



'Computer Characters'

Barnardos Participatory IT Project for Children, Galway

Funded by Children's Hour

Evaluation Report

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Appendix One: Organisations Represented on the Advisory Group

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Executive Summary

Barnardos is Ireland's largest national voluntary childcare organisation, working with over 5,000 children in over 30 locations around the country. The work of the organisation is underpinned by a commitment to the best interests of children and young people, promoting and respecting their rights in all of the work.

Barnardos (West and Midlands Region) received funding for a children's IT project from the national 'Children's Hour'¹ initiative in 2000. The Project was initiated out of concern at an emerging 'digital divide' between those children who are benefiting and those who are being left behind by the information society (Becker, 2000). The 'Computer Characters' project aimed to increase and improve the access to and usage of information technology as a tool for learning by disadvantaged children and their families. The project was also designed as a 'participatory' project, children and their families would have an input into the design, operation and evaluation of the project. The pilot project was of one year's duration. The project commenced training in October 2003 and finished in July 2004.

This project was based on a number of assumptions; there are disadvantaged children and families in Galway City who don't have access to IT skills and equipment; Community and voluntary organisations, such as Barnardos and other stakeholders in the project are well placed to develop initiatives that are tailor made to the needs and interests of these groups; a participatory, child-centred approach was likely to be effective in tailoring interventions to the unique circumstances and needs of each group; tailored training for children and families would help IT to become integrated into the daily life of the family.

A Project Co-ordinator, an employee of Barnardos, oversaw the running of the project, with the support of the Barnardos Regional Manager. An Advisory Group, consisting of representatives of local agencies and groups was formed to advise Barnardos on issues such as siting of training groups, contacts for suitable sites, ethical issues and other general issues relating to the project. A local community or youth group in each community assisted the project in sourcing participants, negotiating premises, co-ordinating training times, liaising with parents and dealing with any issues emerging. Training took place in local youth projects, community centres or at the Barnardos Resource Centre. A range of educational and recreational software was purchased by the project.

Thirty-three children participated in the project, ranging in age from 3 years to 13 years, and including specific groups for Travellers, refugees and asylum seekers. Training sessions took place for each of the six groups once a week, for approximately two hours. Between three and six students took part in each group. Each group received 10 weeks training. Follow up sessions were planned for during the summer holidays.

¹ Note on Children's Hour is provided in Appendix Two

A conscious decision was made at the outset that the Computer Characters project would be a 'participatory' project. The steps involved in translating participation theory into practice involved the following:

- *Increasing knowledge and understanding of participatory approaches among stakeholders.* Research was undertaken into participatory approaches and training on 'consulting children' was provided for staff and advisory group members.
- *Deciding on the level of participation that is most feasible within the parameters of the project.* The Treseder model of participation (1997) was used as a guide. The level of participation thought to be most feasible in the project was 'adult initiated – shared decisions with children'
- *Gaining access to and securing the participation of children and families.* The expertise and knowledge of the advisory group and local community and voluntary groups was drawn upon to source participants that would meet the project's target criteria.
- *Maintaining the ongoing attendance of selected participants.* Attention was paid to group dynamics to facilitate children to maintain attendance.
- *Encouraging active participation and shared decision-making during sessions.* The techniques used to encourage 'shared decisions with adults' conformed to good practice guidelines in children's participation and included ground rules, clarity in information provision, feedback and child-led activities. Children were asked to list their interests and training was designed to fit in with these interests as much as possible. Learning to use the Internet to look up information about their favourite team or singer, using a scanner to scan photos of their favourite people and things and using a word document to paste photos and write about their lives are examples of how learning IT was made relevant to the children.

Feedback from children, parents, trainers and local link groups highlights that the project was a success. Children were facilitated to use IT in a way that interested them and was of relevance to their lives. In doing this, many outcomes were realised, including technical skills development, social skills development and growth in confidence. The children also derived great enjoyment from the training. The evaluation concludes that the success of the project can be attributed to a variety of factors in the training model and in the project environment.

Critical factors in the training model

Participants were shown how to tailor IT to their own needs and interests and become 'content creators', thus seeing computers as relevant in their lives. This approach to children's IT training is in line with recommendations from research (Facer et al, 2001), which emphasises that children are motivated to acquire computer skills by non-technological objectives, such as personal communication and peer group interests, and that training should be based on its relevance to children at the present time. Some of the specific factors in the training model that helped to create positive outcomes include the following:

- Children and parents consented to their participation and were shown respect at all times.

- Information about the project was clearly outlined, both verbally and in written format. Children received clear instructions throughout the project.
- Ground rules were agreed by the participants and trainers.
- Formal and informal feedback mechanisms were provided. Feedback from children was received and acted upon on an ongoing basis.
- Children were given choice regarding the content of the course and the activities were child-led.
- Achievements were celebrated.

Critical factors in the project environment

In addition to the factors in the training model outlined above, some of the factors in the wider project environment that helped this project to achieve success were as follows:

- Children love computers: The 'Computer Characters' project tapped into children's natural interest in IT and provided a creative and fun learning environment.
- Parent's support: Parents are generally keen for their children to be computer literate and support their children's participation in IT training. This project made the parents feel welcome and involved them in their child's learning.
- Clear theoretical framework and reflective practice: The project worked from a clearly defined theoretical framework (participatory approach) and developed and refined it through review and reflection. The experience of the project is that choosing a level and model of participation at the outset and regularly reflecting on how it is working can lead to better outcomes for children.
- Strategic use of research and evaluation: Research was undertaken at the outset to inform the theoretical framework developed and a process of formative evaluation helped to draw out the learning and shape how the project developed.
- Staff skills and commitment: Staff skills, energy, personal approach and commitment to the children were vital in the success of the project. Trainers all made great efforts to ensure that children were comfortable, having fun and learning.
- Good management: Good management, interested and able staff and adherence to good practice in child protection and were crucial in facilitating the smooth running of the project and dealing with any issues that arose.
- Youth and community groups and facilities: Working through local community development and youth organisations was very valuable in terms of providing access to participants and community based facilities.
- Advisory group expertise and commitment: A range of statutory and voluntary organisations were represented on the advisory group. Their expertise was harnessed to provide essential information, contacts and advice for the project implementation.
- Voluntary support: Voluntary support, in terms of trainers' time and skills and donations of equipment, added greatly to the project's ability to achieve its objectives within a limited budget.

Achieving long term sustainability of skills development is impossible in a one year pilot project, but elements for planning for sustainability – including training models, use of volunteer resources, utilising 'used' computers and home based training and follow-up have been identified in this project. Structures, models and relationships have been developed that could be put to further use for the benefit of children and families.

The report concludes that the Computer Characters project should continue on a longer-term basis. The groundwork developed in this pilot project highlights the enormous potential that exists for a participatory IT project such as this to help bridge the 'digital divide' for a new generation. The successful features of the project environment and training model identified above are of relevance to practitioners interested in developing similar projects and should be maintained in the future development of this particular project. In addition, a number of suggestions are made regarding how the project could further develop and expand.

1. Introduction

1.1 Introduction

Computer technology has become increasingly important in society, leading to concerns about an emerging 'digital divide' between those children who are benefiting and those who are being left behind (Becker, 2000). Research suggests that it is socio-economically advantaged groups who are most computer literate and best placed to capitalise on the potential of technology. The non computer literate are disproportionately represented among socio-economically excluded groups. There is a fear that trends in the acquisition, access and diffusion of technology may act to reinforce existing societal inequalities (Loader and Keeble, 2004).

Barnardos (West and Midlands Region) was one of a number of children's charities who received funding under the national 'Children's Hour'² initiative in 2000. In recognition of the millennium as the 'information age' and the lack of equal access to technology and educational supports generally by children and young people who are disadvantaged, a decision was taken to develop an innovative new pilot project in Galway to address this identified need. The project aimed to improve the skills and access to IT for disadvantaged children and their families. It aimed to do this by developing and implementing a participatory approach, which encourages children to take the lead in deciding what and how they would like to learn.

The pilot project was of one year's duration initially. The project commenced training in October 2003 and finished in July 2004. This Evaluation Report describes the rationale for the project, the project model, methodology and the outcomes for participants. The report also analyses the various components of the project and highlights the key lessons emerging.

1.2 Barnardos

Barnardos is Ireland's largest national voluntary childcare organisation, working with over 5,000 children in over 30 locations around the country.

The work of the organisation is underpinned by a commitment to the best interests of children and young people, promoting and respecting their rights in all of the work. This is achieved through the provision of direct services to children and families, particularly those who face barriers in reaching their full potential – barriers such as abuse, neglect, poverty, bereavement, early school leaving, addiction and violence.

² Note on Children's Hour is provided in Appendix Two

Direct services provided by the organisation include family support projects, targeted early childhood services, community based therapeutic educational support services, guardian ad litem, adoption advice and information services.

The work of the organisation is driven by a commitment to develop new and innovative ways of working, which promotes children and young people's understanding of their uniqueness and potential, building self-esteem and an awareness of their rights.

1.3 Project Aims and Objectives

The twin aims of the Computer Characters project are:

- To increase and improve the access to and usage of information technology as a tool for learning by disadvantaged children and their families.
- To encourage the participation of the children and their families in the design, operation and evaluation of the project.

The objectives of the project are³:

- To provide disadvantaged children and their families with access to computer facilities and training.
- To increase the PC and technology skills of parents, children, teachers, pre-school leaders and volunteers in the interests of creating an environment for children and families where use of IT facilitates learning and social interaction in their daily lives.
- To identify and access appropriate educational software for use with children and families, in conjunction with the Information Officer, Barnardos NCRC Galway.
- To encourage children and families to take the lead in deciding how and where they would like their learning to take place and to choose learning that is relevant to their lives.
- To document and evaluate the project, and based on the experience of the project, to produce a 'how to' guide in relation to participatory projects for children and families.

³ Desired outcomes in relation to these objectives were outlined at the start of the project. Progress in relation to these outcomes is highlighted in Section 5.

1.4 Evaluation Methodology

The WHB / NUI, Galway Child & Family Research and Policy Unit (CFRPU) were asked by Barnardos to undertake a formative evaluation of the project. The CFRPU had been involved with Barnardos in the early stages of the project development, having been commissioned to undertake background research in relation to participatory approaches and to assist with the write-up of the project proposal.

As assessment of the project's participatory methodology was a key area of interest for Barnardos, it was felt that a process / formative evaluation would be the most suitable model. According to Rossi, Freeman and Lipsey (1999), process evaluations verify whether a programme has been delivered as intended to programme recipients. A process evaluation is suitable for a relatively new programme, to answer how well it has established its operations and services. Feedback can help to shape how the service develops into the future. While the process evaluation involves some assessment of the impact of the programme on participants, impact evaluation is not the primary consideration. In this case, the evaluation had to be completed within the one-year timeframe of the project, and therefore, a rigorous evaluation of impact would have been difficult. However, it is acknowledged that it would be valuable to measure the sustainability of skills development at points in the future.

A Research Advisory Group was formed to advise on the evaluation process. This Group consisted of the Barnardos Regional Manager and Project Co-ordinator and the Research Manager and Evaluator from the Child and Family Research and Policy Unit (CFRPU). The methodology used in the project was as follows:

Ongoing assessment of progress:

- Training needs assessments were completed at the outset by the Project Co-ordinator, in conjunction with the child and his or her parent, where possible.
- Children completed evaluation and suggestion sheets at every session. Records were kept of training content, each child's progress and their weekly feedback through evaluation sheets. Age appropriate forms were used – i.e. pictures and graphics, as well as words.
- Parents were sent a form to provide feedback, were encouraged to attend the training sessions and to come forward with any comments or suggestions. The evaluator met with parents, both formally (in some cases) and informally at training sessions.
- The evaluator spoke informally to children throughout the sessions and observed their skills development and participation.

Participant observation:

- The evaluator attended the training open days and a number of training sessions for each group.
- The evaluator was a participant observer at Advisory group meetings.

Review meetings:

- The evaluator met with the Project Co-ordinator on a quarterly basis to discuss the progress of the project. This enabled data to be gathered on an ongoing basis. The Project Co-ordinator wrote monthly reports and supplied copies of written documentation in relation to the project.
- Interviews were held with trainers and a number of representatives of local link organisations.
- Review sessions were held with Advisory group members.

Interim Evaluation Report:

- At the halfway point in the project, an Interim Evaluation report was written to report on progress to date and make recommendations for the second phase and future of the project. These recommendations were acted upon in phase two and will be commented on throughout the report.

1.5 Report Outline

Section Two provides a review of key research literature in relation to children, IT and the 'digital divide'. A review of arguments for and against children's participation and the key dimensions of participatory approaches are also provided. The findings from research studies are drawn upon later in the report in relation to the analysis of this project. Section Three outlines how the Computer Characters Project developed, was structured and implemented. The methodology used in the project is described.

In Section Four, each of the six training groups is described in terms of participant profile, location, context, training content and outcomes. We will see that the training was a success. Section 5 seeks to draw out the learning from the project, and analyses the various dimensions of the project, including IT training, participatory approach and project structure and implementation. Finally, a summary of the key learning emerging from this one-year pilot project is provided in Section 6 and recommendations are made for the further development of the project.

2. Literature Review

2.1 Introduction

The aim of the Computer Characters project was to use a participatory approach to develop IT competencies among children and their families. To set the context for an analysis of the Project, this Section outlines key findings from research and policy literature in relation to:

- Children's use of IT and the 'digital divide'
- Participatory approaches with children

2.2 Children, Information Technology and the 'Digital Divide'

The concept of the 'digital divide' – refers to a phenomenon of unequal access to personal computer technology, a divide separating families who have computers and access to the Internet at home from families who do not. Loader and Keeble (2004) highlight that the primary exploitation of information technology has been by social, economic, cultural and geographically located groups that are already best connected, highly skilled and most able to use it to their own advantage. Selwyn (2002) identified that those groups most likely to be digitally excluded are those already characterised as socially excluded in terms of their low income and socio-economic status. People without Internet access tend to lack the skills, knowledge, equipment, infrastructure access, capital, money and telephone access necessary to enter and fully exploit online services. A key concern is that people who suffer economic or social disadvantages are likely to experience even worse problems in the future because they are being excluded from a computer revolution that is redefining social and economic life in our society (Attewell et al., 2003). It is argued that educational or social inequality may increase if less affluent children don't have access to or skills in computers, or use inferior computers.

Computers are sold to the domestic market as essential tools to ensure children's full participation in the present (and future) digital society. Facer et al (2001, p.200) make the point that the ideology of 'computer literacy' has become a key policy concern for policy makers and parents. Young people are often popularly constructed as 'effortlessly' appropriating digital technology for use in their own lives; seemingly able to 'master' the computer without formal IT education. However, research contradicts the assumption that young people simply learn 'on their own' how to use computer technology. Rather, family discourses, the software environment and the wider learning communities of the Internet and family contacts shape the ways that young people learn and perceive the computers' potential.

