



Comfortably Uncomfortable: A Study of Undergraduate Students' Responses to Working in a Creative Learning Environment

Jan S. Watson, University of East Anglia

ABSTRACT

This article, which draws on a study of undergraduate students' perceptions of working in a creative learning environment, is underpinned by the idea that everyone has the potential to be creative. Empirical data was obtained from semi-structured interviews with students in Year 3 BA in Education Studies, their reflective sketchbooks, and notes from observations undertaken in the campus-based Visual Arts Centre studio. The findings support the view that students benefit from having access to creative opportunities which involve self-examination and risk-taking in a supportive, collaborative space. The evidence suggests there is a need for lecturers to discuss and share creative pedagogical strategies designed to support student learning in different settings.

Introduction

The BA in Education Studies degree course aims to introduce students to learning and teaching practices in a wide range of educational settings, with reference to contemporary research and other relevant educational literature. Key skills learning has been integrated into the degree program to ensure that students gain not just subject knowledge but some of the translatable skills and attributes valued by employers; these include effective teamwork, communication and creative problem-solving skills, self-awareness and the ability to make independent judgment (Undergraduate prospectus, 2012). Although the majority of students

hope that achieving a degree in Education Studies will help them to secure a Primary Post Graduate Certificate in Education (PGCE) place, it is not marketed as a Teacher Education course. In line with the common structure for all undergraduate programs provided by the School of Education, core compulsory and optional self-contained modules are offered; this means that students are able to personalize their studies, to some extent, according to their particular interests, experiences, and aspirations. Whichever route they take, the expectation is that all students will have access to innovative, stimulating learning opportunities, which will encourage them to engage with “reflective, critical, creative and conceptual ways of thinking” (Course handbook, 2012). If this aim is to be achieved, much more attention needs to be given to the development of creative practice in Higher Education (HE) undergraduate courses; lecturers need time to explore and discuss what Hayward Rolling (2010) refers to as a “pedagogy of possibilities,” with reference to students’ perceptions of how they engage with their learning in different environments.

This paper focuses on the creative learning experiences of students who opted for the “Creativity and Learning” module delivered in the spring semester of their final undergraduate year; the 12 one-day weekly sessions took place in both the School of Education and the campus-based Centre for Visual Arts. A three-tier model has been developed to deliver the module content: traditional lectures, designed to introduce theoretical ideas and concepts of relevance to creativity in education, more interactive presentations from a range of local practitioners, and practical sessions led by an artist-in-residence. In addition to exploring and gaining insight into the theory and practice, philosophy and policy of creativity in education, students are expected to engage in practical, self-reflective creative learning activities and explore their own creative processes through the planning, creation, and presentation of an art piece. They are provided with a sketchbook to document the ongoing development of their ideas and are asked to produce a short reflective overview of the process to support the final product. The whole creative portfolio is assessed on the last day of the module, when the students present their work as a peer group exhibition in the Art Centre studio. They are also required to submit a written assignment to demonstrate their understanding of the role creativity plays in the current English education system. The central discussion of this article addresses students’ responses to working in the relatively informal, creative learning environment of the art studio.

Theoretical and Empirical Background

The Wider Context

The decision to introduce a new module focusing on creativity in education was underpinned by a strong belief that there is scope for the undergraduate experience to be enhanced and developed; as Dollinger, Dollinger, and Centeno (2005) maintain, aspects of pedagogy and practice in HE would benefit from being experiential, with more university lecturers applying findings from their research to students' learning (Ramsden, 2003). Kuh (1996) talks of the importance of creating conditions that inspire and motivate students, encouraging lecturers to spend time and energy on "educationally purposeful activities" that match with both learners' aspirations and the aims of the institution. As we cannot presume students are learning what we expect them to, it is important to take into account what they bring to the learning environment; Millard (2003) uses the term "flow" to refer to this blending of university requirements with students' ideas, interests and experiences. With reference to some of the studies centred on Year 1 students' levels of engagement, (Elton, 2001; Entwistle, 2000; Haggis, 2003; Pheiffer, Andrew, Green, & Holley, 2003), Holley and Dobson (2008) point out that there seems to be an elitist set of assumptions about student aims and motivation in HE; Haggis (2003) feels that academics share the belief that learning at this level is about questioning, discovering, and creating knowledge but that not all students are capable of, or have the desire to be, intellectually curious. If we, as HE practitioners, acknowledge the many different thoughts, feelings, ideas, and aspirations that students bring to the learning situation, we can discover a great deal about our practice from both formal and informal communications with them.

