

# ICT and Arts Education - for Art's Sake?

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*'Art does not evolve by itself, the ideas of people change and with them their mode of expression' (Picasso, 1923)*

The question underpinning this Introduction to the Art Section of the SITE 2006 Annual, is a response to Picasso's statement - how might information and communication technologies (ICT) be used to express people's ideas in the Arts in the practice and research of the international teacher education community? The paper offers a conceptual framework for ICT and the Arts in Teacher Education in support of the vision, expression, experience and integrity in research in the field, especially as related to the international SITE 2006 conference. Vision is addressed through policy and theory; expression is supported by a review of the evidence of practice with information and communication technologies (ICT) in the arts; experience is described in reports of teachers' responses; and the need for a recognition and development in the contribution of the Arts to research endeavour is all included within this year's SITE conference. The aim of the paper is to present such a framework as an overview for many of the SITE 2006 Art Education presentations which afford opportunities not only to disseminate practice, but also to consider research questions and methodologies which will advance knowledge in the field of ICT, the Arts and teacher education.

An international conference such as SITE affords opportunities for delegates to present and evaluate ongoing activity, and to participate in discussions which place that work within the landscape of practice, research and policy. The international SITE community plays a unique role in identifying trends, developing knowledge and raising questions for practitioners, researchers and policy makers. In preparing for SITE 2006, the Arts Education community considers these three arenas to cast some light on how we might recognise and evaluate emerging practices with ICT, whilst developing focused research questions to inform, encourage and challenge the wider community.

The introduction is offered as a starting point for exploring four questions that provide the structure for this year's Art Education focus.

- ⇒ What are the **visions** for the role of the arts and the affordances of ICT in education in our times?
- ⇒ How are ICTs being used to express **creativity and meaning in arts education**?
- ⇒ How do arts educators experience the **opportunities and constraints in emerging practices**?
- ⇒ How do we **pose questions and conduct research** with integrity in the field?

## Visions

The vision for the use of ICT in the Arts is rooted in a deeper sense of the purposes of Art in our society and education systems, and reflected in elements of government policy. The Arts Council England, for example, has an over-arching aim to promote access, education and excellence. It highlights five strategic priorities, in each of which can be envisaged the potential contribution of ICT:

- ⇒ New work, experimentation and risk, and the centrality of the individual artist, creator or maker.
- ⇒ New art forms and collaborative ways of working, often in or with new technology.
- ⇒ Diversity and public inclusion with special reference to race, disability and economic class.
- ⇒ Children, young people and lifelong learning.
- ⇒ Touring, and distribution through broadcasting, recording and electronic publishing (DCMS, 2001)

The Institute for Public Policy Research (IPPR) brought together policymakers, academics and professionals from a variety of backgrounds to consider and report upon the arts' contribution to wider social goals in education, mental health, offender rehabilitation, and social inclusion. They asserted their belief in the role of the arts: 'Arts and culture are creative, unique, expressions of who we are as individuals and society. The benefits derived from engagement with the arts need to be available to all and widely recognised if they are to secure broad acceptance' (Cowling, 2004 p11). Three themes arising from the IPPR discussions would be of particular interest to the vision of the SITE community: access & participation for all; the development of research approaches and methodologies which allow for evaluation of the arts which speaks to society, parents and pupils; and good working partnerships between Arts institutions, professionals, teachers and schools.

Policy makers express such vision within wider view of society, culture and politics which contain tensions and contradictions in the conceptualisation of education. In asking the question 'What can Education learn from the Arts about the practice of Education?', Elliot Eisner provides a thought-provoking framework which is useful not only for generating new ways of conceptualising education, but also for considering the links between our aims in arts education and the use of digital technologies (Eisner, 2004). He develops his call for a new vision from Read's argument that the aim of education ought to be conceived as the preparation of artists - the development of ideas, sensibilities, skills and imagination to create work in all domains - and contrasts this with an education system which has the tendency to focus on ideas of productivity, management, measurement and mandate. Such a contrast is drawn out in describing six distinctive forms of thinking which are required and nurtured in the arts, yet can contribute to all educational endeavours. At the high cost of not doing justice to Eisner's expressive turns of phrase and reducing his arguments to points, the forms of thinking can be summarised and linked to leading questions about the implications for the use of ICT:

