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TO INFINITY AND BEYOND...

Exploring the links between new technologies, the arts and education

Lorraine Leeson

Artist and Co-founder and Director of The Art of Change, Lorraine Leeson has been making visual art work with communities in East London for over twenty years. Concerned with issues of change - particularly the transformation of the urban environment and its impact upon quality of life and cultural identity, The Art of Change practice is based on consultation and collaboration. Collective energies are harnessed in the creation of artworks and environments that can hold meaning for the communities they serve and take a transformative role in the wider social sphere. The organisation has an ongoing interest in the role of new and emerging technologies in this work, and is currently embarking on in a series of initiatives to engage with the implementation of the National Grid for Learning. Lorraine Leeson describes a recent project in a Newham junior school.

The network society is destined to significantly effect the way we live - the way we learn, do business, educate our children and even mediate our social lives. Digital technologies are promising the greatest step in knowledge based communication since the development of the printing press, even the alphabet. Within this context it is widely recognised that education must begin to engage with these technologies and equip our children for life in a very different kind of society. The National Grid for Learning was created to begin this process, stimulating the use of Information and Communications Technology (ICT) in schools while simultaneously boosting the economy by providing a market for the commercial development of appropriate software. But what does all this mean to the teacher in the classroom when the demands of the National Curriculum are still most effectively met through traditional methods of teaching?

In our literary society we are used to a linear, finite approach to the organisation of information, even reflected in the way that most web sites and multi-media packages are still accessed like pages in a book. The National Curriculum for ICT is no exception. However the new media are in essence multi-dimensional, experiential and infinite. The very strength of Cyberspace is that it is not about emitters and receivers, but participation - or participative learning which has the potential to open up new educative opportunities. It is clear that the approach to ICT in schools must itself change and adapt to new needs and processes, but how is it to arrive at this point? The biggest shift to be made it seems is in the way we think, and the impact of this on education in particular is likely to be considerable.

ICT and the Arts

Some creative thinking around these issues is certainly needed. A seminar entitled *The Artist, the Citizen, the Entrepreneur*¹ was organised last year by the Council of Europe to examine means of opening up possibilities for innovation in digital media and electronic networking. It made a clear point of looking to art and culture as the most likely means of achieving this and was clear that the degree of creativity necessary at this juncture is most likely to come about through collaboration between cultural and technological disciplines. Culture, as the symbolic construction of meanings, is in fact the infrastructure of an information society.

Now that ICT holds core subject status within the National Curriculum, schools are by necessity affording it more attention, though it is not always welcome. Many teachers still see it as an add-on, a detraction from the real educational work of the school. Training in use of the equipment and in software packages is not necessarily able to address this sufficiently. While it is certainly true that familiarisation with the equipment and its processes will help teachers begin to problem-solve themselves, those I have talked to also expressed a desire for help with this thinking together with a need for models of good practice.

The same priorities in the National Curriculum have relegated the arts along with most subjects to the non-inspected area of the curriculum. It seems however that ICT and the arts are particularly suited to helping each other. The arts can help deliver ICT creatively while ICT can offer a means for continued deliverance of the arts. Of course this is not only a two-way dynamic. ICT has a remit to support all areas of the curriculum (except PE) and while the arts and ICT have the potential of working together in a problem-solving capacity, they can also help to support the cross-curricular work which is re-emerging as an efficient approach to teaching and learning.

One of the key issues of this work is the necessity of discovery through practice. New ideas and strategies cannot easily be developed in the abstract when most of the experience still lies in the future. It was within this framework of action research that the idea for *The Infinity Story* arose.

The Infinity Story

The impetus for the location of the project came from Godwin Junior School, Forest Gate in early '97. Like many of its counterparts it was considering taking up the offer of subsidised computer equipment through the National Grid for Learning scheme. LB Newham is well ahead with this, which is positive for its schools, though as part of a vanguard, means that they may also suffer from a lack of role models.

¹ *The Artist, the Citizen, the Entrepreneur* an international seminar for the Council of Europe hosted in London by Artec and CICV Pierre Schaeffer in collaboration with the Arts Council of England 26 - 28 November '97.

The Infinity Story was devised to gear up a whole junior school towards the creative use of new technology by:

- Giving every child a glimpse of the potential of digital interactivity through input to a product that could only be realised in this way - ie. a new way of thinking.
- Timing the project to key in with the first stage of the National Grid for Learning in Newham and its accompanying ICT training for teachers.
- Creating cross-curricular work relating ICT, Literacy and Art.
- Involving the whole school community including the headteacher, subject and year group co-ordinators, the parents association, governors, and every child in the school.
- Producing an exciting and creative product that others would want to access. Much of the work that we have seen to date in this field is 'informational' and of real interest only to those who have made it.

I had recently seen some interesting work by Camille Dorney who was then running Arthouse, a virtual gallery on the internet. On her web site was a story that visitors could access and add to. It seemed that this could be ideally adapted to work with children. With funding raised from the Sir John Cass Foundation we were able to engage Camille in a collaborative partnership as artist in residence for a term at the school, to develop the project and undertake the post-production work. In the classroom she was also assisted by Chelle Hughes, a Media student from University of Westminster.