Research into IT usage highlights that access to and use of the Internet is strongly associated with prior levels of educational achievement. Those who find it easier to visit public information centres and take courses are likely to be higher educational achievers (Carvin, 2000, Hargittai, 2002). McLaren and Zappala found that, for children, the level of parental education was most strongly associated with home access to computers and the Internet as well as computer and Internet usage.

Facer et al (2001) argue that the acquisition of IT skills is driven by the ways in which young people consider ICT use relevant to the achievement of other already existing objectives in their daily lives. Rather than seeing computer expertise in terms of its future benefit, the children in their research were motivated to acquire computer skills primarily in relation to the achievement of non-technologically motivated objectives (such as communication with friends, getting information for homework). The authors argue that current educational policy that focuses on persuading children and families of the *future* relevance of ICT skills, should instead look at its relevance to children *at the present time*. They also argue that the acquisition of computer expertise may be affected by gender, in that young women perceive it as being of less relevance to their lives than boys, with the content of games and software likely to appeal more to boys. They argue that if this new society is not to reproduce and reinforce current inequalities, it will become important to contest dominant constructions of 'valuable' ICT skills and work with young people to develop their vision of an information society. Facer et al question the continued emphasis in educational policy on the acquisition of 'decontextualised information and communications technology skills within a rationale of future relevance to the workplace'.

Children's IT use and Educational Outcomes

Papert (1996) argues that computers unleash the creative impulse in children and allow children to become aware of how they think and learn. This school of thought holds that computers should be integrated into the classroom and the pedagogical approach dramatically restructured so that many types of school work are done through computer. Cuban (2001), however, found that computers do not currently have a strong impact on student learning because most teachers find them to be of limited utility and hard to deploy in their daily teaching and therefore use them in small doses. The research suggests that the achievement of educational outcomes is about more than access to computers. The 'social envelope' around computing – the competencies and involvement of parents, teachers and siblings – is crucial to any kind of educational outcomes.

Others argue that there are many potential dangers of children's computer use, believing it has the potential to cut into play and physical activities that are important for emotional and cognitive development. Computers threaten to displace 'normal' learning experiences, such

as hands-on tangible interactions with other people and the outdoors. Attewell et al (2003) researched whether computing enhances or undermines young children's cognitive and educational development and well being. After controlling for socio-demographic background, they found that use of a computer at home for under 8 hours per week is not associated with less time spent on reading, sports or outdoor activities and is in fact, associated with more time spent at home reading. They also found that moderate computer users performed better than non-users on letter-word recognition, reading comprehension and mathematical calculation. It is also associated with higher self-esteem. Only in cases of heavy computer use (8 or more hours per week) are the effects found to be negative.

Kerawalla and Crook (2002) found that three quarters of parents in their study bought a home computer for educational use and also purchased educational software. Yet, two thirds of children's time is spent on games that would not be found in a school. Whatever parents who purchase computers may hope, research suggests that for most children, game playing becomes the predominant form of domestic use.

Much research has paid attention to the role of the school as a provider of IT access and skills to children. Selwyn and Bullon (2000), in a survey of IT use among primary school children in Wales, found that although most children are coming into contact with IT, any sustained and diverse use of IT is limited for the majority of pupils. The way IT is presented to children and regulated by the teacher curtails many children's use. Also, while children may have 'access' to a computer at home, it does not mean that they actually get to use it much. The authors consider it paramount that the primary school try to balance the demands and experiences of the computer 'haves' and 'have lesses', ensuring that children have sustained, meaningful and equitable use of IT. Teachers should strive to make meaningful and useful opportunities for children to use computers and stimulate a continued desire for computer use. These recommendations were echoed by Becker (2000) in the USA, who found that the nature of children's experiences using computers in school varied greatly by subject and by teacher's objectives. Low-income students tended to use computers more often for repetitive practice, whereas high-income students used computers more often for more sophisticated, intellectually complex applications. He argues that efforts to ensure equal access to computer-related learning opportunities at school must move beyond a concern with the numbers of computers in schools, to an emphasis on how well those computers are being used to help children develop intellectual competencies and technical skills.

Valentine et al (2002) emphasise the importance of the way that children negotiate the meanings and use of computers through their everyday use in the classroom. Like Facer et al (op cit), they argue that children's use of computers is not about only the broad-scale distribution of resources but also about children's everyday social and peer group relations.

Community initiatives to provide computer access

There have been many initiatives to provide skills and community access for those unable to access the Internet from work or home. Some of the findings from research into community provision of information technology highlight the complexity of attempting to promote social inclusion through access to information technology.

The concepts of 'digital divide' or 'community' are used in such a way as to denote homogeneous groups of the information rich and the information poor. In reality, the picture is complicated by social and cultural differences arising from age, sexuality, gender, race and disability, which mediate how people relate to information technology. Therefore, the social context of IT learning is crucial. Loader and Keeble (2004) highlight that while computer / Internet access and skills are important, interactivity requires a self-confidence which is more important than technological ability. For computer projects to be empowering, therefore, they must be socially contextualised - simply showering communities with technology will not address the digital divide.

Loader et al. (2000) found that the social ties of community and neighbourhood centres enable the potential benefits of information technology to become more easily embedded in groups' everyday experience, than formal colleges or schools. A consistent message to emerge from the Loader and Keeble's (2004) review of literature in relation to community informatics was that information technology training aimed at excluded groups needs to be more informal and innovative than traditional models of training. Learning has to be relevant to their own life experience, rather than to jobs and people with whom they could not identify. The most innovative cases examined focused on the user as a potential 'content creator' and not merely a recipient of information.

Issues such as literacy and broader educational under-achievement can restrict the potential of information technology initiatives. These issues must be tackled if users are to realise the potential of technology. However, the point is also made that innovative adaptation of information technology and sharing of best practice may enable wider educational underachievement to be tackled in a holistic and informal manner

Research by Oftel (the UK regulator for the telecommunications industry) in 2003, found that, despite low income, the use of telecommunications formed a considerable portion of the household budget. However, it was found that access to the Internet was generally found to be a luxury rather than a necessity. Asylum seekers made the most effort to seek out and use public Internet access which they used mainly for job hunting and sourcing news from their home countries. Bishop et al (1999) found that the everyday things that people want to use the telephone for – such as paying a bill, writing to friends, information searching – are

traditionally done at home. They conclude that home access is critical for the full integration of computing resources into family, community, work and educational activities. Public access computing requires users to live by other people's rules, schedules and resources. Yet, public access remains an important complement to home access.

Research also indicates that appropriate sustainability or exit strategies need to be negotiated as part of the original design of community information technology projects.

The Irish Context

Research in Ireland for the Information Society Commission (O'Donnell et al, 2003) found that nearly one in every two adults now have access to the Internet, compared with only 1 in 20 in 1996. Four out of five people without access to the Internet are not interested in accessing it. This segment of the population is concentrated among the more marginalised groupings, pointing to the influence of a range of socio-economic factors. The authors suggest that there is a need to build the capacity to use these technologies, and to make their use more relevant. Their recommendations to Government include ensuring that ICT literacy is developed as a core focus of all government funded education and training, including second chance education and the development of sustainable community based initiatives among disadvantaged groups and individuals. Initiatives such as the Department of Community, Rural and Gaeltacht Affairs CAIT Programme are required to mobilise greater usage among excluded groups.

O'Donnell (2000) says that innovative strategies are needed to bring the people without the knowledge, skills or confidence to use IT to a point where they can make informed decisions about technology in their lives. The traditional means of increasing public use of technology – adult training courses and public library access – may have reached the limits of their effectiveness. O'Donnell argues that any strategy to close the digital divide must include active participation of the community and voluntary sector.

In relation to IT for children, the key initiatives have been school-based programmes, including the investment of €107.92 million in the 2001-2003 plan to integrate ICT into schools, expand access to and use of Internet, integrate ICT into the school curricula and enhance teacher development. Research on the impact of the Schools IT2000 initiative (NCTE, 2001) highlighted that while teachers have welcomed the IT initiatives, training, access to resources, perceived relevance and lack of technical support are barriers to its use in schools.

Summary

Some of the key points from literature in relation to Children, IT and the 'digital divide' are:

- The people most likely to be 'digitally excluded' are those already characterised as socially excluded. Usage of IT facilities is associated with prior educational achievement.
- Children are motivated to acquire skills to enable them to meet personal objectives, such as communication with friends, game playing or doing homework. It is argued that policies that emphasise the 'future' use of IT skills should instead tap into children's motivation to use technology in the present.
- The social context of IT use is crucial. Factors such as parental education, siblings, children's own interest and motivation, access to social networks, discourses in relation to IT use and their teachers' attitudes have an impact on how children access and relate to information technology. Research suggests that to be effective, IT training must be informal and made relevant to each participant's social reality.
- Use of IT has been associated with improved educational outcomes for moderate users (8 hours per week or less) and is considered to have potential for improving literacy skills. Yet, while computers are purchased for home and school educational use, they are often under-utilised as a tool for learning.
- Community training initiatives offer the potential for the provision of informal training opportunities for socially excluded groups. While home access is considered very important to ensure the full integration of IT usage into family life, community access is an important complement to home access.

2.3 Children and Participation

In the past number of years, both nationally and internationally, there has been a shift in thinking about children, leading to a greater emphasis on their rights as citizens. A number of trends have converged to place the spotlight on the roles and rights of children in families and society.

Firstly, a growing body of work on the sociology of childhood has criticised earlier thinking in sociology for rarely engaging with children as people in their own right, but instead subsuming them into 'the family'. The sociology of childhood takes the life of the child in its whole as a starting point and studies children as an independent social group with its own culture and characteristics and meaning (Torrance, 1998). Jans (2004) makes the point that in the current phase of late modernity, the traditional institutions like class, family, science, work, state and democracy are increasingly the subject of systematic reflection and continuous change. Children have greater opportunities to present themselves as social actors, both within and outside the family.

Secondly, the consumer movement, which emphasises the rights of consumers to exercise choice about the quality of the goods and services made available to them, has increasingly emphasised that children are consumers in their own right and have a right to be consulted.

Thirdly, the UN Convention of the Rights of the Child (UNCRC) (1992) has promoted an international emphasis on the rights of children to participate in society. The UNCRC was ratified by Ireland in 1992 and 2000 saw the launch of the National Children's Strategy, a wide-ranging ten year plan of action addressing the broad spectrum of rights of those under the age of 18. The first National Goal of the Children's Strategy states that '*children will have a voice in matters that affect them and their views will be given full weight in accordance with their age and maturity.*

Frank Martin (2000, p.5) summarises the challenge facing Irish society in relation to promoting children's participation as follows:

"The empowerment of children as fully autonomous human beings with legal rights and with ability to participate fully in Irish society must .. be the new millennium challenge. Not only must lawmakers tackle the challenge but Irish society must begin to accept an evolving 'child liberation philosophy' which will improve the lives of children.this objective will require the empowering of children to live their lives with the maximum of equal opportunities."

Kirby et al (2003) make the point that, in recognising children's participation rights, adults must take on a different role from simply being protectors and providers. They must work *with* children and young people rather than working *for* them. They can accept responsibility *for* someone, without taking responsibility *away* from them.

Arguments for and against children's participation

McDonald (2002) summarises the arguments in favour of greater participation for children as follows:

Human rights and democracy

- Children are citizens and service users and have the same rights to participate as adults.
- Under the UNCRC and the National Children's Strategy, they have the right to be consulted.
- Greater participation will lead towards a greater democratisation of Irish society. Leading children's rights theorists, Hart (1992) and Lansdown (1997) argue that democratic responsibility is not something that suddenly arises in adulthood but it is a condition that has to be nurtured and recognised at different stages of childhood.

- Embracing children's rights reflects a society's sense of justice and its desire to enhance the human condition for future generations.
- Failure to listen to children in the past has resulted in their abuse. Participation, therefore, is an aid to protection.

Encourages child development

- Children and young people want to be involved. Allowing them a voice shows respect and sets examples for them to respect themselves and others.
- Involving young people in the process of service design can enhance their skills of communication, negotiation, prioritisation and decision-making.
- Consulting children has been shown to increase their sense of ownership and belonging, self-esteem, empathy and responsibility and encourage their future participation in the community.

More effective and responsive service delivery

- The effectiveness of any service is enhanced by listening and responding to service users. Giving children and young people a voice in all areas of service design, including the evaluation process, will ensure that policies and services more genuinely meet their needs.

Lansdown (1995) and Matthews et al (1999) identify reasons why adults are reluctant to encourage children's participation:

- Giving children the right to a say threatens the harmony and stability of family life by questioning parents 'natural' authority to say what is in the best interest of the child. It is counter argued that parents don't always act in the best interest of the child (Qvortup et al., 1994).
- Imposing responsibilities on children detracts from their right to childhood. Yet, others argue that children's lives are full of the concerns that are caused by social and economic factors and so they should have a right to make decisions about them (Matthews et al., 1999).
- Children cannot have rights until they are capable of taking responsibility. Children's rights campaigners argue that children have responsibilities at home and at school (Matthews et al., 1999).
- There is a belief that children are incapable of reasonable and rational decision-making, due to their lack of experience. Yet, others argue that adults are not necessarily good decision-makers either, and that children are capable of making good decisions.

