Global citizenship through technology education, a report of an On The Line project undertaken in Ghana and England

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Abstract

In the latest version of the National Curriculum there is an increased emphasis on citizenship that will allow a more coherent approach to the development of pupils into better-informed citizens. By 2002, citizenship will be statutory at all key stages. Within design and technology there is enormous scope for addressing the subject of citizenship.

The author received an award from On The Line to carry out the research and produce a design and technology teaching resource on aspects of global citizenship. This paper shows how the author developed the teaching resource through visiting schools in Ghana, where children made toys using reclaimed materials. It will show how teachers can use the web site resource and teach global citizenship through design and technology.

Global citizenship

Global issues are part of young people's lives in a way that they never were for previous generations. Television, the Internet, international sport and increased opportunity for travel, all bring the wider world into everyone's daily life. (DFID, DfEE, QCA, DEA and The Central Bureau, 2000)


The importance of helping pupils recognise their responsibilities as members of a global community is greater than ever. The latest version of the National Curriculum has increased emphasis on citizenship. This will allow a more coherent approach to the development of pupils into better-informed citizens, locally and globally. Although currently citizenship in primary schools is only recommended, by 2002, citizenship will be statutory at all key stages.

So far, only the non-statutory guidelines for Key Stages 1 and 2 have been published. It is expected that the requirements will be that pupils develop their understanding of their own worth and that of the wider world, different societies and cultures. Pupils will gain the knowledge, skills and understanding necessary to become informed, respectful, active, responsible citizens locally, nationally and globally. There will be a requirement of sustainable development so that pupils value the need to maintain and improve the quality of life without harming the environment and to understand interdependence, that people and places are parts of the global community.

Although often underestimated, within design and technology there is enormous scope for addressing the subject of citizenship. Consideration of social, moral and economic concerns is an important part of designing and making. Design and technology allows the exploration of ways in which technology can be a tool for sustainable development, by considering raw materials used, the implications of waste products and the different perspectives of people from different places. It raises an awareness of environmental issues and the impact of technology and emphasises the responsibilities people, as citizens, consumers and workers have for technology.

Many children from the majority world do not have access to shops that sell the latest fashionable toys, but they do have stimulating play experiences by designing and making their own toys from locally available materials – often waste products. 'These children design what they want to play with rather than what manufacturers would like them to buy.' (Intermediate Technology, 1992)

It is commonly found throughout the world that children are creative and imaginative when constructing playthings out of waste materials. In some places it is an important source of income. Model making using 'junk' is an accepted part of the classroom curriculum – the activity gives the children an opportunity to explore what re-using or recycling a material involves. It can lead to debates about consumerism and landfill sites,
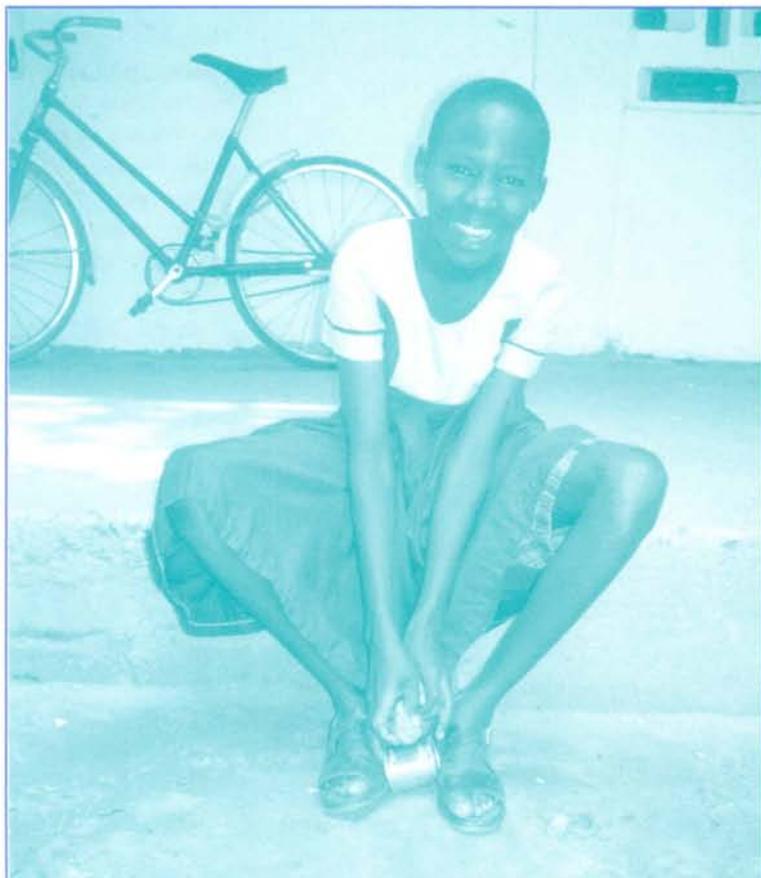
about biodegradable and non-biodegradable materials. It helps stimulate ideas for minimising waste, especially through re-designing, so that products can be re-used over and over. It enables children to think about the value of what is usually considered waste.

