



# Digital beginnings: Young children's use of popular culture, media and new technologies

Jackie Marsh, Greg Brooks, Jane Hughes,  
Louise Ritchie, Samuel Roberts and Katy Wright

Report of the 'Young Children's Use of Popular Culture,  
Media and New Technologies' Study, funded by BBC Worldwide  
and the Esmée Fairbairn Foundation

Literacy Research Centre  
University of Sheffield  
2005

**BBC** Worldwide

**ef** Esmée  
Fairbairn  
FOUNDATION

## **ACKNOWLEDGEMENTS**

### **PROJECT TEAM**

Professor Greg Brooks, University of Sheffield  
Jacquie Gillott, Project Secretary, University of Sheffield  
Jane Hughes, Independent Consultant  
Dr Jackie Marsh, Project Director, University of Sheffield  
Louise Ritchie, Research Fellow, University of Sheffield  
Dr Sam Roberts, Research Fellow, University of Sheffield  
Colleen Woodward, Project Secretary, University of Sheffield  
Katy Wright, Research Fellow, University of Sheffield

### **AUTHORSHIP**

Jackie Marsh directed the project, planned and conducted the project days for practitioners at the University of Sheffield, developed the research tools (questionnaires, the interview schedules, inventory), carried out the literature review, analysed the data and wrote this report. Greg Brooks advised at all stages of the project, in particular providing advice on the sampling procedures and quantitative data analysis. He was also a 'critical reader' of the final report. Katy Wright contacted the LEAs and settings in Stage 1 of the project, organised the distribution and return of the questionnaires, interviewed practitioners, undertook the inventory analysis in some settings and inputted some of the questionnaire data. Louise Ritchie liaised with settings throughout Stage 2 of the project, helped with the administration of the project days for practitioners, conducted interviews with parents and practitioners and undertook the inventory analysis in some settings. Jane Hughes conducted interviews with parents and practitioners and undertook the inventory analysis in some settings. Sam Roberts inputted some of the questionnaire data and undertook the analysis of the questionnaire data using statistical tests in SPSS. Jacquie Gillott and Colleen Woodward provided administrative support for the project, inputted some of the questionnaire data and transcribed the interviews.

### **PROJECT DIRECTOR'S ACKNOWLEDGEMENTS**

I am most grateful to BBC Worldwide and the Esmée Fairbairn Foundation for funding the project.

I would like to thank Mary Renouf at BBC Worldwide and Hilary Hodgson at the Esmée Fairbairn Foundation for their enthusiasm for, and commitment to, the project from the start.

I would also like to express my gratitude to Mark Young, Managing Director of Children's BBC Worldwide, for agreeing to support the project.

Thanks to the LEA Advisers who responded to our initial letters regarding the project; your commitment to the project was very much valued.

Last, but of course not least, many thanks to all of the children, parents, carers and early years practitioners who took part in this project. I would like to express my deepest gratitude for the time and energy you devoted to it.

Dr Jackie Marsh, September 2005

## CONTENTS

<b>EXECUTIVE SUMMARY</b>	<b>5</b>
<b>SECTION ONE: THE RESEARCH STUDY</b>	
1.1 Introduction	9
1.2 Background to the study	9
1.3 Research aims	9
1.4 Methodology	13
1.5 Summary	14
	15
<b>SECTION TWO: CHILDREN'S USE OF POPULAR CULTURE, MEDIA AND NEW TECHNOLOGIES IN THE HOME</b>	
2.1 Introduction	17
2.2 Overall patterns of children's media access and use	17
2.3 Television and film	26
2.4 Computers	37
2.5 Console games	39
2.6 Mobile phones	40
2.7 Radio and CD/audiocassette players	42
2.8 Books and comics	42
2.9 The role of popular culture in children's lives	44
2.10 Parental views on children's use of popular culture, media and new technologies	46
2.11 Summary	47
<b>SECTION THREE: PRACTITIONERS' VIEWS ON, AND CURRENT USE OF, POPULAR CULTURE, MEDIA AND NEW TECHNOLOGIES IN EARLY CHILDHOOD SETTINGS</b>	
3.1 Introduction	48
3.2 Practitioners' views on children's use of popular culture, media and new technologies	48
3.3 Current uses of popular culture in settings	49
3.4 ICT resources	51
3.5 Current use of computers	54
3.6 Current use of other technologies	55
3.7 Current level of media analysis	57
3.8 Practitioners' understandings of 'media literacy'	58
3.9 Views on professional development in the area of 'media literacy'	60
3.10 Summary	60
<b>SECTION FOUR: CHANGING VIEWS AND PRACTICES: THE ACTION RESEARCH PROJECTS</b>	
4.1 Introduction	61
4.2 Impact on practitioners' attitudes towards and approaches to the use of popular culture, media and new technologies in the foundation stage	62
4.3 Impact on motivation and engagement	67

