Experiential, Embedded, Electronic

Integrating Academic Skills Into The Art And Design Curriculum

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Abstract

The objective of this paper is to reflect on the possibilities experiential learning offers to the fuller integration of study skills into the undergraduate design curriculum.

Undergraduate design courses are experiential at their core. Students are actively engaged in their own learning, constructing it for themselves (often literally). However, this practice needs to be complemented by the ability to critically reflect on these experiences, a knowledge and understanding of its context in the field, as well as the aptitude to communicate these insights. This is where contextual studies and study skills come in.

By taking the natural approach of practical design teaching, could a model be developed that allows students to experience the building up of academic study skills in a similar way to how they engage with practical design skills?

Two main hypotheses were made: firstly that the learning needed to be experiential and secondly that the study skills teaching needed to be embedded as much as possible into the rest of the curriculum. These were complemented by the aim to test whether at least some of this could be achieved by the integration of electronic means.

During a case study at Staffordshire University a module has been developed that takes the students step-by-step through some basic processes of researching, culminating in an essay that conforms to academic conventions. Links to the different awards the students are studying are made at every opportunity, embedding the academic research into, and thereby developing, their reflective practice. In order to allow further student interaction a private wiki has been set up, where students can not only practice and test their skills, but also share their research.

The testing of this model is very much a work in progress and while feedback has been positive, it also has identified a number of issues that need to be developed further.

Keywords

experiential learning; critical reflection; study skills; contextual studies; academic writing; reflective practice

The provision of study skills can feel like an 'odd one out' part of the undergraduate design curriculum[1]. While necessary to provide first year students with the abilities to negotiate their academic studies, if study skills are taught in dedicated modules they might include content (and employ learning strategies) that are markedly different from studio teaching. Taking the study skills modules delivered during the first semester of art and design awards at Staffordshire University as a case study, this paper investigates whether it is possible to utilise teaching strategies that are modelled on the experiential learning that takes place

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[1] This paper focuses on awards that predominantly teach practical, rather than theoretical skills. While courses that specialise in History of Design or Design Management, for example, certainly also have opportunities for including experiential teaching into their curriculum, these were disregarded for the purposes of this research.

during studio practice when teaching transferable skills and whether that could lead to a fuller integration of study skills into the undergraduate design curriculum.

After a brief survey of the contextual studies[2] and study skills provision in art and design at Staffordshire University, one of the main differences to studio teaching will be identified as the format in which the teaching is delivered. While studio teaching is largely experiential, both study skills and contextual studies often rely on the more traditional strategy of formal classroom delivery. In order to fully explore this difference, an overview of theories of experiential learning will be given and links to practice (and particularly reflective practice) will be made. Using this as a background, the usefulness of contextual studies in developing skills of critical reflection will be discussed.

This paper then goes on to describe a new model for study skills teaching developed using the main hypothesis that learning should be experiential, but also that it should be embedded as much as possible into the rest of the curriculum and that at least some of this could be achieved by the integration of electronic means. Findings after teaching this module for the first time suggest that, while further research is needed, initial results are positive, but also that a certain distance between studio practice and academic modules in the first year might actually be desirable to train students in their abilities to critically reflect.

Study Skills at Staffordshire University

While some university courses in art and design achieve a seamless integration of theory and practice, a real concern for others is that often a gap between them is perceived, particularly if theoretical teaching is divided from studio practice through being delivered by different staff and in separate modules.

The starting point for this research was a project with the objective to audit the balance of research and practice in art and design awards at Staffordshire University[3] to determine the extent to which theory and practice were integrated by the alignment of the contextual studies curriculum with studio practice teaching. As part of this, a review of the study skills provision was also undertaken.

Study skills at Staffordshire University are taught as a separate module in the first semester of the first year of undergraduate art and design courses. The content includes a breakdown of skills that students will need while negotiating an undergraduate university course, such as note taking, critical reading, giving presentations, finding secondary sources and academic writing. Ultimately, however, all these skills are transferable not only onto other modules of the individual courses, but also onto future life as a professional. In the positioning in the award schemes, the study skills module is the first of the contextual studies modules, which aim to give students an insight into the larger historical and theoretical context of their specialism and thereby allow the students to develop a critical perspective on their own work.