Degrees of participation

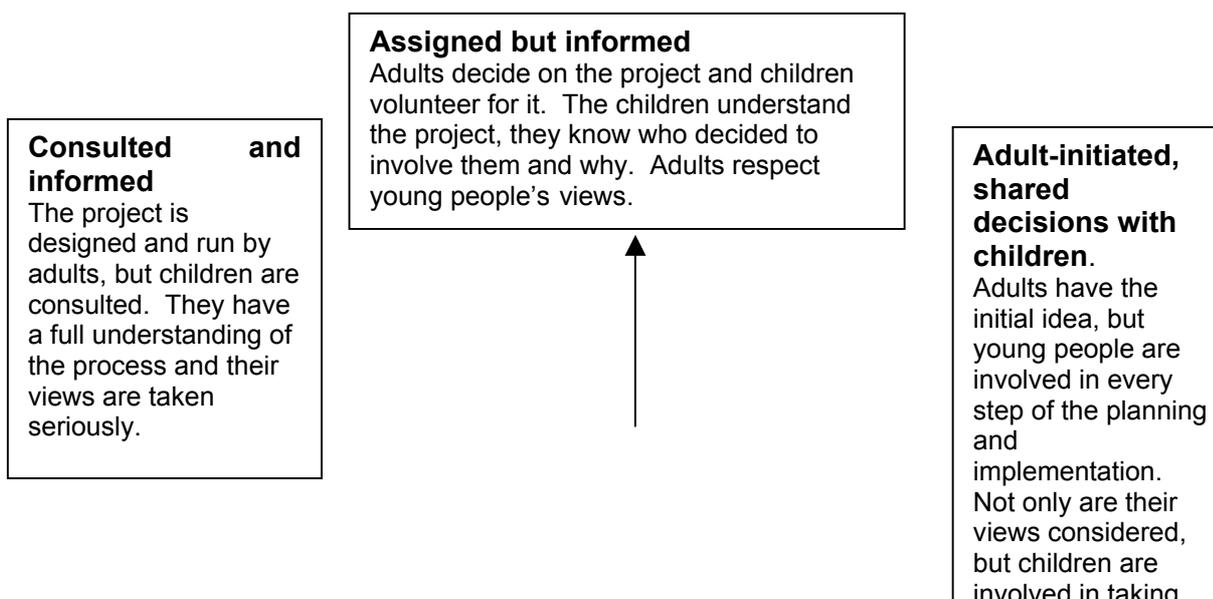
In relation to children’s services, participation can be understood as relating to children’s involvement in the development, provision, monitoring and evaluation of a service. Children can be involved in consultation exercises, research, as respondents, advisers or as young researchers, as part of a management committee, advisory group or community initiative, or in delivering services.

Non-participation:	1. Manipulation 2. Decoration 3. Tokenism
Participation:	4. Assigned but not informed 5. Consulted and informed 6. Adult-initiated, shared decisions with children 7. Child initiated and directed 8. Child-initiated, shared decisions with adults

Figure 1: Hart’s Ladder of Participation (1997)

The level of participation of children can vary, yielding different levels of involvement and empowerment. Hart (1997) emphasises that different levels of participation are appropriate for different settings, and it is important to think both in terms of what is feasible and what is desirable. Factors such as the child’s age, level of maturity or the nature of the decision being made may necessitate different levels of involvement.

Hart’s model has been criticised in that it presents the eight stages as static and hierarchical. It may be the case that ‘assigned but not informed’ done well can be more meaningful than ‘child initiated, shared decisions with adults’ done badly. McAuley and Brattman (2002) suggest that the dynamic, non-hierarchical model used by Treseder (1997), outlined below, is preferable, as it promotes an understanding of different degrees of involvement, with each having the potential to be the most appropriate under a given set of circumstances. It therefore illustrates the importance of taking account of the specific conditions that arise in relation to a given consultation, and the needs and capacities of the young people concerned.



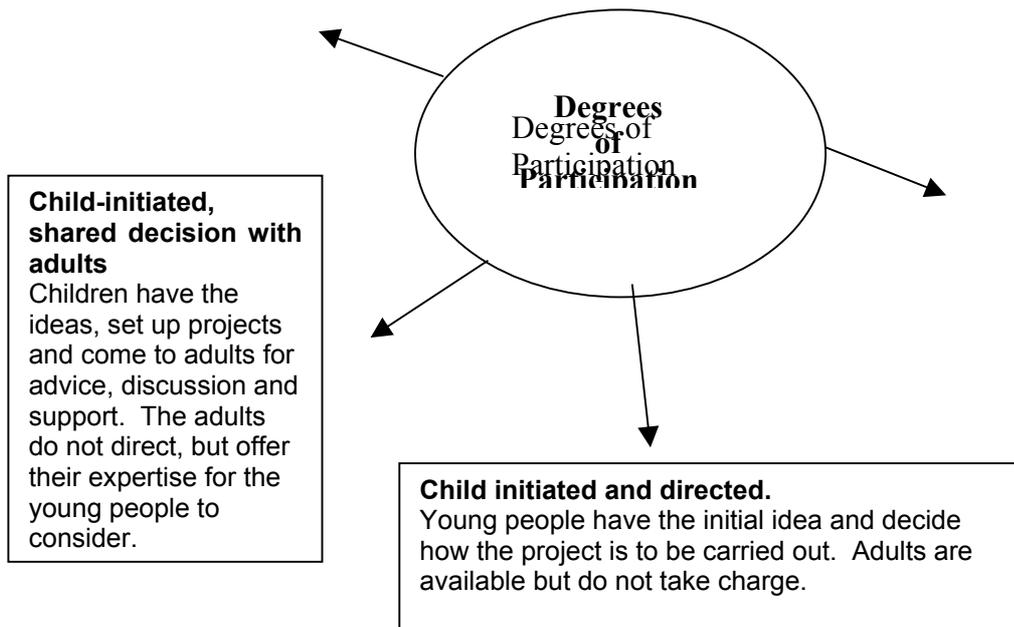


Figure 2: Degrees of Children's Participation (Treseder, 1997)

In addition to degrees of participation, Kirby et al (2003) highlight the following dimensions of participation:

- *Personal and public decisions:* Children can be involved in making decisions that relate to them as individuals, or to children in general. Personal decisions can be small – such as what activities to do, what to eat – or more significant, such as care arrangements or medical treatment.
- *Decision making context:* Decision-making can take place in a broad range of sectors. Kirby et al (2003) found that children are frequently involved in decision-making in community development and urban renewal, but not so much in other spheres, such as the juvenile justice system.
- *Formal and informal:* Children can be involved in decision-making formally or informally. Formal mechanisms are set up to provide opportunities for children and young people to influence decisions, such as a youth parliament or consultation meetings. Informal approaches enable children to express their views in an informal manner, but where they will be listened to. Kirby et al make the point that there is much more in the children's participation literature about formal approaches than about informal approaches, yet the latter is essential to child-focused practice.
- *Frequency and duration:* Children's power is also affected by how often and for how long they are enabled to influence decisions. Formal consultations may be one off, whereas informal approaches may be ongoing.
- *Difference:* All children are different, so it is necessary to design forms of engagement that start from the position of the child.

Literature on participation stresses that there is no one 'perfect' model of participation, and what is appropriate will vary from case to case. It is important to be clear and realistic about the extent and possibility of change and avoid being tokenistic in the use of participatory approaches. Rather than encouraging all agencies to adopt a policy of consultation, researchers and practitioners should instead promote genuine, meaningful and beneficial forms of consultation on a smaller scale. It is important to ensure that the child's agenda is being served in the adoption of a participatory approach and that it is not driven by the needs of an agency to be seen as progressive or inclusive.

While it is necessary to start small and develop genuine participation, the ideal scenario is that participation and the active listening to children becomes part and parcel of the formal and informal ways in which organisations make decisions (Kirby et al, 2003). Kirby et. al make a distinction between:

- *Consultation-focused organisations* – these organisations ask children their views to inform service development. Children's opinions may influence decisions but they have no power over what decisions are made.
- *Participation-focused organisations* – there is an emphasis on developing participation activities by which children and young people are able to influence decisions within the organisation. The participation activities are usually limited to specific issues or projects and do not generally challenge the status quo of adult-youth relationships.
- *Child/ youth focused organisations* – children and young people are involved in making decisions on a daily basis. They are involved in many ways and have varying degrees of influence. The organisational culture assumes that children should be listened to about all decisions that affect them.

Guidelines for Children's Participation

McDonald (2002), McNeish (1999) and Sinclair and Franklin (2000) suggest the following guidelines for engaging with children and young people in a participatory way:

- *Set clear objectives* - Why are you consulting children? Have you taken account of the child's agenda, which may be very different from that of the professional? What level of participation do you intend to use? Consider who should take part – is a representative sample of service users required? How will the child's views influence the decisions being made?
- *Address the organisation's culture and establish agency collaboration* - New structures and decision making processes may be required in an organisation. There may be a need for greater resources for training and extra work. All parties must be committed to the goal and prepared to invest what is required.

- *Surface attitudes:* Adults and young children may have to overcome pre-conceived attitudes in order for participation to take place.
- *Inform children and young people of the process* - Children should be informed on how they can be involved, the role of adults, how their feedback will or will not be used, and that the participation itself is voluntary. In planning, allow enough time to build up trust and rapport with participants.
- *Draw up an ethical statement* - This should clarify issues around consent, confidentiality, anonymity and disclosure.
- *Prepare the child* - Before each meeting, inform the child regarding what will happen, who will be there, what is expected of them, etc.
- *Create a child-friendly environment* - As much as possible, children should be encouraged to help plan the meeting, choose a time, place and environment that is suitable for them.
- *Communicate in a child-centred way* - Children need to feel comfortable with the method of communication. Workers should be mindful of the child's alertness and enthusiasm, watch body language for signs of stress and allow the child to choose his or her method of engagement. The child should be reassured that there are no right or wrong answers.
- *Use creative techniques* - Creative techniques allow you to include children not normally involved, e.g. art, drawing, etc. Special needs of children should be considered. Ensure staff or facilitators have the necessary skills.
- *Give adequate feedback in a reasonable time frame* – if you consult children, provide feedback to them in relation to the nature of the data provided and what will be done with it.
- *Consider the age and maturity level of the child* - Regardless of the age or level of understanding, the best interests of all children should outweigh their right to participate. There is a delicate balance between protecting a child and letting them learn to make risky decisions.
- *Allow for flexibility* - There should be room for flexibility. Not all children respond to the same method of communication, so it is best that workers approach each situation with a clear idea of what is to be achieved, and allow the young person to take the lead in how to get there.

In line with the dimensions outlined above, Kirby et al (2003) suggest the following way to assess participation:

- What level of participation is desired or realistic?
- Will decision-making involve personal or public decisions, or both?
- Will mechanisms be formal or informal?
- Will children's participation be ongoing, regular or one off?

- How many children will be involved?

Summary: Literature on Children's participation

- While there are arguments against increased participation for children in decision-making, a number of trends are promoting an increasing emphasis on children's rights. These include national and international legislation, the sociology of childhood, consumer movements and changes in society.
- There are a number of degrees of participation that children can realise. Participation of children can relate to personal or public decisions, it can be achieved on an informal or formal basis and it may be one-off or ongoing.
- Kirby et al (2003) make the distinction between consultation-focused organisations, participation-focused organisations and child/youth focused organisations, depending on the degree to which children's participation is part of their overall approach.
- Guidelines for developing children's participation relate to the skills, resources and attitudes of the organisation, clarity about the purpose of the participatory exercise and setting the right tone and providing information.

3. Description of the Project Structure and Training Model

3.1 Introduction

This Section provides the context for the evaluation of the project. It describes the project design and development, the assumptions underpinning the project, its aims and objectives, the project structure, methodology and timeline.

3.2 Project Design and Development

The idea for a children's IT project came from the Barnardos Regional Manager, who submitted an application for funding to the Children's Hour Fund in 2000. The application was successful. There was an interest in developing the project as a model of children's participation. Within Barnardos, work had begun on developing a children's participation policy for the organisation. It was agreed that it would be valuable to develop the project with a specific participatory methodology. The CFRPU was asked to undertake a short literature review in relation to participatory approaches with children to inform decision-making on this issue. Following the literature review, Barnardos and the CFPRU discussed how best the project could adopt a participatory approach and a project proposal was developed.

Recruitment then took place for a Project Co-ordinator. Due to the range of requisite skills, knowledge and experience –working with children, IT, project management, participatory approaches - it proved difficult to select a candidate, although a high number of applications were received. A second round of advertising was necessary before the Project Co-ordinator was recruited. The start date of the project was delayed by a number of months as a result of the delay.

Following a brief induction period, the Project Co-ordinator set about building relationships with agencies in Galway City, researching IT training models for children and setting up the advisory group.

3.3 Assumptions underpinning the project

This project was designed based on the following assumptions:

- There are disadvantaged children and families in Galway City who don't have access to IT skills and equipment.
- Community and voluntary organisations, such as Barnardos and other stakeholders in the project are well placed to develop initiatives that are tailor made to the needs and interests of these groups.

- A participatory, child-centred approach is likely to be effective in tailoring interventions to the unique circumstances and needs of each group.
- It is possible to develop training for children and families and their parents together that will allow IT to become integrated into daily life of the family.

3.4 Project Structure

The project structure, through which the project was implemented, was as follows:

- A **Project Co-ordinator**⁴, an employee of Barnardos, oversaw the running of the project, with the support of the Barnardos Regional Manager.
- An **Advisory Group**, consisting of representatives of local agencies and groups⁵ was formed to advise Barnardos on issues such as siting of training groups, contacts for suitable sites, ethical issues and other general issues relating to the project. The Advisory Group met approximately every two months. A half-day training session was provided to the Advisory Group on 'consulting children', by Karen McAuley, formerly of the Children's Rights Alliance.
- It was decided that **six groups** would be chosen, and a 10-week training course provided to each group. The Advisory Group nominated three potential sites where participants could be chosen for phase one and a further three for phase two. The sites were chosen based on consensus, by taking into account:
 - The level of need, i.e. prioritising areas and groups who, due to socio-economic and other factors, are unlikely to have computer access or experience.
 - The existence of appropriate developmental infrastructure, given that the project did not have the capacity to develop grassroots services.
 - The availability of suitable premises, (with IT facilities or suitable for use of portable IT facilities) or proximity to Barnardos Resource Centre for training.
 - Achieving a spread across age groups.
 - The availability or non-availability of existing community and youth services for this age group.
 - A wish to secure participation from a range of geographical areas and target groups.

A **local group** or organisation was used as a link between Barnardos and the participants. The role of the local group was to assist the project in sourcing participants, negotiating

⁴ Employed for 30 hours per week.

⁵ Organisations represented on the Advisory Group are listed in Appendix One.

premises, co-ordinating training times, liaising with parents and dealing with any issues emerging.

It had been envisaged in the original proposal that **local advisory groups** would be formed in each area. However, as the project developed, this was felt to be unnecessary as liaison with parents and project staff fulfilled this role on an informal basis.

IT facilities available in a local youth project or community centre were used by two groups, facilities at Barnardos Resource Centre were used by two groups, while laptop computers were purchased to facilitate access by two groups. A range of educational and recreational software was purchased by the project. Many of the groups also visited the Barnardos resource centre as part of the course.

A total of five **trainers** were recruited to work on the project. Three of them offered their services on a voluntary basis, while two were paid by the project. Two trainers and the Project Co-ordinator were present at every session. Garda clearance was secured for all project staff, trainers and volunteers, in accordance with Barnardos policy.

Training sessions took place for each of the six groups once a week, for one and a half to two hours. Between three and six students took part in each group. Each group received 10 weeks training. Follow up sessions were planned for during the summer holidays.