This small-scale study, which examines students' perceptions of the creative learning experiences offered by the Creativity in Education module, aims to investigate how engaging in creative exploration and thoughtful reflection, in the final year of their undergraduate studies, encourages students to challenge the habitual ways in which they approach their learning. It also seeks to develop our understanding of how working in a collaborative, creative learning environment impacts on students' self-knowledge, with reference to their future practice. It is beyond the scope of this article to enter into the long-standing debates about the importance of students developing the higher level skills and abilities more recently linked with employability, lifelong learning, and personal development, but these are well documented elsewhere (Dearing, 1997; Fallows & Steven, 2000; Gibbs, 1990; Knapper & Cropley, 1985). The long-awaited Higher Education White Paper, published by the British Coalition Government in 2011, advocates the ongoing improvement of course design and content, with reference to student feedback; it professes to put students at the heart

of the educational experience and highlights the need for them to play a more active part in the learning process. Building on the student-centred approach to learning in HE (Kember, 2009), this module provides students with opportunities to work in a dynamic educational setting, where they can make a collaborative contribution to the development of the module content. By incorporating alternative pedagogical approaches, which encourage thinking in different ways, into existing undergraduate programs, the expectation is that improvements to the student experience will be more rewarding and sustainable.

In order to put the research study into context, it is helpful to consider what is meant by creativity and why it is so important for undergraduate students to have access to creative learning experiences at this time.

Creativity

Despite the wealth of literature about creativity in education, there continues to be a lack of consensus about the meaning of this complex, slippery term (Watson, 2008). Wallace (2002) stated that there is no universal agreement on the definition of creativity and Parsons (1987) spoke of the “fertile untidiness in the language surrounding key developmental ideas [in education] such as creativity” (p. 38). Some scholars distinguish between “high” creativity (Csikszentmihalyi, 1996; Gardner, 1990), which involves a significant innovation or achievement, and what Craft (1997, 2005) calls “little c” creativity; the latter is based on the idea that everyone has the potential to be creative if given appropriate opportunities and support. Wallace’s (2002) claim that “being able to generate and extend ideas, suggest hypotheses, apply imagination and look for innovative outcomes, lie at the root of creative thinking” (p. 96) highlights the importance of focusing on developing students’ creative abilities, attributes and behaviours.

In a fast-moving world of economic and technical change, there is an urgent need for a creative, collaborative workforce which will respond quickly and effectively to innovative developments (Cunningham, 2005; Hartley, 2004) and challenge conventional ideas (Barell, 2003). As Craft (2001) points out, the “imperative to foster creativity in business has helped to raise the profile and credentials of creativity in education more generally” (p. 11); the wider social, economic, political, and technological factors responsible for this are explored at length elsewhere (Craft, 2005; Csikszentmihalyi, 1999; Seltzer & Bentley, 1999). Despite being included in the “burgeoning list of graduate outcomes for which we [as university lecturers] take pedagogical responsibility” (McWilliam, 2007, p. 2), there is a dearth of literature focusing

on creative pedagogies and practice in HE. In addition to the misunderstandings about creativity, working within a paradigm of league tables (rankings used to inform potential applicants of the comparative academic achievements of different institutions) makes it difficult for HE institutions to take risks; in fact, some educators feel that educational institutions actively suppress creativity (Cole, Sugioka, & Yamagata-Lynch, 1999). Kawenski (1991) points out that the students themselves find it difficult to be creative in traditional learning environments as they are worried that exploring novel ideas and experimenting with different approaches to learning may lead to academic failure.

Working on the premise that the fostering of creativity in HE is worthwhile and desirable, my work supports the view that certain aspects of creativity can be taught and developed (Amabile, 1996; Craft, 2005; Cropley, 2001; Fryer, 1996) and that HE educators have an important part to play in enhancing the creative potential of all students. Discrete creative thinking training programs are appropriate in some learning situations, but integrated approaches, which promote the development of higher order thinking skills (Anderson & Krathwohl, 2001) through alternative pedagogies and stimulating, creative learning environments, are more relevant to this study. The practical art-based sessions, which encourage students to engage and experiment with a range of ideas and materials, are underpinned by what Smith (2005) refers to as “process-oriented creativity”; the focus being on the development of “mental processes” such as identifying and solving problems, looking at existing ideas in original ways, and becoming more self-aware (Fryer, 1996). As they are tasked with presenting a final piece of art, which is assessed against specific criteria and exhibited in the gallery space at the end of the module, “product-oriented” creativity is also involved. Far from offering a free-for-all approach, which was the expectation of some students (and colleagues), the “experimental modes of pedagogical engagement” (McWilliam, 2007, p. 9) introduced by the artist were incorporated into carefully planned, structured sessions.

Pioneers of creativity in the United States (Guilford, 1950; Renzulli, 1977; Torrance, 1974) viewed creativity as an individual attribute to be identified and nurtured, but more recent studies (Jeffrey & Woods, 2003) have focused on collaborative approaches to creative work in education. The open-ended nature of the practical task encouraged self-directed activity, flexibility, and choice but the content and direction of the sessions were, to some extent, determined by the group as a whole. This study is underpinned by the view that it is the students themselves who determine the social contexts in which their learning takes place (Kuh, 1996); the role of the student within the socio-cultural context of this creative learning experience is central to the discussion.