On The Line

On The Line is the initiative, funded by Channel 4, The Millennium Commission, OXFAM and WWF, that links all the countries on the Greenwich Meridian to promote global citizenship. In the spring of 2000 I received an award in from On The Line to research and produce a primary design and technology teaching resource, published on a web site, that covers aspects of global citizenship.

The resource allows children to learn about and appreciate different parts of the world through toy making. This not only meets aspects of the design and technology curriculum but also raises issues from the global citizenship recommendations. The case study I used is Ghana, but the ideas used are transferable to other countries.

I visited Accra, the capital of Ghana, in January 2001. While I was there I visited three different schools, a toy factory and some craft centres. I spoke to children, teachers and workers from non-government organisations who told me about the country, its history, geography, industries and about daily life in Accra. Most of my time was spent in a school where children showed me how they made toys from 'found' materials. The children had brought waste materials from home, they eagerly moved their tables out of the classroom and into a shady area within the school grounds and got started. Most children brought in empty tin cans and made little silver cars and trucks with wheels made from old flip flops, the vehicles had inbuilt suspension so they rode easily over the rough dusty playground. Other children made cooking stoves and utensils. Some children who had not brought tin cans made puppets using scrap paper and long thorns from plants in the school grounds.

The children disassembled the tin cans by sitting on the ground and holding the cans between their feet. They held an old knife blade against the cans and struck the back edge of the blade with a rock or large piece of wood. They repeated this until the ends were removed. They then hammered the metal flat, cut it further and started to construct their toys. These were very robust, so children would enjoy many hours of play with them, although both products and methods of production would cause grave health and safety concerns in English schools.

I was struck by the ingenuity of the children, how they produced the toys from their own imaginations, they designed the jointing techniques and dimensions in their heads and then by trial and error constructed their toys with confidence. I asked them how they knew what to do 'We have seen our older brothers and sisters doing this' was the response. I wondered about the children at home in England and what they had learned from their older siblings. The creativity and manipulative skills seen in these Ghanaian children exceeded what I might expect to see in children of the same age in England. It seems to me that while we have become wealthier and had more manufactured toys available to us, we have lost much of the ability to create quality toys of our own and become more anxious about our health and safety. We have much to learn from people from different places.

The primary design and technology teaching resource

The web site is primarily intended for teachers of KS2 pupils to use but may be adaptable for other age groups. It also includes parts designed for pupils to use either online or download. The resource will have been trialed with a youth group and in a school.

At the time of writing, I am in the process of developing the web site. It will include:

• information about Ghana – where it is in relation to England, it's population, religions and industries, suggested activities for teachers and pupils – the similarities and differences of the two countries

• photographs of the schools I visited with descriptions of the schools and their localities with suggested activities for exploring similarities and differences between pupils in England and Ghana – the clothes that are worn, the lessons that are done in schools, the games played, the chores at home. It suggests ways to counter the negative stereotypes English children often have of African countries.

• information about the day to day lives of the children, the food they eat and the games children play. There are activities suggested that teachers and children can do to learn about children from other parts of the world. The children can play some of the games played in Ghana and consider the similarities and differences they have with children from Ghana. They can think about games they play in England that Ghanaian children might enjoy.

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- photographs of the Ghanaian children going through all the stages of making toys from reclaimed materials including the final products. These encourage English children to see what they can learn from others around the world.

- information about the amounts and types of waste materials found in England and Ghana, with suggested activities about how children can learn about the implications for the environment and sustainability

- suggestions for toy making activities for children using waste materials commonly found in English dustbins. Using the range of photographs on the web site showing artefacts that children in Ghana have made, pupils can think about toys that they make or would like to make. They think about the waste materials that they may be able to use and they will start to explore different needs and opportunities. The web site is set out in the form of a design and technology brief using a similar format to that used in the QCA design and technology Schemes of Work so that teachers, familiar with these will find it easy to implement

- references of materials that will be helpful for teachers that link with other curriculum areas, for example 'Stories from Greenwich and Ghana' – a pamphlet full of short stories by children of all ages from both countries.

I anticipate that the teaching resource will give the children an opportunity to work with others – a high level of class interaction will be vital to encourage discussion and understanding of the different perspectives people have. Understanding the work of others like the children in Ghana, will help English pupils become informed consumers and to be more aware of the world in which they live. They will value what can be learned from elsewhere. The English children will learn about taking responsibility from making decisions.

Teaching aspects of global citizenship and considering the social and moral aspects of design and technology can be brought to life by using a teaching resource such as this one. 'Designing for sustainability need not doom you to endless worthy projects. A sustainable future has to have beauty and fun and we should always design with that in mind'. (Pitt, 2000) If children are introduced to the issues in a real way – actually seeing how others live, work and play, rather than abstract way just being told about it, they can relate to it easily and enthusiastically.

The web site should be ready to use by July 2001.

References

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on the line.