3.5 Project Methodology

The Project aimed to adopt a participatory approach, but one that would be feasible and realistic within the parameters under which it had to work. The Hart / Treseder model of participation (see literature review) was used to guide how the project could or would secure the participation of children. Given that the project has a short time-scale, it was not considered feasible to involve children and families in devising the wider project structure. The model of participation thought to be most feasible was one that would involve children and families in shared decisions about their own learning. In general, therefore, the level of participation thought most appropriate for direct project work was *'adult initiated, shared decisions with children'*.

An **ethical statement** was developed by the advisory group to guide the project's interaction with children. The statement is outlined in Section Four.

The **participatory training methodology** developed in the project consisted of the following features:

- Following the selection of participants by local link organisations, Barnardos were given the names and addresses and the parents and children were invited to an open day.
- An open day or meeting was held at each site at the outset to explain the project and its potential, introduce the staff, brainstorm possible activities and enable children and parents to ask questions about it. Participants were given the option of participating or not and could make suggestions regarding what they would like to learn. The evaluator was present and introduced to the children and families.
- An initial assessment form was completed for each child, detailing their previous experience of computers, access to computers, parents' experience of and access to computers and their learning objectives. This assessment represented the baseline against which progress was measured. Parents and children signed consent forms to agree to their participation in the project and the evaluation.
- A set of ground rules was devised and agreed by participants in relation to appropriate behaviour.
- Children identified their own personal interests and their objectives in relation to IT. Trainers followed their lead and guide them to use technology in a way that enabled them to acquire skills while pursuing their personal interests. For example, children with an interest in Manchester Utd. were assisted to access their website, download images and graphics and use them to make cards, letters and posters.
- Training was made as relevant to the children as possible. For example, in one group, children took photos of their family and things they were interested in, scanned these and made booklets. Another group made a web page about themselves and their lives. The pre-school group took photos of their families, which were developed into a 'greetings project', with maps and information about their native country and greetings in their native language.
- Children were free to choose from a selection of software and use it within each session.
- Trainers set general objectives in relation to skills development for the overall group, which provided a structure and format for sessions. Participants could mould the session to their own interests within this framework, which ensured that skills acquisition took place while satisfying personal interests and curiosity.

- Mechanisms (such as suggestion box, evaluation sheets) were put in place for children to express satisfaction or dissatisfaction with any aspect of the training.
- Records were kept for each child in relation to their participation, learning and behaviour in each session.
- Parents were encouraged to attend sessions and were offered the option of specialised training if they desired. A training session was held for parents towards the end of the training.
- The trainers monitored Internet access closely to ensure that children viewed no inappropriate content. In the ground rules set by each group, children agreed to seek permission before accessing the Internet.
- A general atmosphere of fun and enjoyment was encouraged. Parties were held at the beginning and end of the training course, participants were presented with certificates, their photographs were taken and their learning and participation was acknowledged.

3.6 Project Timeline

<i>August 2003</i>	<p>Project Co-ordinator employed</p> <p>Consultation with agency and group representatives</p> <p>Trainers sourced and recruited Hardware and software acquired</p>
<i>September 2003</i>	<p>Advisory group formed</p> <p>1st Advisory group Meeting</p> <p>3 sites chosen</p> <p>Draft ethical statement considered</p>
<i>October 2003</i>	<p>2nd Advisory Group meeting</p> <p>Ethical statement agreed</p> <p>Training for advisory group members on ‘consulting children’</p> <p>Provisional training groups, dates and times selected</p>
<i>November 2003</i>	<p>Training commenced in three sites – Eglinton Hotel, Ballinfoile and Mol an Oige</p> <p>List of participant objectives compiled by the IT trainers</p>
<i>December 2003</i>	<p>3rd Advisory Group meeting</p> <p>Potential sites for the second phase of the project discussed</p>
<i>January 2004</i>	<p>4th Advisory Group meeting</p> <p>Sites chosen for the second phase of the project</p>
<i>February 2004</i>	<p>Parents Training Session</p> <p>First phase of training completed</p> <p>Review and evaluation of Phase One.</p>
<i>March 2004</i>	<p>Second phase commenced in three sites – Salthill, Bohermore and Ballybane</p> <p>5th Advisory Group meeting</p>
<i>May 2004</i>	<p>6th Advisory Group meeting</p> <p>Parents Training Session</p>
<i>June 2004</i>	<p>Training ended at three sites</p>
<i>July 2004</i>	<p>Project Review and evaluation</p> <p>Final advisory group meeting</p> <p>Summer meetings for all 6 training groups</p>
<i>August 2004</i>	<p>Parents Training Session</p>

4. Training Profile and Outcomes

4.1 Introduction

This section profiles the context, content and outcomes of the six training groups of the 'Computer Characters' project. The six groups (with names chosen by the participants) are:

- Cookie Bytes (ages 3-4 years)
- Smiley Wizards (ages 7-9 years)
- Group Matrixx (ages 9-12 years)
- Salthill Shockwaves (ages 5-7 years)
- Ballybane Gigabytes (ages 5-7 years)
- Bohermore Bugs (ages 9-13 years)

The profiles and assessments made in this Section were informed by project files, participant observation at training sessions by the Evaluator, children's feedback, parents' feedback, trainers and Co-ordinator feedback and some discussions with local link organisations.

4.2 Cookie Bytes

Age group: 3-4 years (pre-school)

Training location: Eglinton Hotel, Salthill, Galway

Link group: Galway Refugee Support Group

Rationale for selection: This group was chosen by the Advisory group on the basis that children living with their families in asylum seekers accommodation are effectively cut off from normal life in the city. It was felt that the project could offer some stimulation, social and skills development to the children.

Context:

- The hotel, a residential centre for asylum seekers, is run as a private venture so there is no automatic access for community services. A playgroup for pre-school children is run in the hotel. It was decided to run this group separate from the playgroup as there would be too few computers and trainers to cater for a big group.
- The link to Galway Refugee Support Group was crucial for access to this site. The group has built up a relationship with the hotel owners and the residents and was well

placed to negotiate access and encourage participation. Few services are allowed into the hotel.

- The experience of the GRSG has been that the context in which asylum seeker families live (including transitory, high density living conditions, a lack of social and economic rights and worry about an uncertain future) can cause apathy and low energy, meaning that participation in developmental activities can be difficult to secure and sustain. Other factors that impact on participation are differences in language, culture, race and orientation to education.
- The training group was, therefore, a non-cohesive group in spite of the fact that participants live in close proximity to each other. The participants were all of different nationality and language.
- There were no IT facilities on-site. A hotel bedroom used for health clinics and some other activities, was the site used for training. Two mobile computers, a scanner, printer, software, toys and games were brought to and from the site every week. Leaving IT equipment for the duration of the project or beyond was not an option due to security concerns on the part of the hotel management.
- At the start and finish of the project, the hotel was under quarantine due to an outbreak of chicken pox. Therefore, trainers and project staff had to have already had chicken pox or they would have been at risk of infection.
- It was, therefore, a very difficult environment to run the project in. Difficulties and challenges arose as a result of these factors throughout the course.

Profile of participants:

- Initial assessment forms completed by parents indicated that the children had neither experience of nor access to computers. Most of the parents had experience of but no current access to computers.
- Initially, five children (two boys and three girls) were put forward for the group. A further three children (one boy and two girls) were nominated. An average of three children attended the sessions. Two of these (boys) attended regularly from start to finish.

Selected profiles:

M is four years old and is from Croatia. He attended 9 of the 10 sessions. M had never used a computer before. His parents had used a computer, have ECDL, but do not have access at present. M's learning objectives were to play games, make signs, numbers, letters, colours. Some of the things M learned at the course were using software, using headphones, printing images, inserting CD's, scanning, using a mouse and keyboard and typing. Some of the software he used was Lion King, Rainbow Fish, Little Polar Bear and Wizard of Oz. His parents attended some of the sessions. As the time went on, he became more confident about saying what he wanted. He was very fond of the computer and was reluctant to give it up or to finish the class. His parents said that he enjoyed the course a lot and talked to them about the games he played.

E is three and a half years old and is from Nigeria. Like M, he attended nine of the ten sessions. He had never used a computer before. His parents had used a computer many times, mostly for e-mail and MS Word. His learning needs were open – would like to learn anything about the computer and explore. His parents' objectives were to become computer literate. Some of the things E learned at the course were using software, using headphones, printing images, inserting CD's, scanning, using a mouse and keyboard and typing. Some of the software he used were Winnie the Pooh, Cinderella, Tarzon, Toy Story, Mickey Mouse and Wizard of Oz. E. developed a good sense of independence on the computer, and was able to insert, start and play a game after a number of sessions. He enjoyed using the disposable camera.

Trainers: Prosper and Mary were the trainers for this group. Both have experience with teaching IT and both knew the families from previous work /contacts. Prosper speaks French, Romanian and Russian, as well as English, which helped in communication with the children.

Training Content:

There was a meeting with parents to explain the project, complete the individual profiles and obtain their consent for their child's participation. The limited facilities in the hotel meant that it was not possible to have an open day with a party as in the other groups.

Training content included:

- Start up and shut down computer

- Handling disks
- Handling CD's
- Handling the mouse
- Clicking the mouse
- Pressing keys
- Printing
- Software games and adventure
- Using cameras
- Scanning photos

The Cookie Bytes undertook a Group Project, called the 'Greetings Project'. The children took photos of themselves and their families. Their families translated a series of greetings from English into their native languages. These were compiled onto a display, with information and maps from their home country.

At the final session, there was a party for the children. Certificates were presented to all the children and they had their photograph taken.

Outcomes

Skills development:

- Participants gained familiarity with basic computer skills and using software. They also had an opportunity to practice motor skills and converse in English.
- The children showed a great eagerness to play and use computers. The course represented a social outlet for the children, offering an opportunity for them to mix and play with other children.
- Social skills developed included sharing, taking turns and being part of a group.

Enjoyment:

- The children appeared to enjoy the party, games, and overall project. Feedback from parents indicated that this was the case.
- Parents were very positive about the project and trainers. Word got around the hotel and other parents asked the GRSG about the possibility of training for other age groups.

Participatory approach:

- One of the key challenges in working with this target group was to secure and sustain participation by children in the project. A regular attendance and participation of three children was achieved, with more attending erratically. On the basis of their own experience, the GRSG consider this to be a huge achievement for the project, due to challenges outlined in the context above. The GRSG feels that it was valuable that the group was mixed-race, child-centred and focused on training, thus allowing the children to mix and interact as children rather than as 'refugees'. Both trainers were known to parents from previous contacts in the hotel, which was a critical factor in building up trust. They are hopeful that, as a result of Barnardos success in overcoming the challenges to provide a service in the hotel, other service providers may be encouraged to do likewise.

- The participatory approach used in the group involved children selecting their own software and playing games. They could also choose to play or make jigsaws. The children also took pictures of their families and others using a disposable camera and used the scanner. The children's stage of development meant that they were less able to vocalise their interests and needs than other groups. Also, the fact that they could not read or write meant that uses and understanding of the technology was limited. Therefore, having freedom to use technology to explore and play, in a safe context, was the most appropriate means of learning for this group.

- In addition to the outcomes realised through the training, the process represented a learning experience for Barnardos staff in relation to the challenges and possibilities associated with providing services to asylum seekers and refugees.

Sustainability of skills development:

Due to the circumstances of this project, no computers were donated or left with families or in the hotel.⁶ As these children are young and their parents mostly had some experience of computer use and education, it is likely that they will continue to develop computer skills throughout their lives. While this training was valuable as a 'taster' and a social outlet for children, it would have been valuable to have some scope for ongoing development of access and skills.

⁶ At the time of writing, the possibility of making donations to the Eglinton Hotel was being explored.

4.3 The Smiley Wizards

Age group: 7-9 years (2nd to 3rd class)

Training location: Ballinfoile Neighbourhood Youth Project (NYP)

Link group: Ballinfoile Neighbourhood Youth Project, a neighbourhood based intervention for young people.

Rationale for selection: Ballinfoile is a large local authority housing estate in Galway City, with a high number of young children. The NYP and other youth services are primarily targeted at older children, while there are also services for younger children. Advisory group members were aware of a high demand but a dearth of services in the area for the 7 to 10 age group.

Context:

- The Ballinfoyle NYP has a premises in the housing estate, which has 5 computers and other equipment such as printers and a scanner.
- The project identified six children from the locality, who they thought would benefit from participation. Some of their siblings are involved in the NYP.
- The training was run in the Ballinfoyle NYP premises, which is close to the children's homes and school.
- Participants knew each other quite well as they are of a similar age, live beside each other and go to the same school. Just one member did not know the rest of the group so well.

Participant Profiles:

- There were six children in this group, four girls and two boys (including a brother and sister). Four of the six were regular attendees, while one had erratic attendance and another dropped out. Parents attended the open day, but did not come to subsequent sessions.

- Just one child in the group had access to a home computer and her parents had some knowledge of IT. All the other participants had access at school, but not at home, nor did their parents have IT experience.

Sample profiles:

M is aged 8 years old, and is in third class. He had used computers just a few times at school, mostly to play games. He has occasional access to a computer. His parent used computers a few times, for letters, printouts, etc. The family does not have access to a computer. M said he would like to write stories, play games, make posters, draw stories, send e-mails, print and check out magic tricks on the computer. His parents' needs in relation to training are to learn general skills on computer, including Internet. However, as the family had twins during the course, it is unlikely to have been a priority for them at that time! M was present at all sessions.

C is aged 9 and is in third class. (M is her brother). She had occasional access to a computer at school, and used it to write letters and print. Her family does not have access to a computer. C said she would like to draw pictures, do posters, write stories, send pictures to others, e-mail people, play games, check out magic tricks, check websites, send messages, help others, draw houses and pick out clothes on other people. C was present at all sessions.

E is 8 years old, and is in second class. She used a computer a few times to play games and use software, and has access to a computer occasionally at school. Her mother has never used a computer but was due to start a class in the Ballinfoile NYP. E wanted to use the computer to make cards, pictures and photos and to learn about the Titanic, her favourite film. Her mother's objective was to be aware of and understand what she was doing on the computer. E attended all sessions.

Trainers: Pat and Mary were the trainers for this group.

Training content:

Open day – There was an emphasis on fun and games, with the help of a magician. The project was outlined to parents and children and the potential of computers and basic jargon were explained. Participant profile forms were completed. When children brainstormed all the

things they could possibly do on a computer, they each wrote a list of what they would like to do themselves (in the profiles above). The format and times of training were discussed. The Project Co-ordinator and participants set ground rules. Trainers showed some of the software packages to children and their parents.