Outcomes sought from this research were recommendations for the enhancement of research skills that help art and design students to integrate theory and practice, as well as the development of a study skills module that would ensure that all students are familiar with research methods, processes and principles.

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[2] 'Contextual Studies' at Staffordshire University is geared towards giving students the tools and skills to research, critically analyse and understand the various contexts in which their disciplines can operate. Lectures and seminars that provide historical, theoretical and professional practice background information are integrated with research projects that allow students to develop an informed design vocabulary that is grounded in a comprehensive contextual awareness.

[3] Awards being surveyed for this project included 3D Design, Advertising and Brand Management, Animation, Fine Art, Graphic Design, Media Production, Photography, Product Design, Surface Pattern Design and Visual Effects Design

The initial investigation taking place in the academic year 2008/09 explored both the teaching of study skills and contextual studies. Through informal interviews with award staff, reports from external examiners and module feedback from students, it was established that contextual studies and study skills were delivered in a traditional classroom format. The balance between theory and practice was different from award to award, ranging from 10% to 50% on the theory side, but the respective ratios were deemed appropriate for what the individual awards were trying to achieve. However, in some awards the linkages between the 'theory' and the 'practice' modules and the critical engagement that ideally would stem from that failed to make it through to students' work - in both practical and essay form. Particularly students seemed to be too focused on their own speciality, with little or no larger outlook on art and design.

There were 13 study skills modules at Staffordshire University in different art and design awards. For delivery, these were bundled together into four groups which resulted in a 'one-size-doesn't-really-fit-anyone' module. Teaching was delivered through lectures that alternated with workshops designed to give the students the chance to apply the previously covered skills to their own research. There were also two sessions in the library giving students electronic research skills and one session introducing them to the Design Collection, the in-house museum. During the theoretical lectures, links to the students' practice were limited to examples of work from the field. However, there was room in the timetable for award staff to deliver additional sessions, an opportunity only some of the awards took advantage of. These modules were assessed through a 1,000 word illustrated essay. Feedback from the students indicated that the essay writing was seen as 'overcomplicated' and 'very difficult'. While a lot of the students seemed to be aware of the importance of being able to write academically for their degree, there did not seem to be much understanding of possible links to their practice. The theory-practice gap appeared to be firmly in place.

When reflecting on the differences between the two types of modules - studio practice on the one hand, and contextual studies and study skills on the other - one rather obvious distinction was the type of delivery. Study skills and contextual studies modules took place in lecture theatres and seminar rooms, not in the studio spaces familiar to the students. The 'informal' was squeezed into a 'formal' environment. The hypothesis was formed that the type of learning strategies employed in the studio might also be utilised on the theoretical part of the curriculum.

Experiential Learning

The traditional classroom teaching format can be quite distinct from studio teaching. In its most extreme Freire (1982) criticised this model as basically passive, where no new knowledge is created.

> Education thus becomes an act of depositing, in which the students are the depositories and the teacher is the depositor. Instead of communicating, the teacher issues communiqués and makes deposits, which the students patiently receive, memorize and repeat. This is the 'banking' concept of education, in which the scope of action allowed to the students extends only as far as receiving, filing, and storing the deposits. (Freire, 1982: 45f; in: Beard and Wilson, 2006: 30)

In the context of studio practice, on the other hand, one main learning strategy that is employed is experiential learning (Gray and Malins, 2004). No matter what skills students learn in the studio, they need to learn them by doing, through active exploration.

Largely based on the work of Kolb (1984), and Dewey (1925) before him, experiential learning theory draws a strong link between learning and experience. Indeed, Kolb defines learning as "the process whereby knowledge is created through the transformation of experience" (1984: 38). Beard and Wilson (2006) go even further when they state that "Experiential learning is, in essence, the underpinning process to all forms of learning since it represents the transformation of most new and significant experiences and incorporates

them within a broader conceptual framework" (2006: 19). Boud, Cohen and Walker (1993) make a similar point when they argue that

> Learning builds on and flows from experience: no matter what external prompts to learning there might be - teachers, materials, interesting opportunities - learning can only occur if the experience of the learner is engaged, at least at some level. These external influences can act only by transforming the experience of the learner. (8)

However, while all learning may stem from experiences, not all experiences necessarily result in learning, which is one of the main criticisms made of this particular pedagogic model. In order for the experience to become a meaningful basis for learning, it needs to be reflected on (Beard and Wilson, 2006).