- ⇒ Composition – the ability to compose qualitative relationships that have some purpose, pay attention to and make judgements about how qualities are organised and reflect a 'rightness of fit'. *What roles might digital technologies play in developing approaches to composition, feel, fit, nuance, attention and judgement?*
- ⇒ Flexible purposing – the recognition that in formulating aims, the ends need not precede the acts, and that purpose might emerge through response, dialogue and a readiness to exploit surprise. *How does the provisionality and adaptability of ICT encourage and support recognition of serendipity and dialogue between the maker and the made?*
- ⇒ Recognition of the inseparable relationship between form and content. *How do the affordances of multimodality, non-linearity, capacity, range and mobility pose challenges for new media literacy and communication?*
- ⇒ Conceptions of mind – the acknowledgement that, as Polanyi remarks, "We know more than we can tell", and our expression of meaning moves beyond the word. *How does ICT enable us to make connections between with words, sounds, images and gesture and make meaning?*
- ⇒ Mediation – understanding of the interaction between thinking and the material in which we work, and acknowledgement of changes in the nature of tasks and criteria for appraisal. *How is ICT used as a medium and a tool in arts practice and 'mind as a cultural achievement'?*
- ⇒ Motivation – the 'sense of vitality and surge of emotion' that is associated with engagement and aesthetic satisfaction in our work. *How does ICT play a role in motivation, engagement and 'flow'?*

This framework of modes of thinking in education can inform us in interpreting the visions generated by policy makers in arts education, and in placing our activity within the broad purposes of education in our societies. How then might we express our vision for the use of ICT in arts education in ways that reflect active participation and modes of thinking in our world?

## **ICT and creative expression**

The creative use of digital technologies in the arts, can be described as an interaction between creative processes, the affordances of ICT and ICT capability (Loveless, 2003a).

'All Our Futures', the report of the National Advisory Committee on Creative and Cultural Education, defined creativity as, 'imaginative activity fashioned so as to produce outcomes that are both original and of value' (NACCCE, 1999 p29). This definition is helpful in that it expresses five characteristics of creativity:

- ⇒ *Using imagination* – the process of imaging, supposing and generating ideas which are original, providing an alternative to the expected, the conventional, or the routine;
- ⇒ *A fashioning process* – the active and deliberate focus of attention and skills in order to shape, refine and manage an idea.;
- ⇒ *Pursuing purpose* – the application of imagination to produce tangible outcomes from purposeful goals. Motivation and sustained engagement are important to the solving of the problem. A quality of experience in the creative activities of fashioning and pursuing purpose have been described as ‘flow’, where the person’s capacity was being stretched despite elements of challenge, difficulty or risk (Csikszentmihalyi, 1996);
- ⇒ *Being original* – the originality of an outcome which can be at different levels of achievement: individual originality in relation to a person’s own previous work; relative originality in relation to a peer group; and historic originality in relation to works which are completely new and unique, such as those produced by Fermat, Hokusai and Thelonus Monk;
- ⇒ *Judging value* – the evaluative mode of thought which is reciprocal to the generative mode of imaginative activity and provides critical, reflective review from individuals and peers.

Digital technologies exhibit features which can be exploited by users in order to make a distinctive contribution to activities, that is, enable the users to do things that could not be done as effectively, or at all, using other tools. Recognising the potential of these features of provisionality, interactivity, capacity, range, speed and automatic functions is an significant element of ICT capability, enabling children and teachers to make decisions about when the use of ICT in a particular context is appropriate (Sharp, Potter, Allen, & Loveless, 2000). Conole and Dyke have extended the taxonomy of affordances of ICT that epitomize the features of our late modern age – accessibility, speed of change, diversity, communication and collaboration, reflection, multimodality and non-linearity, risk, fragility and uncertainty, immediacy, monopolization and surveillance (Conole & Dyke, 2004).