The content of training sessions included:

- Typing and keyboard skills
- Printing
- Formatting text, cut and paste, delete
- Saving to a floppy disk
- Inserting CD's and floppy's
- Using disposable cameras to take pictures at home
- Using internet
- Downloading
- Scanning photos and pictures
- Inserting, positioning and resizing photos and clip art
- Using software for games, cards, letters
- Designing and planning the group project – a book about themselves
- Writing and producing their own sections
- Designing the cover of the book

Closing session: Certificates were presented, the colourful booklets made by the 'Smiley Wizards' were distributed and a party was held. The children reviewed all they had learned and thanked the trainers.

Outcomes:

Skills development:

- The learning curve in this group was very steep, as participants had very limited experience of computers prior to the course. Most do not have access to a computer.
- A broad range of technical skills were developed, as participants became familiar with using IT in its various forms. The children developed a noticeable ease in the use of the equipment over the 10 weeks.

- Social skills were also practiced, through team work, setting ground rules, sharing, adhering to ground rules and communicating.

Enjoyment:

- The children clearly enjoyed the course very much. The high level of attendance and enthusiasm, as well as the feedback from children through evaluation forms confirms this observation. Fun elements, including the open day with the magician, parties at the beginning and end, and being able to follow their interests and hobbies through use of IT added greatly to the enjoyment factor.
- The children had a very good and open relationship with the group leaders. Credit is due to the group leaders for setting a friendly, participatory tone, which put the children at ease and enabled them to take the lead in their own learning.

Participatory Approach:

- The participatory approach worked very well with this group, as each child was enabled to follow his or her own interests. Trainers allowed each child to work at his or her own pace. The children helped each other out by pointing out things they had learned.
- The group project was ideal as a participatory project as the children led the content by taking photos of people, places and things that were important in their lives and writing the narrative to explain them.
- The fact that the children all knew each other from school and neighbourhood is likely to have helped group dynamics. One child, who did not know the others so well dropped out after two sessions. Informal feedback revealed that she dropped out because she did not know the others. This highlights the need for some group work at the start to facilitate participants to get to know each other and put them at ease.

Sustainability of skills development:

At the time of training, just one family had a computer at home. The Project donated four second hand computers to the children involved, which will enable them to practice some skills. However, it was felt by the project co-ordinator and evaluator that follow-up training for the families in using the computer at home is necessary, as they are likely to encounter technical hitches and may not know where to look for help. The children are also likely to

have ongoing access at school, for which their participation in this course is likely to be of benefit.

4.4 Group Matrixx

Age group: 9-12 years (4th to 6th class)

Training location: Barnardos Office, Galway City

Link group: Mol An Oige, a community after-school facility in Galway City.

Rationale for selection:

Children from all over Galway attend this group in the city centre. They do not have a permanent base and the advisory group felt that the children would benefit from participation in this project.

Context:

- Mol An Oige, the local after-school group, is attended by children from a range of schools throughout Galway.
- It does not have IT facilities, and so the training took place at the Barnardos office, which was nearby.
- As the children go to different schools, most just knew each other in the context of the after-school.

Participant Profiles:

There were six children in this group initially, 5 boys and one girl. Five children attended on a regular basis. A Project Worker from Mol An Oige attended with the group every week. Two parents attended most of the sessions and sat with their children during the training. The parents of one other child came to the final session.

Sample profiles:

A is 10 years old and is fourth class. He has used computers since he was 3 years old, mostly to play computer games. Has regular access to a computer at home. A's parent uses a

computer regularly, and has completed training including a diploma course, DTP and ECDL. A's training needs are to focus on completing certain tasks. He would like to get good photos, get good music and buy things on the Internet. A attended most of the sessions.

B is 9 years old and is in third class. He has often used a computer, particularly in school, where he does typing and clip art. B has occasional access to a computer. B's family are familiar with computers, using it at work to do administration work. B's objective is to become more familiar and comfortable with computers. He would like to play games and make his own music using the computer. The parent would like to brush up on excel – is doing the ECDL at the moment. B attended most of the sessions. His mother also attended in most cases.

D is 11 years old, in 6th class. He has often used a computer to surf the net, play games, do homework using MS word. He has regular access to computers. His personal aims are to be the best he can at everything he does. In this course, his objectives were to make a web page, download stuff, copy CD's, hide information and images. He attended most of the sessions.

Trainers: Pat and Attracta were the trainers of this group.

Training content:

Open day – There was an emphasis on fun and games, including magic tricks. The Project was outlined to the children, including the fact that it was participatory. Participant profile forms were completed. The children brainstormed all the things they would like to learn. They each wrote a list of what they would like to do themselves (in the profiles above). The format and times of training were discussed. Ground rules were agreed by the Project Co-ordinator and participants. Trainers showed some of the software packages to children and the Project Staff.

Training content included:

- Taking photos with disposable cameras
- Playing games and using software
- Using a scanner to scan photos
- Setting up an e-mail address and using it
- Agreeing a project, which was designing a web page
- Learning how to make a web page
- Making a web page about themselves
- Using software to add and modify their voices on the webpage

- Learning morphing and rollovers
- Saving work on floppy disk

At the final session, each child was presented with a personalised CD with their webpage and their photo (for security reasons, the web pages were not put on to the internet). Everybody received a certificate and a list of the skills they learned in the course.

Outcomes:

Skills development:

- As can be seen from the profiles above, all of the children in this group have some experience and proficiency in computers. For the trainers, this was a challenging and fast moving group. The children were keen to use the training as a means to pursue their interests in terms of downloading music and ring tones or accessing information on sport and movies from the Internet. For the trainers, this meant that the content had to be 'cool', interesting and produce immediate results, or the children tended to lose interest quickly. They had to try to find a balance between training and recreation, i.e. find ways to enable the children to meet their own interests while acquiring new skills and not just using the computer for Internet access.
- Doing a group project, the web page, was an important focus for the group. Considerable groundwork was done by the trainers in advance of sessions, in terms of preparing the background for the web page. The children enjoyed having the focus of the project (even if some still wanted to download music!).
- Feedback from the trainers indicated that a number of the participants had a natural aptitude and interest in computers and were quick to learn and complete their tasks. All of the children learned new skills, but for some the learning curve was greater, as they had less prior experience of or access to computers.

Enjoyment:

- The children's evaluation forms indicated that they all enjoyed the training and liked the trainers. Feedback from parents indicated that the children enjoyed the training and talked about it at home a lot. There was a good level of parental interest. The parents were unable to attend regularly due to being at work, but the parents of four out of six children attended at least one session.

Participatory Approach:

The participatory approach adopted in this project is one where children make 'shared decisions with adults'. Achieving this methodology with this age group was challenging for a number of reasons.

- The children were asked what they would like to learn and do at the outset. As their objectives related to things such as downloading music, ring tones and were broadly 'consumerist', the project was faced with the dilemma of whether it should allow them to pursue these options or raise their awareness of other, potentially exciting things they could do. While the children prioritised recreation, the trainers felt that, as this is a training course, skills had to be imparted. They opted for a compromise, introducing new technology and software, but facilitating children to mould the sessions to match their own interests. While this worked well, overall, sometimes the children were reluctant to invest the time and energy in learning something new, preferring the instant response of the internet.
- As each individual had different interests and there were varying ages and levels of experience within the group, feedback from trainers indicates that achieving a balance between a group approach and an individual approach was challenging. Undertaking the joint project was a good solution as it provided greater cohesiveness to the group.
- Therefore, achieving 'shared decisions with adults' involved a process of negotiation - the children could pursue their own interests, but in a context wherein they also learned skills and used new packages or equipment. This raises interesting issues about participatory approaches with older age groups. These children have more expectations and their agenda is less 'open' than in the younger groups and so a greater degree of negotiation may be required.

Potential for ongoing skills development:

As most of this group have access to a computer at home or at school, it is likely that they will be in a position to maintain their IT skills. While they may not have access to particular software used in the training, the course has raised their awareness of its potential uses. Barnardos donated a computer to the Mol an Oige Project.

4.5 Salthill Shockwaves

Age Group: 5- 7 years

Training Location: Traveller Halting Site, Bishop's Field, Salthill

Link Group: National Association of Traveller Centres (NATC) Project Co-ordinator

Rationale for selection:

Traveller children generally don't have computer or Internet access. The Salthill project was chosen as a host site for the project on the basis that there is a NATC centre and project worker there to act as a local link for the project.

Context:

- There are 42 children living on a halting site at the Bishop's field, Salthill. The NATC project employs a Youth Work Co-ordinator who runs a variety of after-school, summer camp and youth activities with the children and young people.
- Barnardos indicated to the Project that they would like to target the younger age groups. Participants were chosen by the Project Co-ordinator on the basis of age. As the training was based on the site, it attracted a lot of interest from other children every week. The presence of the NATC Co-ordinator was important in explaining to the other children that the course was just for participants.
- The training took place on Friday afternoons for one and a half hours.

Participant profiles:

- Four boys and one girl took part in the project, including three brothers. The participation was good. One child attended all 10 sessions, one attended nine, one attended eight, one attended seven and one attended six.
- The children were aged between 5 and 7. Three older children joined the class a half hour after the youngest two children, as their school day lasted slightly longer. This worked well as it gave the trainers an opportunity to have the younger children settled down and working on something when the others came in.
- While the participants have access to computers at school, none have home access. The parents have had some access to a computer in the NATC centre, but would not consider themselves computer literate.

- Parents and some siblings dropped into the course from time to time, more to observe what was happening than to take part. They were encouraged by the NATC Co-ordinator to come along as much as they liked.

T is aged 6 and is in senior infants. His family do not have a computer. According to his school, he has weekly access to a computer at school, mostly for educational games. His family has occasional access to the computer in the NATC Centre. T is interested in horses, cars and sports. During the course he showed a strong interest in the Ford Motor Racing game and pictures of horses.

J is aged 5 and is in Junior Infants. His mother did an 'Introduction to Word' course in the NATC centre on the site. His two older brothers were also on the course. According to his teacher, he has weekly access to a computer to play educational games. J was very quiet at the start of the course, but over time he became more confident and at ease with the various tasks on the course.

Trainers: Prosper and Sinead were trainers for this group.

Training Content:

Open meeting: There was an open meeting and party for children to explain the project. Some of the children were very boisterous and there was a lot of noise from children outside the training centre, which made it difficult to explain the project to the children. The children were eager to get started on the computers.

Training content included:

- Start up and shut down computer
- Handling CD ROMs
- Handling Disks
- Using the mouse
- Pressing keys
- Printing
- Scanning photos and printing them
- Playing games and using software
- Naming the parts of the computer
- Using digital and disposable cameras

The Salthill Shockwaves group project involved selecting, colouring and scanning pictures of horses, which were made into a booklet.

Outcomes:

Skills development:

- Participants increased their familiarity and ease with computers. They practiced starting and shutting down the machine, using a mouse, key board and other aspects of the computer hardware. The participants were introduced to new technology, such as scanners, printers and digital cameras.
- The children's ease with the use of computers increased as the course progressed. It was challenging for the trainers to get participants to do a variety of things, as most shared an interest in one computer game. They worked on the basis that everybody had a turn on it at some stage, providing they also did some other things.
- Social skills developed included sharing, taking turns, tidying up and asking permission to leave the class.

Enjoyment:

- The children appeared to enjoy the course. The attendance was very good. There was a range of personalities, from very boisterous to very quiet, but all showed evidence of enjoyment. The children became engrossed in the software programmes and enjoyed showing their parents what they could do when they popped in.

Participatory Approach:

- There was a high level of excitement and boisterous activity in the group. At the Open Day, it was difficult to hold the children's attention for group activities and discussion. Playing the name game enabled the children, trainers and evaluator to get to know each other. Ground rules were set by the group. The trainers spent some time trying to calm the children and get them to focus on the task at hand. Achieving a balance between discipline and participation was a challenge faced by the trainers. As the participants' excitement settled down more in subsequent sessions, it was easier for the trainers to get them to focus on the course.
- The emphasis in the training content was on using the technology to explore the things the children were interested in, thus making it relevant to their lives. Many of the children are interested in horses, and so horses featured prominently in the group project, pictured drawn and scanned. They are also interested in cars and all the

children loved software with cars. The trainers worked hard to impart skills and knowledge while allowing children to play the games they enjoyed. Generally, children enjoyed using other equipment once they were introduced to it, but were often reluctant to move from what they were familiar with.

- The children responded very well to encouragement and support of the trainers and took pride in showing what they could do.
- This group was a challenging one. In this case, it is likely that a follow-up or ongoing sessions would be required to further develop the skills. After ten sessions, the group had settled considerably, so additional sessions would have been valuable.
- The support of the NATC Co-ordinator was very important, in addition to the Barnardos staff and trainers. She played an important role in helping to implement ground rules, liaison with families and communicating with the project staff about what was happening on the site. It would have been very difficult to run the course and maintain participation without the benefit of her skills and knowledge.

Potential for ongoing skills development:

The Salthill Shockwaves don't have computer access, apart from at school. The project donated a computer to the NATC centre on the halting site. While children may be able to access this at some times, the centre caters for 42 children, with just one paid youth worker. Therefore, her ability to offer ongoing access will be very limited.

4.6 Ballybane Gigabytes

Age Group: 5 to 7 years

Training Location: Ballybane Resource Centre, which has a well-equipped computer room.

Link Group: Ballybane / Mervue CDP

Rationale for Selection: This area was chosen as a site for the Project as it is a disadvantaged area in Galway City. The Ballybane Resource Centre has a computer room, where the training could be based.

Context:

- Five participants were selected by the Co-ordinator of the Ballybane – Mervue CDP. The training took place in the resource centre. The Co-ordinator did not have an ongoing involvement in the course.
- This was a mixed cultural group, including three non-nationals.
- Training took place on Wednesday afternoons for 2 hours.

Participant Profiles:

- There were three girls and two boys on the course. The level of attendance was very high. Two children attended all 10 sessions. One attended 8, and two attended six.
- Three of the children did not have a computer at home, while two did. All have some access to a computer at school.
- There was a very high level of parental participation in this group, with mothers attending almost all sessions with their children. The parents said that it is an opportunity for them to spend time with their child, doing something for them, apart from their siblings. Being at the class allows them to see and understand what their child is doing and discuss it with them. One parent had a good knowledge of computers but the others had limited experience and were very eager to learn more.

S is 6 and in first class. She has occasional access to computers at home and at school. She is a very outgoing child and loves to learn new things. She showed a great interest in the class and didn't miss any classes. Her mother attended the sessions with her, seeing it as an opportunity to spend time with her daughter and learn some new computer skills herself. According to her school, she has fortnightly access to a computer in the classroom, which she has mostly used for typing.