The importance of reflection in the context of one's practice has long been a recognised concept in art and design. Donald Schön (1983) and his work on 'reflective practice' promotes the idea of the professional (or practitioner) using two different types of reflection: concurrent (reflection-in-action) and retrospective (reflection-on-action). Reflection-in-action is almost instantaneous learning, it stems from the immediate interaction with external stimuli.[4]

Reflection-on-action is learning through looking back at an experience and analysing it, making sense of it retrospectively. This is a step removed from the experience itself and as such more abstract. It goes through the steps of undertaking an action, evaluating it, learning from it and planning the next action, a variation of which is Kolb's experiential learning cycle.

A third type of reflection has been suggested by John Cowan as 'reflection-for-action' (1998 in: Gray and Malins, 2004: 57) or a 'prospective' analysis of experience by Beard and Wilson (2006: 247f). This is concerned not just with learning from the experience for similar experiences in the future, but also with the question whether this action should be continued with or whether its type needs to be significantly changed. Rather than being instantaneous, it is an evaluation of the practice through not just the experience itself, but putting it into a larger future context. This type of reflection is critical reflection.[5]

Critical Reflection in Practice and in Contextual Studies

Developing a critical perspective on our experiences (and learning) is particularly important because experiences are by their nature subjective. As Beard and Wilson point out, this subjectivity of experiential learning is one of the main criticisms being made of this approach to learning (2006: 38ff) and had already been addressed by Dewey in 1925:

> When the notion of experiences is introduced, who is not familiar with the query, uttered with a crushingly triumphant tone, '*Whose* experience?' The implication is that experience is not only always somebody's, but that the peculiar nature of 'somebody' infects experience so pervasively that experience is merely somebody's and hence of nobody and nothing else. (Dewey, 1925: 1, as quoted in Beard and Wilson, 2006: 40)

This issue is linked to the process of developing research methodologies for art and design and the question whether art and design practice can be part of academic research. As Schön points out:

> ... when we reject the traditional view of professional knowledge, recognising that practitioners may become reflective researchers in situations of uncertainty, instability, uniqueness, and conflict, we have recast the relationship between research

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[4] 'Action learning' is another concept that is close to reflective practice and experiential learning, though Beard and Wilson (2006) define it as being located specifically in the workplace and being concerned with project work in groups.

[5] For the purpose of this paper the term 'critical reflection' will be used in an individual or organisational context and not in the sociological definition introduced by the thinkers of the Frankfurt School.

and practice. For on this perspective, research is an activity of practitioners. It is triggered by features of the practice situation, undertaken on the spot, and immediately linked to action ... the exchange between research and practice is immediate, and reflection-in-action is its own implementation. (Schön, 1983, 308f)

Gray and Malins, whose book *Visualizing Research* (2004) is about developing research methodologies for post-graduate studies in art and design, also discuss this particular problem. Referring to Robson's *Real World Research* (1993), they state that the problem of subjectivity (or 'insider' problems as Robson terms it), is a challenge for all researchers. However, they argue that this

> can be addressed to some extent by always exposing ideas and practices to other professionals for feedback, support and advice. In seeking the views of others, which will inevitably be subjective, we can develop inter-subjective views, which are less likely to be one-sided. Of course, keeping a critical view of your research at all times is essential. (Gray and Malins, 2004: 23)

Through a survey (and their own experience) of previous and ongoing research degrees in art and design Gray and Malins (2004: 20f) suggest the legitimising of the practitioner as researcher, the 'practitioner-researcher', which acknowledges and embraces subjectivity and the 'insider' role. They go on to say that

> the interaction of the researcher with the research material is recognized. Knowledge is negotiated - inter-subjective, context bound, and is a result of personal construction. Research material may not necessarily be replicated, but can be made accessible, communicated and understood. This requires the methodology to be explicit and transparent (documentation is essential) and transferable in principle (if not specifics). (Gray and Malins, 2004: 21)