4.4 Impact on progress in language and communication	69
4.5 Impact on progress in literacy	70
4.6 Gender	71
4.7 Parental responses	71
4.8 Impact on professional development	72
4.9 Successful factors	73
4.10 Summary	74
<b>SECTION FIVE: CONCLUSIONS</b>	
5.1 Introduction	75
5.2 Key findings	75
5.3 Implications for policy and practice	76
5.4 Implications for research	77
5.5 Summary	77
<b>REFERENCES</b>	79
<b>APPENDICES</b>	
Appendix 1 Methodology	84
Appendix 2 Interview questions for parents [Interview 1]	99
Appendix 3 Interview questions for parents [Interview 2]	102
Appendix 4 Interview questions for practitioners [Interview 1]	103
Appendix 5 Interview questions for practitioners [Interview 2]	107
Appendix 6 Inventory for settings	108
Appendix 7 Data from questionnaires	111

## EXECUTIVE SUMMARY

This report presents the findings of a study which took place from September 2004 to July 2005. The study explored young children's (aged from birth to six) use of popular culture, media and new technologies in the home through a survey of 1,852 parents and carers of children who attended 120 individual maintained and non-maintained early years settings in England. A total of 524 early years practitioners who worked in 104 of these settings were also surveyed in order to determine their attitudes towards children's use of popular culture, media and new technologies and to explore how far they planned for their use in the communications, language and literacy curriculum of the foundation stage. The study also included an evaluation of the success of action research projects which took place in nine of the maintained and non-maintained early years settings. These projects were undertaken in order to identify the impact of interventions in which aspects of popular culture, media and new technologies were introduced into the communications, language and literacy curriculum of the foundation stage.

### Key findings

There are a number of key findings from this study, which can be summarised thus:

- (i) Young children are immersed in practices relating to popular culture, media and new technologies from birth. They are growing up in a digital world and develop a wide range of skills, knowledge and understanding of this world from birth. Parents and other family members scaffold this learning, either implicitly or explicitly, and children engage in family social and cultural practices which develop their understanding of the role of media and technology in society.
- (ii) Parents report that their young children generally lead well-balanced lives, with popular culture, media and new technologies playing an important, but not overwhelming role, in their leisure activities. Engagement with media is generally active, not passive, and promotes play, speaking and listening and reading. In addition, engagement with media and new technologies appears to be a primarily social, not individual, activity, taking place most often with other family members and in shared parts of living spaces.
- (iii) Parents are generally very positive about the role of media in their young children's social, emotional, linguistic and cognitive development. They feel that their children learn a great deal from film and television and that it has a positive impact on many aspects of their lives.
- (iv) Parents support their children's interest in popular culture, media and new technologies through the provision of resources and interactions with children (e.g. shared play, visits to theme parks) around their interests.

- (v) Parents feel that media education should be included in the school curriculum; many think this should be so from when children are very young. Parents would also welcome further work in schools on new technologies. They feel that this is needed in order to prepare children for the demands of the new technological age.
- (vi) Early years practitioners generally express positive attitudes towards the role of popular culture, media and new technologies in children's lives, including demonstrating positive attitudes towards their use of video/console games. However, they do have concerns about the perceived amount of time children spend on these activities.
- (vii) The majority of early childhood practitioners have used popular culture to promote learning in the communications, language and literacy curriculum at least occasionally. There is less extensive use of media and new technologies.
- (viii) Early years practitioners would like more professional development on the use of ICT, media and popular culture to promote learning in the foundation stage.
- (ix) There is disparity in the provision of resources for work on media and new technologies in maintained and non-maintained settings. Practitioners based in maintained settings reported being generally better equipped with technological hardware and software than practitioners based in non-maintained settings.
- (x) The introduction of popular culture, media and/or new technologies into the communications, language and literacy curriculum has a positive effect on the motivation and engagement of children in learning. Practitioners report that it has a positive impact on children's progress in speaking and listening and literacy, although the present study did not include methods which could determine if this was the case.