‘ICT capability’ is more than competence with a set of skills and techniques with particular digital technologies, but encompasses such skills being turned to use. It can be described as an ability which is used actively, and involves understanding, informed choice, critical evaluation and being open to or susceptible to development (Loveless, 2003b)

How then is this interaction expressed in practice? A recent review of key findings in the literature on creativity, new technologies and learning, emphasised that: ‘It is important to note that is not the access to digital resources which ‘delivers’ creativity, but the opportunities such access affords for interaction, participation and the active demonstration of imagination, production, purpose, originality and value’ (Loveless, 2002 p15). The framework developed from this review illustrated how ICT was used from the evidence of activities in a wide range of learning environments:

- ⇒ Developing ideas
- ⇒ Making connections
- ⇒ Creating and Making
- ⇒ Collaboration
- ⇒ Communication
- ⇒ Evaluation

(see <http://www.nestafuturelab.org/research/index.htm> for details of particular projects)

## **Experience and practice**

The focus of such reviews of literature does not always highlight the real experiences of the practitioners and participants in realizing the projects, and there is also evidence of frustration in art education in schools, where the provision, design and location of ICT in art departments is inappropriate for access and modes of working. Wood reports on how teachers of art and design approach technology and draws attention, not only to the examples of the uses of different technologies, but also to the teachers’ discussions of practicalities, and their reservations about form, function and mimicry. They also discussed the challenge to their understandings of mediation and appraisal of artistic achievement in new media (Wood, 2004).

Creating Spaces - a network of educational practitioners engaged in teaching, teacher education, broadcasting, software development and research - undertook a commission from the Arts Council of England to report on case studies of teachers working in a range of Primary, Secondary and Special Schools (CreatingSpaces, 2003). The report 'Keys to Imagination', drew attention to the factors which promote or inhibit the development of creative work using digital media in art and design:

- ⇒ Value: the perceptions of how art education was valued within the school and wider community, and how the contribution of ICT in art was perceived. Many teachers considered that they were 'educating young people to be visually literate, confident enough to express themselves and to explore, understand and appraise the world around them through the medium of art and design' (p13). In schools which did value the arts, there was a perception that the teachers had more freedom to explore and take risks in their work with ICT.
- ⇒ Motivation: the factors which motivated teachers to use ICT in their art teaching. Using new technology in art and design appears to be a motivating factor for young people, for whom these technologies are unquestionably part of their lives, but the motivation for teachers was more complex. Some teachers, of course, developed their personal interest and expertise, but those who were less confident with the technologies were encouraged to draw upon their pupils' knowledge and ideas. A key factor was the influence of outside artists or institutions which modeled positive approaches to the use of digital technologies in their own practices and presentations.
- ⇒ Creativity: understandings of the relationship between digital technologies and creative processes. A creative approach to using digital media was embedded in processes which included a range of other materials and techniques, often in collaboration with colleagues in other subject departments to support cross-curricular projects. There was a mutual relationship between creative attitudes to play and exploration with new technologies, and the affordances of the technologies themselves, although frustration with rigid time-tables, inflexible curricula and inappropriate physical environments was also expressed.
- ⇒ Environment, Access, Resources and Funding: acquisition, sharing and management of ICT resources. The physical environment in which art educators work expresses approaches to teaching and learning, and the integration of digital technologies requires solutions which are different from more traditional ICT labs or suites. Teachers were developing repertoires of techniques for adapting spaces for exploration, development and making. Resources need to include, not only a range of appropriate and flexible technologies, but also technicians and a collaborative network of support in using new software. Learning resources needed to be differentiated, rather than standard.
- ⇒ Connections: the linking and integration of people, spaces, subjects, organization and wider communities. This was the most important factor that emerged from the study. The teachers valued not only the connections between themselves, pupils and colleagues, but also the wider community of practitioners and expertise – from other schools, artists, galleries, museums and higher education institutions. Although there is potential for online connection and collaboration, there is also a need for an infrastructure which facilitates grass roots communication.
- ⇒ Pedagogy: teaching strategies for creativity with digital technologies. The challenge for teachers and teacher educators is to develop and share pedagogy which models the principles of creative practice. The learning environments which are established need to afford opportunities for exploration and play, risk, reflection, flexibility, collaboration, planning, critique and evaluation.