Research Methodology and Data Collection Methods

This qualitative study, which is part of an ongoing action research project centred on creative pedagogy and practice in education, was carried out within an interpretive-social constructivist theoretical framework. The reflective methodology employed enabled the participants to document and share their “lived experiences” (Whitehead & McNiff, 2006) of working in a creative learning environment over the 12-week period. As McNiff (2002) states, reflection on action only makes sense “when practice is seen as in relation with others, a process of dialogue and encounter” (p. 18); recounting and reflecting on their experiences collaboratively (Leavy, 2009) helped them to develop their artwork with new insights. I hoped that sharing the findings with colleagues in an engaging way would stimulate discussions focusing on improving the quality of the undergraduate learning experience.

The 40 participants were drawn from two groups of Year 3 BA in Education students, the first of which had opted for the “Creativity and Learning” module in 2011 and the second in 2012; with nearly three years of HE experience behind them, they were at the point of considering the next stage of their careers in education. Some students made it clear that they had opted for the module in the hope of becoming more creative practitioners and others said that, having just completed their final extended essays, they were keen to experience a completely different approach to learning and assessment. Although they readily agreed to participate in the study, it was important to reassure them that the interviews would be confidential and that the data would have no bearing on their grades.

As I attended the 11 two-hour practical sessions in the role of both supportive module convenor/lecturer and participant observer, it was necessary to acknowledge that the notes I made would be “subjective, biased, impressionistic and idiosyncratic” (Cohen & Manion, 1994, p. 110). The observations were carried out in the context of what I already know and value about creativity and art-based education, so it was inevitable that I would bring my own implicit theories to the situation. The notes I made when observing and interacting with the students, as they worked in the studio, enabled me to be aware of the changes in my own thought processes and consider the impact these might have on the participants—what Warwick and Board (2012) refer to as “immersed reflexivity.” When selecting students’ comments for this paper and attempting to draw meanings from these, I was aware that I was constructing yet another narrative which reflected my knowledge, beliefs, values, and experience. As the focus of the study was the students’ perceptions of their learning

experiences, the most interesting and useful data was obtained from the 45-minute recorded interviews; these were conducted during the practical sessions in a quiet room next to the art studio. Ten of the 30 students interviewed in week five agreed to be interviewed for a second time at the end of the 12-week module; this enabled me to get some idea of the development of their thoughts and feelings throughout the process. A conversational approach to the semi-structured interviews (Clough, 2002) was adopted, so students could tell their "stories" with reference to their reflective sketchbooks and elaborate on the initial ideas, thoughts and feelings expressed informally in the studio, where appropriate (Cohen, Manion, & Morrison, 2003). This method of data collection, referred to as "qualitative interviewing" by Mason (1998), acknowledges that each account is "grounded in the complexities of [the individual's] experience" (cited in Henkel, 2000, p. 250); although it was useful to draw out key issues from the transcripts, it was important not to lose sight of the rich, unique learning journeys of individuals.

Findings and Discussion

This section provides an overview of the findings with reference to students' experiences of working in the art studio. The discussion focuses on how students responded favourably to working in a collaborative learning environment; it highlights how the whole experience helped them to explore their identities, develop their understanding of the links between theory and practice, and rethink their ideas about assessment.

Initial thoughts, feelings and expectations.

Although comments about the art-based work were overwhelmingly positive, evidence from the interview transcripts indicated that the majority of participants felt apprehensive and anxious in the first session. One student said, *"I found it a daunting, even intimidating, experience; I was sceptical of the process and what it would entail"* and another (a visiting student from the US) said, *"As I am used to being given instructions and having things planned for me, I found it difficult being told to experiment with ideas."* One of the students interviewed at the end of the module exclaimed, *"I couldn't see the point at first; I just wanted someone to tell me the facts to write down and learn; I was worried about not knowing what was expected of me."* A mature student, who had worked as a Teaching Assistant before starting the BA course, enhanced on this comment by saying: *"I found [the experience] a bit alien at first because, as we*

have been so used to didactic teaching—being told things to learn for exams—this is a new experience for most of us.” Another student said, “I have not had the opportunity to be creative on this course until now; we have become disciplined and passive over the years ... some lectures are interactive but in a limited way; most downplay the idea of self-discovery.” Students who chose the module in the hope of discovering their “inner creativity” were excited by the “real challenge” offered by the practical sessions but nervous about presenting their work to others in the group. As a student who had secured a place on the primary post-graduate teacher education course remarked, “I used to think creativity was only for those with artistic ability; having the confidence to recognise my own creative potential has made me realise that the children I teach will be creative in many different ways.”