### **Implications for policy and practice**

This study has a number of implications for policy and practice in early childhood education. These can be summarised thus:

- (i) There needs to be further attention paid to the needs of early years practitioners with regard to subject knowledge and pedagogical content knowledge in the use of media and new technologies.
- (ii) Professional development materials and programmes which address these areas need to be developed and disseminated if early years settings are to develop curricula which attend to the needs of the 'new media age' (Kress, 2003).
- (iii) Non-maintained settings in particular need to be supported in the acquisition and use of technological hardware and software, although this is the case for all settings in relation to some

- technologies (i.e. digital cameras, video cameras, interactive whiteboards).
- (iv) Given the findings with regard to parental knowledge of, and support for, children's use of media, popular culture and new technologies, family literacy/ learning programmes need to draw on these aspects of families' cultures in order to ensure relevance and enhance interest.
  - (v) Content producers (e.g. television programme producers, film companies) could work more closely with early years educators in designing and producing resources which can be incorporated into the foundation stage curriculum. Given the positive impact of the introduction of media narratives and characters in the curriculum, there is scope for further collaboration and development.
  - (vi) Software producers need to be more attuned to the needs of very young children in the development of software which can facilitate media analysis and production. It should not be assumed that the children's age precludes such work; many young children demonstrate a wide range of skills and knowledge in relation to technologies. More extensive collaboration with early years educators is needed in order to develop appropriate software.

### **Implications for research**

Whilst this study has provided a wide range of information on various aspects of young children's engagement with popular culture, media and new technologies, more extensive research is needed if we are to develop further understanding of children's capabilities, needs and potential in this area. Specifically, the following priorities for future research are suggested:

- (i) Longitudinal, observational studies of children's use of popular culture, media and new technologies in homes and early years settings are needed in order to determine the contexts in which skills, knowledge and understanding develop and how parents and educators can best scaffold and extend this development.
- (ii) Closer studies are needed of the impact of technological developments on the communicative practices of young children, in particular the specific demands made by various media and how they inter-relate. The relationship between young children's reading and writing of print-based texts and the receptive and productive processes in which they engage in relation to media texts needs a more focused analysis.
- (iii) Studies with an experimental design are needed in order to determine the impact of the introduction of culture, media and new technologies into the foundation stage curriculum on children's progress and attainment in speaking and listening, reading and writing.
- (iv) Further action research projects based on these themes should be developed, which will enable practitioners to create

collaborative networks that provide opportunities for professional development.

## **SECTION ONE**

### **THE RESEARCH STUDY**

#### **1.1 Introduction**

This report presents the findings of a study which took place from September 2004 to July 2005. The study explored young children's (aged from birth to six) use of popular culture, media and new technologies in the home through a survey of 1,852 parents and carers of children who attended 120 individual maintained and non-maintained early years settings in England. A total of 524 early years practitioners who worked in 104 of these settings were also surveyed in order to determine their attitudes towards children's use of popular culture, media and new technologies and to explore how far they planned for their use in the communications, language and literacy curriculum of the foundation stage. The study also included an evaluation of the success of action research projects which took place in nine of the maintained and non-maintained early years settings. These projects were undertaken in order to identify the impact of interventions in which aspects of popular culture, media and new technologies were introduced into the communications, language and literacy curriculum of the foundation stage.

This study was conducted in order to contribute to knowledge and understanding about the changes taking place in young children's communication landscapes and to explore the implications for education in the early years. Technological developments have led, over the past three or four decades, to significant changes in the ways in which we communicate and undertake daily tasks involving the reading, writing, and creation of texts. The impact of this digital revolution on the lives of young children is rarely considered, yet they are as engaged in the social practices of the 'new media age' (Kress, 2003) as the older children, adolescents and adults who surround them. In addition, it is vital that educational institutions respond to these wider social and cultural changes in order that they offer children opportunities to develop skills, knowledge and understanding which will be of value in the new knowledge economy (Luke and Carrington, 2002). This study, therefore, examines some of these themes and offers insights into the new media worlds of our youngest children.