They conclude that there is not one specific methodology that fits art and design research, but rather that because the practitioner-researcher needs to be taken into account, research projects need to be approached pluralistically, combining a number of methods to triangulate results. (Gray and Malins, 2004: 21)

In order to introduce undergraduate design students to this way of working and prepare them for using reflection to develop their practice not just in-action but also on- and for-action, they need to acquire the skills to work rigorously and make their reflection (and thus their practice) transparent. This is done in undergraduate studio practice through the critique or 'crit', where students informally discuss the progress of their work with tutors and peers. This is also where the area of contextual studies, which trains students to develop a knowledge and understanding of the context of their practice in the field, comes in. Training students in their studio practice as well as contextual studies is a first introduction to different methods of reflection, something that ultimately can build up to the pluralist approach to art and design methodology that Gray and Malins (2004) argue for. What provides contextual studies with a different perspective on work is particularly that here the main strategy for assessing student learning is not through practical work, but rather the critical essay.

The process of writing, while sometimes unfamiliar or uncomfortable to design students (Gröppel-Wegener, 2004; also see work of Writing-PAD project), has an important role in critical reflection, even for practitioners. Gray and Malins (2004: 57f) report on the work of McAleese (1999), who proposes the keeping of reflection journals as an 'off-loading' device - one main tool "to enable and externalize reflection-on-action" (Gray and Malins, 2004: 58). They go on to say that while they recognise a possible fear that exists in practitioners that speaking or writing about their work has an adverse affect on working creatively, there are compelling reasons for articulating and exposing practice. They cite four main reasons to communicate reflection: developing various models of practice; developing interdisciplinarity and collaboration through better communication; extending professionalism through self-evaluation; and having better conversations with 'ourselves'. (Gray and Malins, 2004: 58f)

This issue plays into the different kinds of knowledge experiential learning offers. As argued by Biggs (2004) there is a marked distinction between experiential feeling and experiential content. While experiential feelings are subjective and maybe cannot be expressed through words, it is the content that can be communicated that should be at the heart of the research. Biggs argues that experiential feelings are an individual representation of the experiential content, which for the researcher should trigger cognitive reflection in order to uncover the content.

The trick for the researcher is to move from reflection-in-action, which is subjective, is concerned with the experiential feelings and might not be possible to communicate through words, to a reflection-on-action, which uncovers the experiential content that can be externalised.

While Gray and Malins (2004) as well as Biggs (2004) are concerned with post-graduate research in the art and design field, links can be drawn to the undergraduate field as well. When it comes to the design students' journey, it is the same distinction that needs to be grasped - while building up skills in the studio is invaluable, it starts with reflection-in-action, experiential feelings. However, in order to go on to deep learning students will have to realise that these subjective feelings are just a starting point and that through critical reflection they can progress to double-loop thinking and retrospective as well as prospective reflection. This is not just crucial for researchers, but also for the level of development in undergraduate education, progressing practical work.

Studio practice can be so subjective and personal, especially for first year students - many of whom come straight from school, it seems quite difficult for them to realise that it is possible to take a step back and critically reflect on their own work. It might even be too difficult to do this at the very beginning of their studies, when they might not have any experience of critical reflection. This is where study skills as the first contextual studies module encountered can help. Here is an area where students can develop their critical and communication skills that is linked to their interests, but through giving them a historical and/or theoretical perspective, is also detached from their practice. Having developed this skill, students will later be able to transfer the critical thinking skills onto their practice to make the step from reflection-in-action to reflection-on-action (and then reflection-for-action). However, the way that the basics of critical thinking and academic communication are taught seem removed from the studio practice; at least this is how it seems to be in the minds of the students. Feedback from study skills modules at Staffordshire University suggests that these skills are often seen by students as removed from their chosen subject, an academic hoop students feel they have to jump through in order to get their university degree.

Could a model for study skills teaching be developed that took the form of an experiential programme that allowed the students to see the writing of their first critical essay at undergraduate level as an experience similar to the experiences they have in their studio practice?