J is six years old and in first class. He does not have a computer at home and has occasional access at school. In the course he wanted to learn how to play games, have fun, do arts and crafts, learn more about the Internet, Man United and puppies. He also wanted to scan a picture of his little brother. Unfortunately, J hurt his head at school and missed some of the sessions. His feedback forms show that he enjoyed the classes and learned more about computers.

Training content:

- Assessed level of knowledge about computers

- Making children feel at ease with the equipment
- Name computer parts
- Printing, inserting, ejecting
- Mouse control
- Use of software
- Designing cards
- Inserting text
- Use of microphone and headphones
- Interviewed parent with microphone & recorded
- Recording sound
- Software manipulation
- Choose project theme
- Use of MS Word
- Drawing pictures and scanning them
- Internet search
- Clip art
- Use of digital camera
- Display photos on screen / print
- Completion of project – choosing photos for display

Trainers: Mary and Pat were trainers for this group.

Outcomes:

Skills development:

- The children were introduced to a wide range of equipment and software and were facilitated to use them. Their knowledge of what is available and what is possible will have increased. Their ease with use of the mouse and computers developed through playing games.
- One of the parents who has a computer at home said that the course helped her child to learn to respect the computer and not to treat it as a toy. Since she has done the course she is more likely to allow her daughter to use the computer at home as she knows what she is capable of. Her daughter has also taught her things she didn't know, including aspects of programmes and computer terminology.
- Social and team work skills were developed through learning to share, taking part in a group work project and being part of a group. The group project involved producing posters showing "Games We Play".

Enjoyment:

All the children indicated they enjoyed the sessions. Their mothers said that the children looked forward to the class every week and hated to miss it.

Evidence of participatory approach:

- From the outset, a supportive environment was created for children and parents. Name games and clearly outlined ground rules and expectations at the open day helped to set the tone. Children could comment on all aspects of the course and their feelings were taken on board by the trainers. The atmosphere of the group was friendly and supportive and children were encouraged to come forward with ideas and suggestions.
- Again, while the content of the course was broadly structured, children could take the lead within this and make it relevant to their own experience and interests.
- This group was different from most of the others due to the dynamic of parental participation. One of the parents said that this is the first time she and her daughter have done a course together. They enjoyed having two hours on their own, doing something together. She also enjoyed meeting the other mothers. The fact that they are all there for their kids rather than for themselves helped to break down cultural barriers.
- Other parents were keen to learn at the course. Their feedback suggested that they would like to have more individual training for themselves. This was challenging for the trainers as they had to give adequate time to the children and didn't have a lot of time to spend with the parents. There were also cases where the parents suggested things for the children to do, which detracted from the course's focus on the child taking the lead. Therefore, while there were both benefits and challenges to the parents being there, it was overall a benefit as the parents learned with their children and enjoyed the social aspect.

'To the best of knowledge everything is okay and absolutely brilliant'

"The computer training is perfect."

"maybe a personal project, e.g. family tree where both parent and child could or would have to work getting information for child to work on – not on a major scale."

Quotes from Ballybane Gigabyte parents

4.7 Bohermore Bugs

Age Group: 9-13 years (3rd to 6th Class)

Training Location: Bohermore and Barnardos office

Link Group: Bohermore Youth Club

Rationale for selection: Bohermore was selected on the basis that it is a disadvantaged area, has a community centre with computer facilities and has a local group that could provide access to participants.

Context:

- The participants selected for this group know each other from the neighbourhood, although they attend different schools. The participants were invited by a local youth worker.
- The training took place on a Friday evening, from 4 to 5pm. This was the only suitable slot, and was not ideal as an hour is quite short for the class.

Participant profiles:

- There were six children in this group, 5 girls and one boy. Five children attended on a very regular basis, along with their parents. One child attended just three sessions, without her parent. All of the children have computer access school and almost all at home and were familiar with the use of computers.
- The rate of parental participation was very high in this group, with parents attending most sessions with their children. The parents had a basic knowledge but were eager to learn more skills.

M is 11 and in 5th Class. She has often used computers and has regular access at home and at school. She has used the computer for games, making cards, writing poems and school projects. The school indicated that M has access to the computer on a daily basis and has used it for various projects, including excel. M attended 6 of the 10 sessions. She was not very fond of the group project, but enjoyed most of the other activities.

R is 11 and in 6th Class. She has often used the computer for riddles, Internet, school work and has regular access at home and school. Her mother did a beginners course and would like to do typing and accounts. R attended all ten sessions and in surveys, rated her enjoyment of all aspects of the training. She thought the trainers were 'brilliant' and the Barnardos staff 'fab'. She got a bit bored with the 'under the sea' project sometimes.

Trainers:

Mary and Prosper were the trainers for this group, along with Barbara, the Project Co-ordinator.

Training Content:

Open day – as for the other sessions. A name game was played to help everybody get to know each other and support positive group dynamics. Two representatives of the local project also attended the Open Day.

Training content included:

- Playing games and using software
- Using a scanner
- Setting up an e-mail address and using e-mail
- Agreeing a project, which was a project on 'Under the Sea'
- Using microphone, headphones and digital cameras
- Searching the internet
- Making cards and posters
- Using the computer to develop material for the 'Under the Sea' project
- MS Word and Clip art

At the final session, each child was presented with a laminated copy of the Under the Sea' mural. Everybody received a certificate and an outline of what they had learned on the course.

Potential for ongoing skills development:

As most of the group have access to a computer at home and at school, it is likely that they will continue to build on the skills developed in this course.

Outcomes:

- As the participants all had a basic level of proficiency in the use of computers, from their experience at home and at school, this course helped them to expand and apply their range of skills, use new software packages and develop internet and e-mail skills. It also gave them supervised computer access, in a context where they could ask questions.

Enjoyment:

- The children's evaluation forms and feedback from parents indicate that they enjoyed the training. Two children indicated that some of the activities in some sessions were boring.
- As attendance was optional, the fact that there was a high rate of attendance indicates that children enjoyed coming along. A number of children knew in advance that they would miss one or two sessions and were disappointed to miss out on those sessions.

Participatory Approach:

- Children chose a project – 'under the sea', which was in line with their interest in dolphins, nature and sea life, as indicated in their forms.
- Children could choose what they wished to search for on the Internet and select software of their choice.
- Children completed evaluation sheets for each session and had the option of indicating their preferences for the next session.
- Parents indicated that they very much noticed the participatory aspect of this course in that children were encouraged to take the lead and state their interests. The course differed from other courses they had undertaken in this regard.

The parents were a bit disappointed that there was not a separate training for them. They did not realise that they would just be working with the child on what he or she was doing.

4.8 Training Outputs

- 33 children participated in the course. 28 participants participated regularly and completed the course.
- Their ages ranged from 3 to 13 years.
- There was an estimated 120 hours contact time with children.
- Up to 10 parents participated regularly in the course
- Five trainers (and the Project Co-ordinator) delivered the training

Group	Age Range	No. of Participants Started	No. of participants attended regularly	Parental participation ⁷	Children's baseline level of computer knowledge (0-5)
Cookie Bytes Eglinton Hotel, Salthill	3-4 years	5	3	Weak to average	0
Smiley Wizards Ballinfoile NYP	7-9 years	6	5	Weak	1
Group Matrixx Mol An Oige	9-12 years	6	5	Average	3
Salthill Shockwaves Bishops Field, Salthill	5-7 years	5	5	Weak	0
Ballybane Gigabytes, Ballybane Community Centre	6-7 years	5	5	Strong	1
Bohermore Bugs, Bohermore Community centre	10-13 years	6	5	Strong	3
Total	3-13 years	33	28		

Figure 3: Summary of Training Outputs

⁷ Parental participation

Weak – parents dropped in but did not take part in the training

Average – a number of parents came to one or more sessions

Strong – the parents of most or all of the children took part in most of the sessions

4.9 Summary of Training Outcomes

- This project facilitated children to use IT and also use it in a way that interested them and was of relevance to their lives. In doing this, many outcomes were realised including technical skills development, social skills development, growth in confidence and enjoyment.
- There were varying outcomes across the six training groups. The asylum seekers pre-school group and the Travellers young group (5-7yrs) were run in very difficult circumstances, but succeeded in maintaining the participation children. The children benefited in terms of gaining familiarity with computers, having a social outlet and developing social skills through interaction with others.
- For the 5-7 and 7-9 years age groups, the level of skills developed through the project was high. In some ways it was an optimum climate for learning due to the proximity of the training to the children's homes and schools, their eagerness to learn, their previous lack of experience and the availability of excellent facilities in a local youth and community centres. The trainers and the project created a warm, friendly climate for learning and worked with the children to create a participatory training project where children took the lead in their own skills development.
- Both 9-12 years age groups had a greater baseline level of experience and so, while they gained new skills, the impact of their learning was not as strong as in the two other groups. In one group, the children did not know each other so well, there were variations in the age group within the group and the children had definite ideas about what they wanted to get out of the course. These factors made the group a challenging one to work with in a group setting. However, the trainers introduced them to new forms of software and worked with them to design their own web page, areas in which they had little or no prior experience. In the other group of this age group, the children came from a very tight knit community and knew each other well. The dynamic was more relaxed and less competitive. The confidence and competency of the children in both groups relation to IT has been improved.
- In sum, therefore, 28 to 33 children received intensive training from the project over a 10-week period. The training was made relevant to each child's life experience and level of skills.

5. Analysis of the Project

5.1 Introduction

Feedback from children, parents, trainers and the advisory group members on the training was, overall, very positive, as outlined in Section Four. The evaluation found that participants were involved in agreeing the course content, developed IT skills and found the training very enjoyable. The positive outcomes realised through the training were achieved as a result of actions undertaken by the project management. This Section seeks to provide an understanding of the specific features of the project that contributed to its success, examining and analysing aspects of the project design and delivery in the interests of informing future initiatives. This analysis is based on the feedback and reflections of the project stakeholders including project staff, management, advisory group members and trainers, as well as the analysis of the evaluator herself. The analysis of the Computer Characters project is presented under the headings of Project Structure, IT Training, Participatory Approach, Progress in Relation to Planned Outcomes and Ethical Issues.

5.2 The Project Structure, Operations and Management

In terms of the wider project structures, stakeholders in the project (advisory group, project staff) feel that the project model has worked well, for reasons that can be attributed to various aspects of the project operation, as described below.

Well planned and managed: Throughout the project there was clarity regarding what the project aimed to do, its timescale and methodology. The role of the advisory group was clear and it fulfilled its role very efficiently. Any difficulties and challenges that arose were handled as quickly and efficiently as possible.

Dedicated and skilled staff: As mentioned earlier, the Project Co-ordinator role required a range of skills, including experience with children and IT skills. The Co-ordinators' role is crucial in a project such as this, and a background in working with children is considered more important than IT knowledge. Feedback from parents and children indicates that the staff (Project Co-ordinator and trainers) were very dedicated to the project and invested much time and effort in ensuring it was a success. They built up a bond with the participants, which added to the enjoyment of both parties. Staff worked behind the scenes to try out software, do background work for group projects and install equipment. When children came to class they had the undivided attention of the staff.

Role of advisory group expertise: The advisory group formed for the project was composed of representatives of a range of statutory, community and voluntary organisations from throughout Galway. Together this group possessed a considerable body of knowledge in relation to needs, areas of disadvantage, community facilities and local project staff. According to Barnardos staff, this expertise was crucial for them in deciding where and how to implement the project on the ground. The advisory group also helped reflect on the progress of the project and shape its ongoing development.

Liaison with local groups: To access participants, this project identified geographical areas and target groups experiencing socio-economic disadvantage. Making contact with a local group provided a link to children and local facilities. For example, access to the asylum seekers hotel would have been very difficult had the Galway Refugee Support Group not been working there already. The Ballinfoile NYP was aware of a strong demand for services for children under 10 years and so could identify suitable participants and provide a facility. On the other hand, however, a wide range of areas were mentioned by the advisory group as lacking services, but the project was unable to target these areas as there was no local development infrastructure on the ground. From the point of view of IT access for children, therefore, availability of developmental support and facilities, as a precursor to training is very important. A project such as this either has to work with existing groups or build in an element of development support for areas with few services. The latter is obviously a longer-term process, but necessary if the project is to reach its target audience in some areas.

Needs assessment: The asylum seeker and Traveller groups were experienced to be genuinely disadvantaged in relation to IT skills and access. In both cases, links with the local organisation were crucial in terms of facilitating access and liaison with families. In the case of the four area based groups chosen, however, there was a mix in terms of participants experience of IT skills and access. It is felt that, based on the experience in these areas, additional forms of selecting participants are required, that involve an assessment of existing knowledge, access to and interest in computer technology.

Research and Reflective Practice: Prior to the development of the project, Barnardos undertook research into participatory approaches, which it used to design the methodology of the project. This provided clarity regarding how the project would work and provided guidance to staff and trainers in relation to their engagement with children and families. The fact that staff were working from a defined theoretical approach, and reflected on their practice regularly, contributed to the success of the project.

Children First and best practice in relation to child protection: The project followed best practice in relation to child protection. Garda clearance was secured for all staff, trainers and

volunteers. Any incidents of concern to staff or participants were documented and brought to the attention of relevant personnel.

Volunteer support: The Project has been successful in securing voluntary support from a number of sources, including three trainers providing their services on a voluntary basis and donations of disposable cameras and pre-used computers. This support was very useful in terms of making the resources of the project go further. The experience of the Project Co-ordinator has been that there are many people with IT skills who are willing to volunteer their skills to a project such as this. There is also potential to access used computers from private and public sector workplaces and homes for donation to community and youth groups and to families.

5.3 IT Training

Child orientated approach to IT training: Feedback from parents, children and local staff suggests that the Project was hugely enjoyable for the children. One of the reasons given for its success was that it was 'child orientated rather than technology orientated'. This feedback confirms research which indicates that, to be effective, community based computer training must be relevant to the participants' lives, and not related to abstract notions of the workplace and how technology 'should' be used. In working with children from diverse cultures and backgrounds, this is particularly important. The various nuances of the participatory model adopted helped to create a positive learning environment. Imposing a standard format would have been less enjoyable and less successful, especially with younger groups. This confirms research findings that the more that is known about the 'social envelope' surrounding children's computer usage – such as the skills and attitudes of children, teachers, parents, siblings, peer groups – the better interventions can be designed to promote continuity in learning and experience.

Children are drawn to IT: The readiness with which the children took to IT training proves that it is a medium that most children respond to. Most children are drawn to computers and playing games. Packages such as Disney, Mickey Mouse and Formula One were recognisable brands that children were drawn to. Opportunities to play computer games were a major incentive in their participation in the training. This suggests that, as well as being of value in itself, IT training could be used in a number of ways, as identified by the Advisory Group, including:

- As means of getting children and families together as a precursor for group or services development.
- As a tool for educational support
- As a practice tool in family support work

- As a basis for life skills training for children and young people, using specific packages designed to explore self-esteem, bullying, making choices and other issues.