Although no two stories were identical, it was interesting to consider some of the factors that underpinned these comments; the interview transcripts revealed that past experience and personalities played an important part in determining initial feelings about the sessions. One student said, *“My negative experience of art in school has made me reluctant to participate in art-based work again—the teacher didn’t like us having original ideas.”* In contrast to this, several students were enthusiastic about the creative experiences offered by their schools but disappointed with the lack of creative opportunities in HE. One student said: *“I chose this module so I could get back in touch with my creative side—I felt I had lost the creative spark which was an important part of me at college.”* Comments like these support the idea that people lose their creative potential, including their sense of playfulness and spontaneity, if they are not given opportunities to experience creative approaches to learning and teaching throughout their time in formal education (Erikson, 1982; Esquivel, 1995). The point made by Robinson (2001) that traditional education systems have allowed students (and possibly teachers) to feel more comfortable by not being creative is reflected in the findings; he was referring to schools when he talked about the “stifling” of creative ideas but evidence from this study indicates that this spills over into HE. Many students were surprised that the module was so *“academically rigorous”*; *“my friends and family thought I was just playing when I told them about the practical sessions,”* remarked one student, *“those who did not choose it either felt they lacked the necessary creative skills or dismissed it as a soft option with no academic rigour.”* These comments chime with the idea that even if creative opportunities are made available in schools, they are not always given high status (Lin, 2011; McWilliam, 2005).

Experimentation and risk-taking.

Students were required to experiment with the wide range of materials in the studio, spend time in the gallery exhibitions, and discuss emerging themes and ideas with each other. The artist facilitated the process by providing ongoing guidance and support, but she encouraged students to be open-minded and flexible when conducting the personal lines of inquiry leading to the development of their final piece. In some cases, the introductory, exploratory tasks made students more self-aware; *"when we were presented with the sketchbook with all those blank spaces,"* one student said, *"I felt inclined to fill the pages at once; it made me realise that emptiness and simplicity makes me feel nervous and vulnerable."* In contrast to this, another student said she was worried about *"spoiling the clean pages with poor work"* but *"felt more inclined to take risks once it became clear that everything didn't have to be all neat and tidy";* she remarked that seeing unfinished work displayed in the galleries made her realize that *"everything in art does not have to be perfect"* and that it was *"acceptable to pursue ideas that led to unexpected outcomes."* This concurs with the idea of "possibility thinking" (Craft, 2005) and Haywood Rolling's (2010) inference that it is the "labyrinthian" nature of art-based learning which makes it so interesting and challenging.

Reflective entries in the sketchbooks, which were regarded as *"effective vehicles for recording ideas and expressing emotions,"* indicated that most students approached the work with increased confidence once they became familiar with the learning environment and knew what was expected of them. The comment that *"Creative thoughts flowed more freely when I abandoned my preconceived ideas and found simple, unexpected things fascinating"* was echoed by others. The few students who had a fixed vision of their final piece early on recognized that they needed to be open to other ideas and influences if they were to fulfil their creative potential; as one student said, *"I made a conscious decision to allow my creativity to be constructed by my interactions with the whole learning environment."* Despite the lack of control associated with working outside their comfort zones, the comment that *"There was a marked transformation from feeling deflated and despondent to being excited and motivated once the initial ideas had been thought through,"* summarized a general feeling. One student said she *"played safe at first"* but became *"more creative both in [her] thoughts and with the materials [she] was using"* when the focus shifted from the outcome to the experimental process; this concurs with the idea that having the confidence to experiment and take risks in educational settings is a "vital part of creativity" (Biech, 1996, p. 53).

The learning environment and identity building.

Most students enjoyed working in the art studio and having immediate access to the galleries; *"as soon as I entered the big light canvas of the studio, the lack of distractions made me feel uncluttered and focused,"* commented one student. It was generally agreed that working outside their familiar learning environment encouraged them to be more creative; as one student said, *"it's good to be out of that space which is so associated with the whole didactic thing."* *"There's so much space, both physically and mentally, where you can come up with ideas for yourself and in discussion with others rather than be told what to think,"* another student remarked; this resonates with a point made by Heath, Brooks, Cleaver, and Ireland (2009) about the importance of both internal and external space in building social identities.

The data showed that the majority of students felt working in a creative environment had impacted on their self-knowledge and personal development; with reference to their own particular areas of interest or significant events in their lives, they found producing artwork to be a way of displaying their identity. Several students made comments about discovering abilities they did not know they had, enjoying the independence, choice and control over their own learning and *"coming to terms with being comfortable about feeling uncomfortable."* One student, who produced a very thought-provoking final piece said, *"I have found the whole experience stimulating and challenging; it has enabled me to rediscover my expressive self which had been lost amongst the academic work of university life"* and another said, *"Actually experiencing what I've been learning about in theory has had a transformative effect on me—I feel this should be one of the main aims of education."* According to Ramsden (2003), "learning in educational institutions should be about changing the ways in which learners understand, or experience, or conceptualise the world around them" (p. 6); this study suggests that it should also be about introducing pedagogical practices which encourage the development of students' self-knowledge. One student said, *"As students of education, we need to use every opportunity to think outside the box";* he went on to say that, *"lecturers tell you about different teaching methods but often don't practise these themselves."* Another student thought it was ironic that in *"education we are constantly talking about encouraging children to be more creative but are not given much chance to be creative ourselves."*

Collaborative approaches to learning.