The product subsequently produced with the children is an imaginative, non-linear story incorporating Photoshop illustrations. Teaching staff helped the children develop a theme, and from there it grew much in the shape of a three-dimensional tree. That is, there is a 'trunk' containing the beginning of the story and characterisations. At a certain point this branches out where children worked in small groups or sometimes individually, choosing an aspect of the story they wished to develop. As it reached the next class, children would decide whether to continue an existing story, or begin a new one. Although at the beginning new story branches were the most popular, gradually the children became more interested in continuing from where each other left off, and indeed in how their own stories had been developed by other children. The final product incorporates many different branches, a number of which sub-divide again and again, some going back in time to give 'roots' to the original characters. A number of branches reach conclusions, others end at a point where new growth could start in future classroom work. One is even by school governors. It is like a giant non-linear game of consequences. The branches go in all directions, making up a forty thousand word story to which there are many dimensions. It can be accessed as a whole or in part, the reader creating their own version through the way they choose to move through it. It offers an approach to creative writing and reading more akin to the oral tradition of story telling where the story can change according to the audience, than the traditional book.

Children produced their material by whatever means available. The promised equipment inevitably did not arrive until after the classroom work had finished, though in time for the final product to be installed on the school's web site early in '98. The most important aspect of the project was for the children and staff to glimpse the potential of interactivity, to see how the technology offered the means of achieving certain things differently. The fact that much of the children's work was produced with paper and pencil, or on the school's old Acorn computers, demonstrated how little hardware is necessary before a shift can begin to be made. At the same time the children produced very sophisticated artwork using Photoshop on the artist's laptop, which was used to assemble the work in the classroom. Creative management of resources is after all something to which most schools, and artists, are well accustomed. The school is currently awaiting the appointment of a new ICT Co-ordinator who will hopefully take it up as an ongoing resource for the classroom.

The most interesting aspects of The Infinity Story however, are the unexpected and unplanned outcomes that became enabled through the combination of the interactivity and collectivity made possible by the technology, with a process of imagination.

It is not often that upward of three hundred people are able to collaborate on one project, particularly a single story. The Infinity Story contains themes and characters that are the result of many children choosing what they felt to be most appropriate for them, woven into a larger entity. The characters in their entirety are more like 'archetypes' than stereotypes. Children homed in on those aspects that they found most intriguing, and built on certain themes again and again.

The plot centres on an East End family seen through the eyes of six children when their parents depart for a round the world holiday leaving them in the hands of Rosie the mad babysitter. The parents' role seems to be characterised by their absence. Whenever they re-appear in various stories after intervals ranging from six months to fifteen years, they are sent away again pretty quickly. Their function appears to be of a benevolent background presence, and fulfilment of the children's fantasies on their extraordinary journeyings. By contrast, Rosie the babysitter is a continuing presence in the children's lives. Whenever she is sent off (since she is so 'disgusting'), it is to be promptly returned. By turns witch, sorceress, clearly sexual, she is also the inept childminder and carer of the family. She lives in a room at the top of the house forever locked and the starting point of endless mysterious adventures.

The eating of disgusting things (particularly worms), smells, the dual forces of dirtiness and cleanliness are returned to again and again. The story bursts with children's hopes, desires, anxieties and experiences, conscious and unconscious.

Collective and individual identities are also clearly reflected through the story. A wonderfully positive portrait is drawn of East London, despite the disasters and dreadful experiences that happen throughout. The multi-cultural East End family, the Patels, at the centre of the story reflect the children's own diverse

lives and cultures. It was enlightening how the children worked out between themselves some of the meanings of these differences. For example as the story was being handed on from one class to another, and the plot described to the next group, questions were asked by the children. How could there be West Indian triplets with white brothers and sisters in a family called 'the Patels', with a white Mum (who also looks like a rabbit!), a brown-skinned Dad? Perhaps it isn't their real Dad/ perhaps they are all adopted/perhaps some of them are fostered/ my parents and I all have different skin colours - were all offered in response by different children without prompting.

The story also seems to have created a 'safe space' through which the children were able to express difficult issues clearly relating to actual and perceived life experiences, protected by the story's fundamental humour and their relative anonymity within it. These experiences then had the possibility of being explored not only by that child, but also through the imaginations of their peers. For example following a description of Rosie's tragic childhood, we hear how she managed to get a flat from a homeless people's organisation, after which she 'tidied herself up and got a job as a childminder', the beginning of a better life for herself. In another incident, Bunny the Mum finds herself working as a maid for a family in Domenica, looking after other people's children while her own are looked after by a childminder. Needless to say, she finds a way back (before going off again!), and all works out for the best.

Through the story the children indirectly supported each other, examined options and ultimately problem-solved together. This was not a planned part of the project but something that begs further exploration. The Infinity Story holds fascinating insights into children's psychology and development and provides an abundance of material that children could talk around.

And Beyond...

The Infinity Story achieved a very small step into the realm of what is not yet known and cannot even be imagined. Much more research is required in this area, and we need our children to help us. It is their imaginations that will help us to help them put these technologies to work for a better future.

East London is in many ways an ideal place to begin these explorations. Its mesh of diverse communities provides opportunities for real communications across geographical and cultural divides. It is well ahead in its implementation of new technologies with the National Grid for Learning and initiatives such as the Gateway and Extranet being developed by Newham Online. It has opportunities through its Education Action Zones and the resources that will accompany the UEL's new campus. The potential is there to begin to use these new technologies in harnessing the power of the collective imagination to cross boundaries, to build, strengthen and multiply our social and cultural networks.