Training and developmental stage: For younger groups (3-6 years), learning takes place through game playing. Middle age groups (7-9 years) have better literacy skills and inquisitive natures, which means they can use the Internet and word processing. Older groups (10 – 13 years) tend to have defined personal objectives in relation to computer use that relate to their peer group interests. The older groups also have had greater exposure to computers. The different age groups, therefore, require very different approaches. Even within age groups, there was a difference between children's ages and developmental stages.

Links with education and schools: The experience of the project is that IT training can be educational, as well as fun. Through use of software and hardware, children can practice literacy, numeracy and motor skills. Although a range of educational software was available for selection, participants tended to gravitate towards a small number of games that, while not explicitly educational, did involve colours, numbers and making choices. Group and social skills are developed through participation in a class and team projects. Therefore, computer training can play a role in supporting children's development.

The potential of community based computer training to support children with literacy and numeracy difficulties to improve these skills was highlighted by the Advisory Group members and trainers. In the future, should the project wish to have an impact on literacy and numeracy development among children with greatest need, it was felt that greater co-operation between the project and teachers and ongoing access by the child to a variety of educational software would be required.

While links with schools are important, however, the objectives of the community based training for children should guide the degree to which schools are involved. For example, the training objectives may be primarily educational, social, technological or a variety of these objectives. If the objectives are primarily educational (e.g. to support literacy and numeracy), links with schools will be vital. If the training objectives are mixed (social, educational, technological), as in the case of this project, links with school curriculum, while valuable, may not need to be very strong. Tailoring training to correspond to school curricula may result in losing its appeal as a space for children to pursue their own interests and make it relevant to their own lives. Clarity regarding the objectives of the training and the roles of various stakeholders can help to ensure that the most suitable approach is used.

Labour intensive: Implementing an approach that is participatory requires a hands-on approach, to support each child's progress. Two trainers and the Co-ordinator were present at all sessions, which was necessary even for a small group. Feedback from trainers suggests

that, as training of this nature is labour intensive, a ratio of at least two children to one trainer is required. In terms of technology, it is important that each child has access to a computer. While this was not always possible with the younger age groups, the children took turns and learned to share.

Parents interest in IT: Parents are eager for their children to learn computer skills, believing that it is important for their progression. The parents objectives may be different to the child's, with the child tending to focus on the 'here and now'. The course could reconcile the parent's interests with the child's by teaching computer skills in a way that is of relevance to both parent and child. As mentioned in the literature review, parental discourses about the value of IT training influences their support for their child's participation. For many refugee and asylum seeker families, access to skills training is considered important for their adaptation and integration into Irish society and so they have a strong commitment to training. Other parents mentioned that they generally consider it important that children are computer literate in today's society.

Demand for training: The project met a (latent) demand for affordable, accessible training for children. Most children have some contact with computers at school and some do at home. However, there is a gap between the availability of facilities and children's skills and access to the facilities. It is likely that much of the facilities are under-utilised. There is little targeted affordable and accessible community based (i.e. non commercial) training available for children. This project highlighted that there is a demand for and interest in such training, both from families who are well-resourced in terms of computer access and those who are not.

5.4 Participatory Approach

A conscious decision was made at the outset that the Computer Characters project would be a 'participatory' project. The steps involved in translating participation theory into practice involved the following:

- Increasing knowledge and understanding of participatory approaches among stakeholders.
- Deciding on the level of participation that is most feasible within the parameters of the project.
- Gaining access to and securing the participation of children and families.
- Maintaining the ongoing attendance of selected participants.
- Encouraging active participation and shared decision-making during sessions.

Increasing knowledge and understanding of participatory approaches among stakeholders.

Before the project model was designed, Barnardos commissioned a literature review in relation to participatory approaches with children. This helped to enhance their knowledge and understanding of how a participatory approach could be adopted. It clarified for stakeholders that aspects of the project could be participatory, but the overall project did not have to be. This made sense in terms of the timescale of the project.

Training was provided to the advisory group members on 'consulting children'. While this training was valuable, it related mostly to formal consultation, and a more general focus on participatory approaches with children may have been more useful. It should be noted that accessing trainers on 'children's participation' proved difficult for the Project Team.

At this early stage, it would have been useful to have more discussions among stakeholders in relation to participation, in order to 'surface' attitudes and pre-conceptions in relation to children's rights or abilities to participate.

Deciding on the level of participation that is most feasible within the parameters of the project.

Using the Tresder model of participation (as outlined in the literature review), Barnardos decided that given the funding parameters and deadlines within which the project had to operate, there would not be time to build genuine participation from parents and children in the wider project structure and that the most meaningful level of participation that could be achieved would be through direct training. Even within the training, there were some parameters in relation to what was desired. The project was designed to impart IT skills and so had to achieve certain objectives in relation to upskilling participants. Therefore, the model of participation chosen was 'adult initiated, shared decisions with children'. How this worked in practice is described below.

Gain access to and secure the participation of children and families:

The project gained access to information about potential participants via the advisory group, who collectively possessed a wide range of knowledge about groups and areas in the city experiencing social and / or economic disadvantage and the current profile of services for these families. They identified local link groups to act as an interface between the project and participants. The local link groups selected participants that they felt would enable the project to meet its objectives. While this approach worked well and was the most feasible in terms of the project timescale, there are a number of points worth noting:

- Areas identified that did not have developmental infrastructure were precluded from participating.
- Once the local link groups were selected, the selection of participants was in their hands. It was felt that some of the participants were very disadvantaged in

relation to IT access, while others were quite advantaged. There is a need, therefore, for clearer guidelines and additional support for the selection of participants to ensure that the project reaches its desired target group –i.e. families with little experience of or access to computers.

Maintain the ongoing attendance of selected participants:

Children who joined the training groups maintained strong participation in the majority of cases. Just a small proportion of children attended erratically or dropped out. While this is a normal occurrence in all training groups, it is worth paying attention to the range of factors, both external and internal that impact on a person's ability to participate. While many of the external factors are beyond the control of the project (i.e. attitude of parents, interests of the child, other commitments), paying attention to overcoming barriers that occur internally in the group (such as shyness, lack of confidence, timing of sessions) can help ensure ongoing attendance. The group leaders went to great lengths to make children feel welcome and important. In the interim report, it was recommended that more attention to group dynamics would help children to feel welcomed by other group members as well as the group leaders. This was done, by playing name games at the start to put people at ease. It appeared to have a positive impact – certainly the level of participation was high in the second phase.

The level of cohesiveness of the group at the outset appeared to have an impact on group dynamics and learning. The Smiley Wizards (7-9yr) group and the Bohermore Bugs (ages 9-12 years) were cohesive groups in that all the children knew each other from school and neighbourhood. The groups were better integrated, with good sharing and teamwork.

Encourage active participation and shared decision-making during sessions.

Children were encouraged to share in decision-making in relation to the content and format of the training. However, the trainers had to ensure that skills development could take place and so had to inform and raise awareness among the children of what was possible before they could decide. Both the children and the trainers had to compromise in terms of what they wanted to do.

Feedback from a variety of sources (children, parents, advisory group, local link groups) indicates that the professional but personal approach of the Project Co-ordinator and trainers was very important. They made each child feel welcome and tailored the training to their interests and needs as much as possible. The fun element they brought to the course greatly added to the experience for participants. Their pro-active and friendly approach was an incentive to children and parents to participate.

Key elements of the participatory approach

The key elements of the child-centred, participatory approach adopted in the training were in line with the guidelines for engaging children in participatory approaches. They are as follows:

- Ground rules were developed at the outset by the trainers in conjunction with the participants.
- The objectives and rationale of the course were clearly outlined to children.
- Children had the numerous opportunities to express their feelings, opinions, satisfaction or unhappiness about any aspect of the course – including feedback forms, suggestion box, complaints box.
- Children were asked to list their interests and training was designed to fit in with these interests as much as possible.
- Children could take the lead on their own training including choosing games and software to use, deciding a theme for a group project.
- Attention was paid to group dynamics. At the outset, name games and group games were played to introduce everybody and put people at ease. Group work was also included in the course to add a social, interactive and creative dimension.
- Parents were encouraged to get involved and were kept informed regarding the progress of the course.
- Parents were asked for written and verbal feedback about their child's learning and enjoyment.
- While children had choices, they also had to participate in learning activities. In cases where children had a strong preference for one game, to the exclusion of other learning, the trainers negotiated with them to encourage them to vary their learning.
- Children took part in self-directed learning, but could ask for assistance if required. Parents attending sessions were encouraged to allow their child to take the lead and not direct them in their choices.
- Where a child dropped out or did not attend for some sessions, an effort was made to find out why and encourage re-attendance if possible.
- Training was flexible, it was adapted to suit the needs and dynamic of each group. Issues such as socio-economic factors, age group, technology, location, gender, parental attitudes and timing of the course could influence the dynamic. Trainers adapted to these dynamics as much as possible, while retaining a focus on broad learning objectives.

Benefits of the participatory approach:

Some of the benefits of the participatory approach to learning were:

- Children respond well and participate well if enabled to pursue their own interests in a training context. The children grew in confidence throughout the training as their skills developed.
- Learning to use the Internet to look up information about their favourite team or singer, using a scanner to scan photos of their favourite people and things and using a word document to paste photos and write about their lives are examples of how learning IT can be made relevant to children.
- Trainers observed that, for children with literacy or behavioural problems, the medium of IT and a participatory approach appears to offer them an opportunity to develop their skills and interests in a way that conventional forms of learning may not.

Challenges of the participatory approach:

Some of the factors that made the participatory approach challenging were:

- Children come from a school environment to a training environment so it may not be easy for them to automatically switch into a participatory mode of learning.
- Children don't always know what they want to do. In some cases, information and experience has to be provided before they can identify the possibilities. In this project, the Co-ordinator brainstormed with the children all the things they could possibly do and showed them additional options before they chose what they themselves wanted to do.
- Participatory does not automatically mean that children get to do what they want. Getting the message across that children could do what they wanted to do, but that there was also a need to learn, share and develop was harder for some groups than others.
- There is a need for a balance between group work and individual work. For example, the older group were more oriented to individual interests, such as downloading music or ring tones. Had the trainers merely followed this approach, there would have been little skills development or group work. They had to find a way to encourage interest and excitement in learning new skills as a group. Having a group project was a good means of achieving this. For the trainers, therefore, getting a balance between teaching and facilitating, leading and being led was a challenge initially, but after some time they found a suitable balance.
- Where parents took part in the sessions, the trainers sometimes noted that they would direct the child or tell them what to do on the computer, which was contrary to their approach. This relates to the point made in the literature review about the need to 'surface' attitudes about children's participation. Some discussion with parents about what participation means in practice would have been valuable. However, some feedback from parents suggests that they noticed the way the

trainers worked with children and learned from them regarding how they should let their child take the lead.

- The project met children for just 10 weeks of training. It would not have been feasible to develop a more child-led model within this timeframe. If the project had been of a longer duration, it could offer the potential to move from an adult initiated to a child initiated approach.

The dimensions of participatory approaches with children, identified by Kirby et al (2003) are used below to classify the dimensions of participation evident in this project.

Analysis of the various dimensions of participation in the Computer Characters Project in terms of Kirby et al's (2003) framework.

Dimension of participation	Computer Characters Project
Informal or formal	The project adopted a formal methodology in relation to participation, including clearly outlined aims and objectives and feedback mechanisms. Participation was also encouraged in an informal way, by encouraging children to take the lead and make decisions about what they wanted to do.
Personal or Public	Decision-making related to personal decisions about what the child would do in the session.
One-off or extended	The participation was for an extended period, but yet was for a set 10 week course.
Level of participation	The level of participation within the training sessions was 'adult-initiated – shared decisions with children'. Trainers set the parameters within which children could make decisions about content. In the time frame available, this was considered most feasible. The wider project structure was not participatory, but was informed to some extent by feedback from children at training sessions.
Response to difference	The training adapted to meet the needs of children of all ages from diverse family and cultural backgrounds. Facilitating children to be 'content creators' helped to ensure that the training was suited to age, culture and developmental stage.

5.5 Ethical Issues

An ethical statement for the project was agreed by the advisory group. The statement was as follows:

Computer Characters Ethical Statement

Barnardos Computer Characters Project for Children will allow a diverse group of children and their families in Galway City to access the medium of technology in an integrated way through a variety of educational and recreational materials and approaches.

Participation on the project will be voluntary and participants have the right to withdraw at any time during the life of the project. The project will adopt an anti-discriminatory policy that fosters diversity and ensures equality of access for all groups to participate. This includes all races, ethnicities, cultures, religions, and people with disabilities.

From the outset, participants will give formal, **informed consent** based on their maturity level. Their parent's consent will also be required for participation. Informed consent means that children will be made aware of the purpose, content and methods of use of the project. This is to ensure that they are clear about what they are agreeing to at the beginning. Consent may be withdrawn at any time.

A **Complaints** procedure will be in place and complaints forms will be readily available that participants can complete anonymously if they so wish, at any time. The views of the participants are of utmost importance to the project and they will have the opportunity to express their views regularly, through monthly meetings, reports, interviews, etc.

Confidentiality will be the practice in relation to the identity of participating children and their families, and their contributions. This confidentiality will be explained to the children and their families, with regard to the fact that confidentiality has limits. This is particularly pertinent in relation to child welfare concerns where, in the context of Children First, mandatory reporting will be operational in the project.

Care will be taken to ensure the **safety** of all participating in the project. In this regard all those involved will be treated with respect, integrity and honesty at all stages of the project. All efforts will be made to ensure that participants are protected from physical and mental discomfort, harm and danger, whilst participating in the project.

Procedures were put in place in line with this ethical statement – for example, participants were informed that their participation was voluntary, consent forms for the project and the evaluation had to be signed by parents and children and a complaints procedure was in place. Due to the attractive nature of the project for children, obtaining consent was not difficult.

Some additional ethical issues that arose in the course of the project were:

- Should the project have the right to 'label' families as disadvantaged? While the aims of the project were to target disadvantaged families, once contact and relationships were developed with families, it did not seem right to 'label' them as disadvantaged in the project literature. This is a dilemma in a participatory project, wherein families are provided with feedback and information. Yet, removing reference to disadvantaged families would be disingenuous, given that they are named as the target group in the aims of the project.
- Deciding who is adequately disadvantaged also presents an ethical dilemma. To protect participants' confidentiality, the Project did not wish to pry into their personal

circumstances. It therefore involves project and local link staff making judgements about who is worthy of participation. Greater clarity as regards criteria for participation would help to overcome this dilemma.