A New Model

Based on the findings of the initial survey of study skills and contextual studies, a number of parameters were decided by the Director of Learning and Teaching and the Programme Area Manager for Arts, Culture and Design in consultation with the award leaders:

- There would still be one fractional member of staff responsible for the bulk of the study skills teaching.

- The 13 different study skills modules would be consolidated into three groups, 'Studying Art' for students on the Fine Art and Photography awards, 'Studying Design' for students studying 3D Design, Graphic Design, Product Design and Surface Pattern Design, as well as 'Studying Media' for students on the Animation, Media Production and Visual Effects Design awards. This would mean three cohorts of 90-125 students each.

- In order to give students a flavour of the field, rather than just exposing them to their own specific subject, there should be occasional lectures delivered by staff from each award to (and relevant for) the whole cohort.

Based on the aim to develop a study skills model that would ensure that students would become familiar with research methods, processes and principles, while also integrating theory and practice, two main hypotheses were made:

- Study skills teaching should be experiential - In order to allow students to relate to this for many unfamiliar and possibly difficult way of working, the teaching should link as much as possible to their practice by employing experiential learning strategies wherever possible.

- Study skills teaching should be embedded - The content should link as much as possible to award specific subjects in order to embed the study skills as fully as possible into the individual awards.

Since a main concern was how to engage large groups of students with limited contact time and staff, it was hoped that electronic means could be used to give students an active research experience outside of the classroom, that possibly tied into communication skills they already employed during their spare time, i.e. social networking.

Based on these parameters and hypotheses a module template was designed that aimed to take students step-by-step through the process of a research project culminating in an academic essay. An introductory session was followed by three blocks of teaching of three weeks each focusing on primary research, secondary research and writing up respectively. The last week was set aside for emergency drop-in sessions to deal with any specific questions regarding the writing of the essay. Input for making the individual sessions more experiential in nature were taken from a workshop on experiential learning by Dr. Colin Beard and his and John P Wilson's book *Experiential Learning - A Best Practice Handbook for Educators and Trainers* (2006).

The introduction to the module was in two parts. The first one was delivered by study skills staff, covering the basic university regulations, what it means to be a student and giving an overview of the individual sessions in the module. The second part was delivered to the separate award groups by award staff; here links to other modules were established and it was explained why the contents delivered in the study skills lessons were important not only for students, but also for practitioners, in their respective specialisms.

The primary research block was designed to introduce students to rigour and the skills of observation and description in an accessible way. They were introduced to note and image taking 'in the field' through an introduction to the Design Collection (Staffordshire University's in-house collection of 20th century design artefacts), a treasure hunt to help them find their way around the campus and a primary research workshop (by award staff), which on the Media courses became part of a residential study trip. Students were also introduced to presentation skills.

The secondary research block introduced students to the library and academic conventions in regards to finding and collecting sources. It also gave the cohorts the chance to test their group working skills through giving group presentations. This included a session with award staff taking them on a subject specific library tour and an introduction to library resources by library staff.

The writing block was designed to help students become accustomed to academic writing skills. They were divided into seminar groups of 30 and taken through the steps of putting their research into a larger context and finding a focus for their essay, how to structure their essay and how to use formal language. There was also a session with library staff scheduled which focused on researching journals to find further sources.

Throughout the semester lectures were scheduled by members of the awards staff to talk about important contributions to the field. These were meant to expose the students to a wider field outside of their specialism.

In order to gauge the proficiency of the students' writing they were asked to write a 500 word descriptive piece to hand in by the end of week five. This was used as a diagnostic piece to find out whether some students needed further testing for dyslexia and whether there were any problems with the hand-in procedures. Weaknesses in the majority of the students' writing were also exposed, which then fed into the teaching of the writing workshops.

A private wiki was set up for each module to give students more help with their independent study time and as a forum for discussion within a larger group. During the module tasks tying into the students' research activities were set, most of which encouraged a submission to the wiki. There was, for example, a group task asking the students to contribute to and create a page that illustrated their treasure hunt.

Findings

While running the module for the first time between September and December 2009, a number of problems were encountered that had not been anticipated and that allow only a limited conclusion as to whether it is possible and effective to take study skills teaching into a more experiential format as opposed to traditional classroom teaching.