The findings of this small-scale study support Kuh's (1996) idea that, when they interact purposefully with others, student learning is enhanced; *"I enjoy working in the more informal, creative learning environment of the studio as I am free to talk*

to different people and explore my thoughts—listening to each other and talking things through has helped us to be more open to new ideas." The following comment, made by a student who had been reluctant to engage in group discussions at the beginning of the module, enhanced on this view: "This experience has given me the confidence to converse with a wider range of my peers—it's been useful to know that you can ask them for help and advice when necessary." The findings support the idea that creativity is a social process and that collaborative approaches aid the creative development of groups and individuals (Csikszentmihalyi, 1996; Jeffrey & Craft, 2004); Lin (2011) talks of a "collaborative emergence" which can occur if everyone involved in the learning and teaching process works together to support self-directed activity and choice. One student, who agreed to be interviewed for a second time at the end of the module, was very enthusiastic about how working in a collaborative learning environment had helped her to develop her artwork: "I would not have taken so many risks with my piece if I had been working alone," she said, "we were constantly bouncing ideas off each other and considering different possibilities—it made us more creative individually by being in a bigger group as everyone's enthusiasm was contagious." She elaborated on this point by saying, "it didn't feel we were competing against each other to produce the best piece, as the artwork was not viewed as a reflection of our academic ability—we have not had the opportunity to see each other's work before." This student spoke at length about how strange it was that a relatively small group of people could spend three years together but only start to build friendships in the final semester of the course.

Making the links between theory and practice.

As the written element of the assessment required students to demonstrate their knowledge and understanding of creativity in education, with reference to current policy and practice, it was interesting to find out what they thought about the links between the practical and theoretical aspects of the module. One of the students interviewed at the end of the 12-week period said, "The lectures in the morning got you in the right mind-set for the practical sessions—thinking about some of the ideas introduced helped to prepare me for the creative flow needed in the art work; it all ties in but it's done very subtly." One student said that having a definite idea from virtually the first day prevented him from experimenting with resources and using ideas from the theoretical sessions: "I felt uneasy until I made the link between my feelings and the different stages of creativity introduced in one of the lectures—I realised that I needed an incubation period" (reference to the second of the four stages of creative thought, proposed by Wallace in 1926, in which the problem or issue is thought about unconsciously; cited in Vernon, 1970). Engaging with some of the theoretical models

of creative development inspired some students to consider the reasons behind their thinking; with reference to an entry in her sketchbook, one student said:

This module has changed the way I think about things; I've recorded my weekly reflections on the sessions but have started to leave a space after each entry so I can go back and critically reflect on the thoughts and feelings I had at that time. I feel I'm in a better position to look back at the whole process and examine my thoughts in more depth.

This metacognitive approach to learning supports the idea that creativity is not developed at the expense of intellectual engagement; evidence from the data shows that, as students reached the final stages of their creative journeys, they were able to reflect on the whole process and draw everything together. This chimes with Warwick and Board's remark that "the plethora of those mixed feelings and pathways that are present in the moment" may be difficult to understand at the time but, when we look back on these, they often "appear linear and logical" (2012, p. 152).

Assessing creativity: process and product.

All students interviewed thought there should be opportunities for creative experiences throughout the course but they were mindful of how the all-important summative assessment process would impact on their degree classification. Some students felt that formal written assignments contradicted the spirit of creativity but they were pleased the essay accounted for half of the final mark. As one student remarked, "*the written account gave us the opportunity to express our creative experience in words as well as through art ... it made a pleasant change be challenged and assessed in different ways.*" Another student, who admitted to being "*obsessed with grades*" said, "*I think you should be able to learn for learning's sake but, unfortunately, our society has created a situation where exam results count for everything.*" He went on to talk about how he had wanted to be more experimental with his practical work but was constantly worrying about there being "*a right and a wrong response*" to the tasks set.



Fig. 1: A celebration of creativity in the art studio: the final exhibition (Sainsbury Centre for Visual Arts, Photograph: Bryony Graham)

Planning for the final exhibition of individual pieces in a shared, negotiated space made students realize that *"creativity involves dealing with practicalities as well as using the imagination."* One student said, *"It's about connecting the new ways of thinking developed throughout the module and then transforming the thinking patterns into visual representations for others to interpret in their own way."* Although the transcripts indicated that students were more interested in the creative process during the course of the module, they were pleased that there would be a product to physically represent all their hard work. One student said, *"I believe that having an end result will give me closure on this creative journey as well as a sense of achievement"* and another remarked, *"I am so proud of my final piece but see it as a culmination of my thoughts and ideas rather than as an exhibit; I know that people will never truly understand the processes I have worked through to get to this stage."* An amalgamation of the "process/product orientated" approaches referred to earlier (Smith, 2005) is evidenced in the following comment:

The process was layered rather than linear—you get an idea from someone else's piece or from something you've read or experienced and then feed this it into the work in progress; as I kept adding bits right up to the day of the exhibition, I came to realise that creativity can never be finished—it was difficult trying to convince myself that this was acceptable.