- A dilemma for the evaluator related to the extent to which the evaluation should interfere with or take time from the children's training sessions. The children had just 10 weekly sessions, time they valued highly. To overcome this issue, the methodology used included informal discussions, observation and using children's feedback forms to assess their enjoyment, skills development and participation.

5.6 Progress in Relation to Planned Outcomes

The planned outcomes of the Computer Characters project and the degree to which they were met are outlined below.

- *Participants of the project demonstrate increased capacity in the use of information technology, measured against the targets they themselves have set in conjunction with the project staff.*

Participants in all groups set objectives for themselves and achieved their objectives. All greatly improved their capacity to use IT. For some, the baseline level of skills was lower and the impact of their learning was more evident. On the whole, it was felt that the mid-range age groups (i.e. 6-9 years) gained the most from the training, as they were young enough to have limited experience of computers and a more open agenda in relation to its possibilities, but old enough to be able to read and write. Having said this, all age groups benefited.

- *Participants of the project have been introduced to and are capable of using a range of educational software.*

Educational software appropriate to age and interests was introduced to all three groups. The participants selected and used the software of their choice.

- *There is evidence that parents / guardians and children have jointly engaged in the use of IT for educational or recreational purposes.*

Parents were invited to participate in the project, both with their children and on their own in parent's sessions. Some parents were very active, while others came just to the open day or one other session. In two groups in particular, parents attended most of the sessions with their children and engaged in joint working with them. Feedback suggests that it was valuable experience for the parents, as they became more

familiar with their child's skills. Feedback from parents and trainers regarding other groups suggests that parents were busy with work, parenting and other tasks and could not attend regularly. As the parent's needs were different to the child's, the project provided specialised training for parents at parents' sessions.

- *Participants have greater access to IT facilities – in schools, in their own homes, at community centres, etc.*

The project has facilitated access to existing IT resources during training sessions, and the level of ongoing access to IT facilities in homes and communities has been increased somewhat by the project. Seven families received donations of computers, while two community projects each received a computer. At the time of writing, an additional five computers have been donated to Barnardos, which will be distributed among families.

For children with computers at home, some feedback suggests that children are allowed greater access to the computer as a result of their increased knowledge. However, it is felt by project staff that follow-up training is needed with families who have received donations of computers. Also, technical support in terms of securing Internet access, printing, compatibility, etc. would be valuable. Otherwise, the computer may become a 'white elephant'.

- *Participants understand and see the relevance of IT to their lives and have identified ways in which it can be a resource to them.*

The project went to great lengths to ensure that children could see the relevance of IT to their lives. Children were resourceful in their use of computers.

- *A number of parents have sought further education or training as a follow-on from their participation in this project.*

A number of parents indicated a strong willingness to learn more about computers. The staff of the project provided information on training options to them. There is a strong demand for computer training among parents.

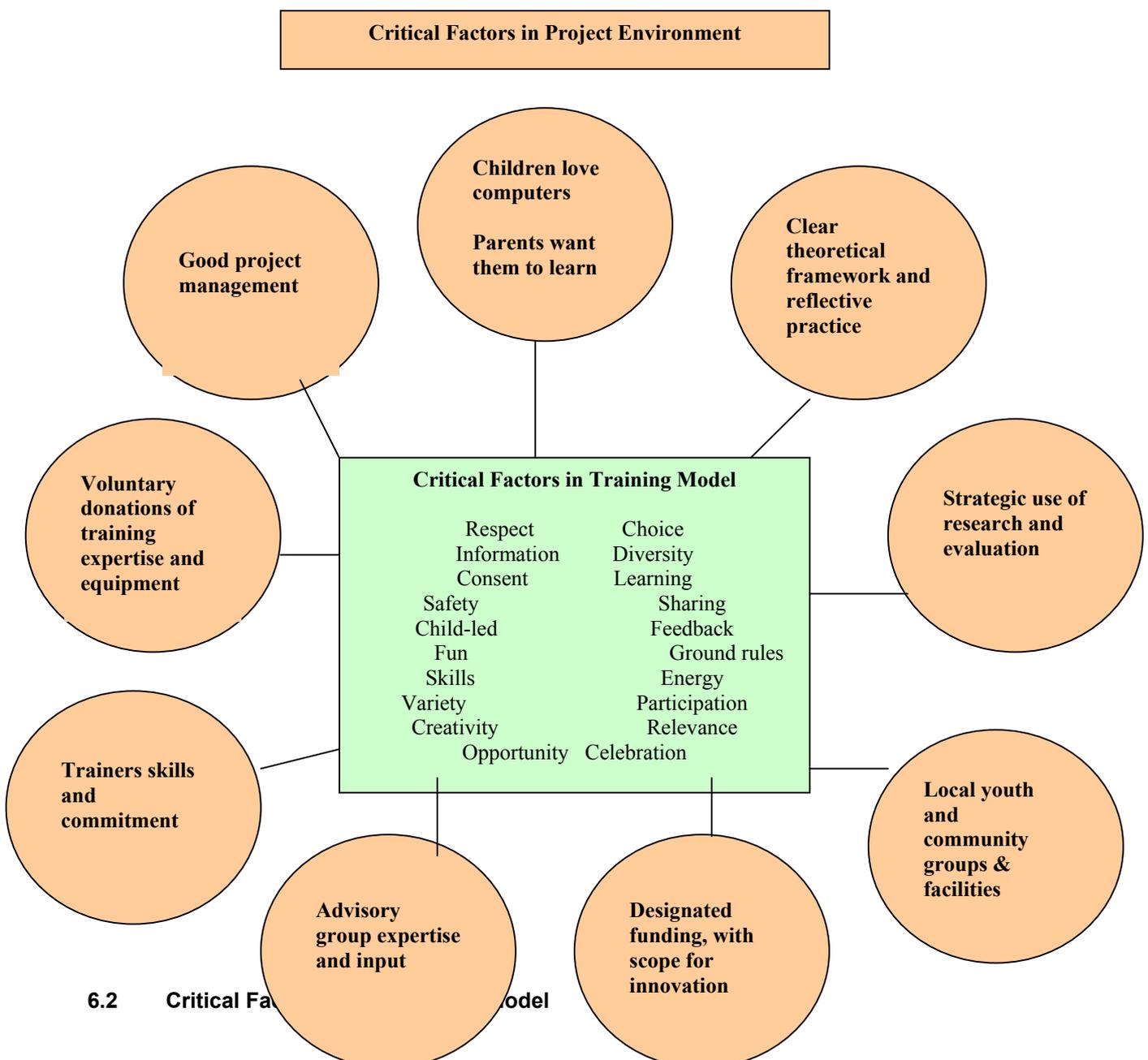
- *Under-utilised or unused facilities such as out-of-date computer equipment have been secured for use by participants of the project.*

Eight computers were donated to date. In the future, this is an area that could be explored more.

6. Conclusion and Recommendations

6.1 Introduction

The evaluation findings indicate that this one-year pilot IT project for children and families has been very successful. The success of the project can be attributed to a combination of factors in the project environment and in the training model, as illustrated in Figure 4 and described below. The factors contributing to the success of the project have relevance for services wishing to learn from the Computer Characters experience. A number of recommendations are also made in relation to the future development of the project.



6.2 Critical Factors in Training Model

The participatory approach adopted in Computer Characters project was very suited to IT training for children, as it enabled skills to be developed, while the participants had fun. Participants were shown how to tailor IT to their own needs and interests and become 'content creators', thus seeing computers as relevant in their lives. This approach to children's IT training is in line with recommendations from research (Facer et al, 2001), which emphasises that children are motivated to acquire computer skills by non-technological objectives, such as personal communication and peer group interests, and that training should be based on its relevance to children at the present time.

Some of the critical factors in the training environment that helped to create positive outcomes include the following:

- Children and parents consented to their participation and were shown respect at all times.
- Information about the project was clearly outlined, both verbally and in written format. Children received clear instructions throughout the project.
- Ground rules were agreed by the participants and trainers.
- Formal and informal feedback mechanisms were provided. Feedback from children was received and acted upon on an ongoing basis.
- There was an emphasis on having fun, while developing skills.
- Children were given choice regarding the content of the course and activities were varied and child-led. Children had opportunities to engage with various types of hardware and software throughout the programme and to engage creatively in their use.
- The content of the course was relevant to children's daily lives and what they deem important to them.
- The trainers and children together created an energetic environment in which learning and sharing could take place. Achievements were celebrated.
- Children's safety was a priority and good practice guidelines in terms of child protection were adhered to.
- Children's diverse cultures, needs and abilities were respected and acknowledged.
- Parents were welcome to participate with their children, and training sessions for parents only were also provided.

6.3 Critical Factors in the Project Environment

In addition to the factors in the training model outlined above, some of the factors in the wider project environment that helped this project to achieve success were as follows:

- **Children love computers:** IT is a medium that is very popular with children, regardless of their level of development or academic ability. The project has shown that IT can be used to encourage participation and build confidence among groups that may be hard to engage. It can also be used as a tool for literacy, numeracy and social development, especially among disadvantaged groups. The 'Computer Characters' project tapped into children's natural interest in IT and provided a creative and fun learning environment.
- **Parents' support:** Parents are generally keen for their children to be computer literate and support their children's participation in IT training. This project made the parents feel welcome and involved them in their child's learning. Feedback suggests that the fact that parents were aware of what their children were doing, made them more likely to encourage their learning.
- **Clear theoretical framework and reflective practice:** The project worked from a clearly defined theoretical framework (participatory approach) and developed and refined it through review and reflection. The experience of the project is that choosing a level and model of participation at the outset and regularly reflecting on how it is working can lead to better outcomes for children. Information, training, self-examination, discussion and reflection are important for all adults involved in participatory projects to explore attitudes to children's rights.
- **Strategic use of research and evaluation:** Research was undertaken at the outset to inform the theoretical framework developed and a process of formative evaluation helped to draw out the learning and shape how the project developed.
- **Staff skills and commitment:** Staff skills, energy, personal approach and commitment to the children were vital in the success of the project. Trainers all made great efforts to ensure that children were comfortable, having fun and learning.

- **Good management:** Good management, interested and able staff and adherence to good practice in child protection and were crucial in facilitating the smooth running of the project and dealing with any issues that arose.
- **Youth and community groups and facilities:** Working through local community development and youth organisations was very valuable in terms of providing access to participants and community based facilities. The established relationship between the local link community or youth worker and participants was often vital in terms of communication and helping to sort out difficulties. Gaining access to the target group would have been very difficult without this local knowledge and assistance. However, a number of disadvantaged areas were not chosen for the project as they did not have a community or youth group to act as a link organisation. Without the presence of developmental support to facilitate access by initiatives such as this in a community, the entire process is likely to be more time-intensive and beyond the scope of a one-year project. However, in the interests of equity, it is something that should be considered in a longer-term project.
- **Advisory group expertise and commitment:** A wide range of statutory and voluntary organisations were represented on the advisory group. Their expertise was harnessed to provide essential information, contacts and advice for the project implementation.
- **Voluntary support:** Voluntary support, in terms of trainers' time and skills and donations of equipment, added greatly to the project's ability to achieve its objectives within a limited budget.

6.4 Conclusion and Recommendations

The one-year project has piloted a successful model of participatory IT training for children. Positive outcomes were achieved for participants in terms of enjoyment and skills development. The training is in line with recommendations from research in relation to promoting digital inclusion, which stress that training should reflect participants social reality, be flexible and locally based. The project also adhered to best practice in terms of supporting children's participation and contributed to learning regarding practical ways to develop participation.

The project should continue on a longer-term basis. The groundwork developed in this pilot project highlights the enormous potential that exists for a participatory IT project such as this help to bridge the 'digital divide' for a new generation. Achieving long term

sustainability of skills development is impossible in a one year pilot project, but elements for planning for sustainability – including training models, use of volunteer resources, utilising ‘used’ computers and home based training and follow-up have been identified in this project. Structures, models and relationships have been developed that could be put to further use for the benefit of children and families. The successful features in the project and training environments identified above should be maintained. In addition, the following suggestions are made regarding how the project could further develop and expand:

- Develop clear criteria for selection of participants to ensure that participants have a low baseline level of computer access and skills. Explore means of including children from disadvantaged areas where community or youth provision is not well-developed.
- Set a minimum acceptable level of skills to be attained for each age group. Be clear with parents regarding the extent to which their own learning can be supported.
- Work with each family to develop a pathway of how their skills can be developed, building on their own social networks, statutory and community supports.
- If necessary, build in a phased approach to training involving group training, follow-up home training and linking to mainstream provision for further group training.
- Develop greater links with schools, as appropriate to the objectives of the project.
- Develop a voluntary pool of trainers, technicians and equipment ‘scouts’ who are trained in the project principles.
- Consider what is acceptable in terms of ‘age’ of computer equipment used in the project, to ensure that donated equipment is not outdated.
- Work with youth and community groups to provide training for local volunteers in the participatory training model that can be delivered locally.
- Examine how the participatory approach can be extended to other aspects of the project, including advisory group, trainers and project management.
- Engage all stakeholders in discussion and reflection to examine attitudes to children’s participation and continuously examine ways in which it can be achieved.

In conclusion, in addition to meeting its objectives, the Computer Characters one year pilot project has provided valuable learning in terms of participatory work with children and, more specifically, the potential role of participatory IT training as a methodology for bridging the digital divide for children and families without access to IT.

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Appendix One

Organisations Represented on the Advisory Group

Barnardos

Department of Education and Science

Western Health Board, Community Services

Western Health Board, Residential Services

Galway Youth Federation

Galway Refugee Support Group

Galway City and County Childcare Committee

Galway Travellers Support Group

Galway Vocational Education Committee

Galway City Partnership

Appendix Two:

Note on Children's Hour



The Children's Hour, endorsed and supported by the National Millennium Committee, raised more than £4 million to help children's causes. Everyone in the Irish workforce was asked to donate the value of their final hour's earnings of this millennium to the children of the next. The Government, employers and the trade unions pledged their support to help collect the one hour's wages.

Donations from companies, employees and individuals reached £2.1 million and the National Millennium Committee significantly boosted the fund by making a contribution of £2 million.

Over 3,000 companies participated in the Children's Hour campaign. Employees raised more than £2,000,000 in a spontaneous response to the appeal for all workers to give an hour of their pay to help make a better life in the new Millennium for children and young people.

The proceeds of the Children's Hour were being shared between the National Children's Trust, the Irish Youth Foundation and five designated charities- Barnardos, Focus Ireland, Temple Street Children's Hospital, National Youth Federation and the Irish Children's Museum.

At least 100 causes dedicated to the care, protection and promotion of children and teenagers have or will benefit from the allocation of the funds.