It is important, therefore, that research and development in ICT and Art Education encompasses not only innovations and practices with new technologies, but also the experiences of the practitioners, and the nature of the environments in which they work and express their knowledge of the subject and its pedagogy.

### **Integrity in research**

The Arts Education section within the SITE community of teacher educators is well placed to consider two telling questions:

- ⇒ How can research be conceptualized as a creative activity?
- ⇒ What particular contribution do the arts and ICT make to research which demonstrate integrity in the subject domains as well as in research methodologies and presentation ?

Understandings of research as a creative activity have been explored at previous SITE conferences (Loveless & Brindley, 2003). The research question permeates the ways in which the researcher 'fashions' and 'pursues purpose' in the capture, organization and analysis of data. Expertise in a variety of methods requires a range of skills and capabilities, described by Mason as 'the discipline of noticing' (Mason, 2002), by McCary Sullivan as 'paying attention' (McCary-Sullivan, 2000), and by Sanger as 'creative insight' (Sanger, 1994), each drawing upon the interaction of experience and imagination. The researcher also plays the role of connoisseur-turned-critic, reconstructing his or her perceptions into a representational form that 'illuminates, interprets and appraises the qualities that have been experienced' (Eisner, 1991 p86). The stages of recognizing originality and judging value are established within the academic community in the examination of research degrees and the peer review of conference proceedings, journal articles and books. These procedures, however, are always open to challenge and renewal and digital technologies offer interesting opportunities for the development of media and tools which afford different modes of collaboration, presentation, publication, performance and knowledge building within a community.

Two educational researchers who are also poets have offered insights into the relationships between the two activities. McCary Sullivan wrote... '... researchers with aesthetic vision perceive the dynamics of a situation and know how to 'read' it. They look at details within their contexts, perceive relations among the parts and between the parts and the whole. They look for patterns within disorder, for unity beneath superficial disruption and for disruption beneath superficial unity. They construct forms and suggest meanings' (2000, p221). Saunders suggests that poetry seeks to:

present rather than argue; offer insights rather than build theory; add to the sense of the world's variety rather than negotiate and refine a consensus; play (with ideas) rather than work towards a closure; 'make new' rather than seek to replicate or systematically build on what has gone before; proceed by association and image rather than evidence and logical consequence; engage, surprise, attract, shock, delight, connect the unconnected, stir the memory and fertilise the unconscious; communicate something ultimately unsayable (the paradox of poetry) because uniquely arising from the poet's personal vision and interpretation (Saunders, 2003 p176).

She then poses a series of questions that consider in what circumstances could or should these be the aims of educational research, noting that 'the researcher's and poet's responsibility, and talent, is not just to 'tell it like it is' but to add a deeper sounding' (p185). How then might the visual and performing arts also play a role in such a deeper sounding?

In June 2005, the first international Arts-Based Educational Research Conference was held at Queen's University, Belfast, Northern Ireland, and celebrated a wide variety of research methods – visual sociology, narrative enquiry, autobiography, ethnographic studies and autoethnography. It was noticeable, however, that there was an absence of the use of new technologies in the presentation and expression of data analysis. Digital technologies have undoubtedly contributed to data capture and storage, and the organization and presentation of data analysis. It is timely to consider how the use of ICT might also act as conceptual tools to reflect the relationship between the Arts and research in modes of thinking and practice. How might research findings be analysed and presented in the making and presentation of images or multimedia performance?

### **For Art's sake in Teacher Education?**

The aim of this introductory paper is to invite responses from contributors to the SITE 2006 conference, asking them to consider how their work and presentations might be placed within a wider framework of vision, expression, experience and research for teacher education. Over the years the SITE community has demonstrated a wide range of experience and expertise in the Arts in Teacher Education, and made notable innovations in the use of ICT in the field. There is a wide variety of resources, technologies and practices that we can draw upon, ranging from the capture and manipulation of visual images, creating multimedia portfolios, engaging in mobile and interactive communications, and enacting spatial sculptures with new locative technologies. One should bear in mind that, the SITE 2006 conference is an opportunity to reflect upon and advance knowledge in the international arena, not only for the sake of the Art Education community, but also for practice, research and policy in general teacher education through a more global awareness and reflective experience.

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