Fig. 2: "Here I stand": a visual representation of creative identity building
(Photograph: Kimberley Sparkes)

For some students, the dynamic process of experimentation, risk-taking, and being open to different interpretations continued to be unsettling throughout the process. One student actually referred to it as *"mentally torturous"* although she agreed with her peers that *"pushing the boundaries"* of her thinking did lead to *"the generation of inspirational new ideas."* It was interesting to note that some of the students who found the process particularly challenging produced the most thought-provoking final pieces. One student, who said she had not felt comfortable expressing herself through visual art initially, presented a fascinating artwork entitled "Here I stand"; *"each of the elements in the cage, which were constructed at different times, represented my thoughts and feelings about my identity over the course of the module,"* she explained, *"viewers are invited to look in but they won't be able to find out everything about me."* Some students managed to distil a wide range of ideas into what appeared to be relatively uncomplicated final pieces; as the artist noted, this ability to deconstruct complex thoughts and re-present these in a simple way demonstrated

a deep level of intellectual engagement with abstract concepts. The following comment, taken from a student's reflective overview of her experiences, draws together some of the key issues discussed in this paper:

The different aspects of my final piece symbolise the development of my identity and ideas from the interactions with my peers, family, environment, reading, artistic influences and conscious reflection throughout the module; each one has been influenced by my existing knowledge, interests and experiences which I feel form the building platform to my creative development. I am pleased that my artwork will be seen and interpreted in different ways.

Implications for Practice

The extracts from the interview transcripts incorporated into the previous section represent only a fraction of the rich accounts of students' creative learning journeys; the unspoken experiences and implicit personal theories embedded in the data help to make each "story" unique. However, key ideas have been extrapolated from the findings, which have implications for both the BA in Education degree course and for wider undergraduate pedagogy and practice.

This study has highlighted the need for us, as educators, to acknowledge and discuss the wide range of interests, knowledge, and skills that students bring to the learning situation and the ways in which they engage with their learning in different types of educational settings (Woods & Jeffrey, 1996). Evidence from the data suggests that students benefit from being exposed to alternative learning and teaching approaches which put them under pressure and shake up their preconceived ideas about what it means to be an education undergraduate. They need to have access to dynamic course modules which genuinely promote open-mindedness and experimentation and recognize that creative practice involves rigorous, structured intellectual processes. The findings build on the idea that students are more likely to be interested in theoretical ideas if they can see how these may be applied to their own learning experiences (Starko, 1995). They tended to draw on theoretical models of creativity at significant moments, such as when they were unsure about how to proceed with their artwork; this observation, which indicates that the process of making creative connections is not straightforward and linear, has implications for course design.

The study shows that individuals benefit from working in a collaborative learning environment, where they can pursue their own lines of enquiry but explore and develop their ideas through discussions with others. Armstrong (2012) makes the point that traditional teaching methods often ignore or even suppress learner responsibility; this view is echoed in a recently published report of effective learning and teaching in the UK (HE, 2012) which promotes the idea of students co-designing innovative learning experiences with both their lecturers and their peers. This idea could be extended to the assessment process; as students welcomed the opportunity to demonstrate their knowledge and understanding in different ways, there may be scope for them to play a part in the formulation of assessment criteria in the future. As traditional methods of assessment tend to inhibit creativity (Craft, 2006; Csikszentmihalyi, 1996), student involvement could lead to more meaningful, creative assessments being incorporated into existing processes.

Next steps.

The next stage of the research will focus on students' identity as they move on to teacher education courses or employment; the idea is to interview some of the former participants to find out to what extent the creative, art-based experiences have impacted on their personal development and professional practice. Creativity research has not paid much attention to identity in the past (Dollinger et al., 2005) so this should contribute to the knowledge base in this area. Subsequent studies will address the role of the teacher/artist in the creative learning environment and creative approaches to assessment. There are plans to publish some of the students' accounts of their individual creative journeys in the form of vignettes.

Conclusion

This study has drawn attention to some important issues at a time when learning, teaching, and assessment are high on the HE Reform agenda. Having acknowledged that performance-driven institutions, such as universities, are reluctant to take risks which may adversely affect their recruitment figures, major changes to undergraduate degree courses have not been suggested. Incorporating creative learning objectives and activities into existing course specifications and module outlines will still enable students to achieve high class degrees but they will have been able to draw on a wider range of opportunities in the process. This concurs with Kuh's suggestion that HE educators should be prepared to experiment with and share

creative pedagogical strategies but aim to incorporate these into the existing “culture, policies and practices [which] indirectly shape students’ expectation and performance” (1996, p. 135).