While the experiential approach generated some good feedback and some students remarked how effective the treasure hunt was in getting a better idea of where teaching rooms were located across the campus and meeting people from other awards, others found it 'childish'. It almost seemed like these respondents had expected classroom teaching and did not want to settle for anything else. Overall due to the size of the groups it was difficult to facilitate short activities, but this is something that can be developed in future.

It also became apparent that it was more difficult than anticipated to embed links to the students' practice in the module. This was due to some breakdowns of communication between study skills and award staff. In some cases task instructions given to students by award staff differed from those provided by the study skills staff for the same task, the final essay brief being the worst example. This resulted in much confusion for the students, who complained that lecturers told them different things. However, through a detailed de-briefing and re-planning with award and study skills staff together, these issues can hopefully be ironed out for next year.

In terms of results, the outcomes were inconclusive compared to the previous approach. Comparing the new modules with an average of the respective modules from two years previously, the average pass grade improved slightly for two of them, while the pass rate fell. However, what is possibly the most interesting is that the percentage of non-submissions in one of the modules, Studying Media, almost tripled (from 8.87% to 25.69%, while the other two modules' non-submissions were around the 10% mark). While it is difficult to trace this back to the change in learning and teaching strategies specifically, it could be down to students associating a more playful rather than formal teaching approach with a less important module. What does seem clear is that the issue of motivation has not been solved yet.

The module feedback from students suggests that the sessions taught by the award staff varied in relevance - whether that was in the study skills sessions or in their more contextual lecture on contributions to the field. The latter were often seen as 'not relevant for us', so the attempt to give students a broader perspective on the field failed in this respect.

Using an electronic forum for students to engage with research seemed to get positive feedback. While throughout the parts of the module when the wiki was used anxiety was expressed by some, particularly by mature students, more than half the respondents to the module feedback questionnaires stated that the wiki was underused. If it is paired with giving students the confidence to interact with electronic media as needed, this seems to be a part of the module that could be developed much further. Again a problem here was the size of the groups, going through recent activities on the wiki became an administrative problem for the study skills staff. Looking back it seems obvious that while the potential is there, the

practical use of electronic learning in this context was not properly researched in advance in order to properly embed it as a teaching and learning strategy. More research on the design of electronic learning needs to be conducted in order to turn this into a valuable experience for the students and make it work as efficiently as possible.

While the experiential aspects of this module have been successful, they were not enough to change the problem of the students' motivation. It seems that the model of organising this as few 'big' modules dealing with a number of awards in a larger field resulted in a large number of them not even handing their essays in. Consequently the decision was made to change this delivery pattern back to modules that deal with students per award and that have considerably more input from award staff. This will also include a more detailed introduction to how this module is based on the experience of research and how developing a critical perspective on an aspect of their studies will allow them to appreciate the relevance for the development not only of their essay writing skills, but also their critical thinking. There will also be more detailed links between the weekly tasks and the final essay as well as the studio practice. If the tasks could be linked closer to and embedded more firmly into the subject matter of the individual awards, students might be able to be more aware of a problem they could solve through critical intervention, rather than a task they have to fulfil in order to get their degree.

Conclusion

Based on the findings of the case study, it seems that using experiential learning strategies to integrate study skills teaching more fully into a practice-heavy undergraduate design curriculum is a possibility. However, a major element towards making this work is linked not just to learning strategies that reflect each other, but also to the subject matter. It seems that students are prone to dismiss teaching that they feel is not related to their 'real' object of study. Therefore it is important that the study skills teaching is not considered as generic in order to better engage students. Content needs to be embedded in the subject area.

It has been found that electronic activities can support study skills content, but in order to use them as part of allowing students the experience of academic research and reflection, they need to be fully integrated and built on during the teaching.

However, when planning the introduction of more experiential, embedded and electronic ways of teaching study skills it needs to be kept in mind that its particular value for students is as the first step to developing their critical reflection skills. As that (and a stepping stone to contextual studies modules to come), it is an advantage that study skills deals with less experiential feeling, the students are less involved in the subject matter than they are in their practice. The challenge is to find a subject matter which has experiential content that is removed from the students' immediate experiential feelings, yet related enough for them to (want to) engage with it.

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