objectives in the intended learning outcomes have been achieved. However it is the third learning outcome which particularly demonstrated the success of this intervention:-

In this project it was my intention to help students (and staff) to recognise the benefits of practical interaction with their peers' design process in a group setting, breaking down barriers of ownership and encouraging co-operative and collaborative learning.

Scottish Education in its newly adopted Curriculum for Excellence, has already begun to recognise the necessity for a broader approach to education, breaking down discipline specific barriers and valuing group interaction and collaborative learning. Learners recognise the benefits of both co-operative and collaborative design development. Educational theories by Kolb (1984) and Cowan (2006) which encourage reflective thinking as the learner develops support this approach. This project introduces an additional activity supplementing these theories. Students working on this intervention began to reflect not only on their own actions, that is the decisions made during the printing and designing, but the design decisions initially made by their peers and now physically linked to their own designs, thus extending their experience in action.

The implications for adopting some of these methods in design education may complicate the assessment process, however the value of working in groups and teams far outweighs the complication of assessing.

The impact of this intervention has been felt very strongly throughout the department. As well as a spectator's awareness of their peers' work, students have adopted a refreshingly open minded approach to the value of fully integrated, practical, co-authored, collaborative development.

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