It is clear from the evidence presented in this paper that, if undergraduate students have access to alternative, creative learning experiences which involve self-examination and risk-taking, they will be more likely to develop the translatable skills required by employers. However, institutional efforts to enhance student learning and self-knowledge through the development of new pedagogies means placing greater value on teaching and more emphasis on professional development (Teaching and Learning Research Programme, 2012).

As the study focussed on student voice, the final word goes to one of the interviewees:

Being creative involves some seriously complex thought processes—this module has encouraged me to think about who I really am and what kind of practitioner I will be—creativity is so fundamental to learning that I find it difficult to understand why we have not been introduced to this kind of work before.

References

- Amabile, T. (1996). *Creativity in context* (Update to the social psychology of creativity). Boulder, CO: Westview Press.
- Anderson, L., & Krathwohl, D. (2001). *Taxonomy for learning, teaching and assessing: A revision of Bloom's taxonomy of educational objectives*. New York: Longman.
- Armstrong, J. (2012). *Natural learning in higher education*. New York: New York Free Press.
- Barell, J. (2003). *Developing more curious minds*. Alexandria, USA: ASCD.
- Biech, E. (1996). *Creativity and innovation: The ASTD trainer's programme*. New York: McGraw-Hill.
- Clough, P. (2002). *Narratives and fictions in educational research*. Buckingham: Open University Press.
- Cohen, L., & Manion, L. (1994). *Research methods in education*. (4th ed.). London: Routledge.
- Cohen, L., Manion, L., & Morrison, K. (2003). *Research methods in education*. London: Routledge Falmer.
- Cole, D., Sugioka, H., & Yamagata-Lynch, L. (1999). Supportive classroom environments for creativity in higher education. *Journal of Creative Behavior*, 33, 277–293.
- Course Handbook. (2012). BA in Educational Studies, School of Education and Lifelong Learning, University of East Anglia.
- Craft, A. (1997). Identity and creativity: Education for post-modernism? *Teacher Development: An International Journal of Teachers' Professional Development*, 1, 83–96.

- Craft, A. (2001) An analysis of research and literature on Creativity Education: Report prepared for the Qualifications and Curriculum Authority.
- Craft, A. (2005). *Creativity in schools: Tensions and dilemmas*. London: Routledge.
- Craft, A. (2006). *Creativity in schools*. In N. Jackson, M. Oliver, M. Shaw, and J. Wisdom (Eds), *Developing creativity in higher education: An imaginative curriculum*. London: Routledge.
- Cropley, A. (2001). *Creativity in education and learning*. London: RoutledgeFalmer.
- Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. New York: Harper Collins.
- Csikszentmihalyi, M. (1999). Implications of a systems perspective for the study of creativity. In R. J. Sernberg (Ed.), *Handbook of creativity*. Cambridge: Cambridge University Press.
- Cunningham, S. (2005). Creative enterprises. In J. Hartley (Ed.) *Creative industries* (pp. 282–298). Oxford: Blackwell.
- Dearing, R. (1997). *Higher education in the learning society: Report of the national committee of inquiry into higher education*. London: HMSO.
- Department for Education. (2011). *Higher education: Students at the heart of the system*. London: Department for Business, Innovation and Skills.
- Dollinger, S. J., Dollinger, S. M., & Centeno, L. (2005). Identity and creativity. *Identity*, 5, 315–339.
- Elton, L. (2001). Research and teaching: Conditions for a positive link. *Teaching in Higher Education*, 6(1), 43–56.
- Entwistle, N. (2000). Approaches to studying and levels of understanding: The influences of teaching and assessment. In J. Smart (Ed.), *Higher education: handbook of theory and research* (pp. 156–218). New York: Agathon Press.
- Erikson, E. (1982). *The life cycle completed: A review*. New York: Norton.
- Esquivel, G. (1995). Teacher behaviours that foster creativity. *Educational Psychology Review*, 7, 185–201.
- Fallows, S., & Steven, C. (2000). Building employability skills into the higher education curriculum: a university-wide initiative. *Education and Training*, 42(2), 75–83.
- Fryer, M. (1996). *Creative teaching and learning*. London: PCP.
- Gardner, H. (1990). *Art education and human development*. Santa Monica: J.P. Getty Trust, Getty Centre for Education in the Arts.
- Gardner, H. (2011). Educational research: What (a) to do about impact! *British Educational Research Journal*, 37, 543–561.
- Gibbs, G. (1990). *Improving student learning project: Briefing paper for participants in the project*. Oxford: Oxford Brookes University.
- Guilford, J.P. (1990). Structure of Intellect. *Psychological Bulletin*, 53, 267–293.
- Haggis, T. (2003). Constructing images of ourselves? A critical investigation into 'approaches to learning' research in higher education. *British Educational Research Journal*, 29(1), 89–104.
- Hartley, J. (2004). The value chain of meaning and the new economy. *International Journal of Cultural Studies*, 7(1), 129–141.
- Haywood Rolling, J. (2010). Circumventing the imposed ceiling: Art education as resistance narrative. *Qualitative Inquiry*, 17(1) 99–104.
- Heath, S., Brooks, R., Cleaver, E., & Ireland, E. (2009). *Researching young people's lives*. London: Sage.
- Henkel, L. (2000). *Academic identities: Policy change in higher education*. London: Jessica Kingsley Publishers.
- Holley, D., & Dobson, C. (2008). Encouraging student engagement in a blended learning environment: the use of contemporary learning spaces. *Learning, Media and Technology*, 33(2), 139–150.
- Jeffrey, B., & Craft, A. (2004). Teaching creatively and teaching for creativity: Distinctions and relationships. *Educational Studies*, 30(1), 77–87.
- Jeffrey, B., & Woods (2003). *The creative school: A framework for success*. London: RoutledgeFalmer.

- Kawenski, M. (1991). Encouraging creativity in design. *Journal of Creative Behavior*, 25, 263–266.
- Kember, D. (2009). Promoting student-centred forms of learning across an entire university. *Higher Education*, 58, 1, 1–13.
- Knapper, C., & Cropley, C. (1985). *Lifelong learning and higher education*. London: Croom Helm.
- Kuh, G. (1996). Guiding principles for creating seamless learning environments for undergraduates. *Journal of College Student Development*, 37(2), 135–143.
- Leavy, P. (2009). *Method meets arts: Arts-based research practices*. New York: Guilford.
- Lin, Y.-S. (2011). Fostering creativity through education: A conceptual framework of creative pedagogy. *Creative Education*, 2, 149–155.
- McNiff, J. (2002) *Action research: Principles and practice* (2nd ed.). London: Routledge/Falmer.
- McWilliam, E. (2005). Unlearning pedagogy. *Journal of Learning Design*, 1, 1–11.
- McWilliam, E. (2007). Is creativity teachable? Conceptualising the creative/pedagogy relationship in higher education. *Proceedings 30th HERDSA Annual Conference: Enhancing Higher Education, Theory and Scholarship*, Adelaide.
- Millard, E. (2003) Transformative pedagogy: Towards a literacy of fusion. *Reading, Literacy and Language*, 37, 1, 3–9.
- Parsons, M. (1987). *How we understand art: A cognitive development account of aesthetic experience*. Cambridge: Cambridge University Press.
- Pheiffer, G., Andrew, D., Green, M., & Holley, D. (2003). The role of learning styles in integrating and empowering learners. *Investigations in University Teaching and Learning*, 1, 36–39.
- Ramsden, P. (2003). *Learning to teach in higher education* (2nd ed.). London: RoutledgeFalmer.
- Renzulli, J. (1977). *The enrichment triad model: A guide for developing defensible programs for the gifted*. Mansfield Center, CT: Creative Learning Press.
- Robinson, R. (2001). *Out of our minds: Learning to be creative*. Chichester: Capstone.
- Seltzer, K., & Bentley, T. (1999). *The creative age: Knowledge and skills for the new economy*. London: Demos.
- Smith, G. (2005). How should creativity be defined? *Creativity Research Journal*, 17, 293–295.
- Starko, A. (1995). *Creativity in the classroom: Schools of curious delight*. London: Blackwell.
- Teaching and Learning Research Programme (2012). *Effective learning and teaching in UK Higher Education*. Retrieved from www.tirp.org.
- Torrance, E. (1974). *Torrance tests of creative thinking: Norms-technical manual*. Lexington, MA: Personnel Press.
- Undergraduate Prospectus. (2012). BA in Educational Studies, School of Education and Lifelong Learning, University of East Anglia.
- Vernon, P. (Ed.). (1970). *Creativity: Selective readings*. Bungay, Suffolk: Richard Clay Ltd.
- Wallace, B. (2002). *Teaching thinking skills across the middle years*. London: Fulton.
- Warwick, R., & Board, D. (2012). Reflexivity as methodology: An approach to the necessarily political work of senior groups. *Educational Action Research*, 20(1), 147–159.
- Watson, J. (2008). *Creative thinking through art: A study of how more able pupils respond to paintings*. Unpublished EdD thesis. University of East Anglia, Norwich: Centre for Applied Research in Education.
- Whitehead, J., & McNiff, J. (2006). *Action research, living theory*. London: Sage.
- Woods, P., & Jeffrey, R. (1996). *Teachable moments*. Buckingham: Open University Press



Jan Watson is a Lecturer in Education and Professional Development at the University of East Anglia in the UK. She has over 25 years of teaching experience in secondary education and has held a wide range of senior management responsibilities in schools. Jan is particularly interested in helping students to develop their academic study skills and providing them with career and employability opportunities. Current research interests are focused on creativity and learning in higher education, the development of children's creative thinking skills through art, visual literacy, working in creative learning environments, global citizenship education and identity studies.