#### **1.2 Background to the study**

This report focuses on young children's use of popular culture, media and new technologies. These terms can be defined, in the context of this study, thus:

- 'Popular culture...refers to those cultural texts, artefacts and practices which are attractive to large numbers of children and which are often mass produced on a global scale' (Marsh, 2005a:2).

The aspects of children's popular culture considered in this study are: toys; games; media; and artefacts related to popular narratives, characters and icons.

- 'Media' is a term used for materials and resources in a range of formats and modes which are used for communication. In this study, the following media are considered: books, comics and magazines, newspapers, television programmes and films.
- 'New technologies' is used to refer to technological innovations that have been made possible through digitisation. It can include 'old' technologies, such as radio and television, which have been transformed through the digital signal. In this study, the following technologies are considered: television, radio, computers, console games<sup>1</sup>, hand-held computers, mobile phones.

There have been a number of surveys of children and young people's media use over the last decade (Livingstone and Bovill, 1999; Livingstone and Bober, 2005). However, none of these studies have explored the media use of children under the age of six in England. The most comprehensive survey to date of this youngest age group is the report *Zero to Six: Electronic Media in the Lives of Infants, Toddlers and Preschoolers* (Rideout, Vandewater and Wartella, 2003). This details the findings from a telephone survey of 1,065 families in the United States. This survey indicated that many young children's lives are media-rich and that they are developing a wide range of skills, knowledge and understanding of media from birth. The study reported that children are surrounded by a wide array of media and technology in the home and they actively use it from a young age. The findings from the *Zero to Six* study will be reported selectively throughout this publication, as the comparison between children in the USA and England is of interest. Therefore, it is sufficient to note here that Rideout et al. (2003) offer a wealth of evidence to suggest that the very young are indeed children of the digital age.

Through engagement with a wide range of media and technologies from birth, children develop 'media literacy', which refers to 'the ability to access, understand and create communications in a variety of contexts' (Ofcom, 2004). As research in relation to print-based emergent literacy suggests, simply by engaging in daily practices in which print plays a part, children learn much about its role, nature and purpose (Hall, Larson and Marsh, 2003). It is inevitable that the same processes should occur in relation to 'media literacy'. Indeed, in a review of research in the field, Buckingham (2004) suggests that, 'Children develop media literacy even in the absence of explicit attempts to encourage and promote it' (2004:2). However, there is, as Buckingham indicates, very little research evidence about young children's 'media literacy' development (2004:52). This report offers some evidence of how young children are accessing, understanding and creating a range of

---

<sup>1</sup> The phrase 'console games' is used in this report to describe computer game machines which are connected to a television screen e.g. PlayStation2, Nintendo. They were also referred to as 'video games' in the questionnaires used in this study, because that is a familiar term to parents/ carers and practitioners.

communications and indicates how far parents<sup>2</sup> and early years educators are supportive or not of those practices.

It may be the case that the experiences of young children in this field have been neglected because of the confusion and negativity which surround children's cultural practices. There has been a range of 'moral panics' (Cohen, 1987) taking place in relation to young children's use of popular culture, media and new technologies. These have included concerns about the perceived negative impact of media on children's emotional, social and cognitive development, in addition to worries about the way in which children are becoming positioned as economic targets by multinational companies (Kenway and Bullen, 2001). These concerns are not to be dismissed in their entirety; there is a need to consider the way in which childhood is being constructed and shaped by specific political, economic and social practices (Buckingham, 2000). Nevertheless, often these anxieties about media and young children are based on misinformation and nervousness about the prospect of a seemingly 'runaway world' (Giddens, 2000; Leach, 1968) in which children and young people are the 'digital insiders' and adults the outsiders (Lankshear and Knobel, 2004), unsure about where the technology is leading and concerned about losing control. Instead of this deficit model of young children and their popular cultural worlds, Robinson and Mackey (2003) propose that we embrace an 'asset model', a model which examines the positive aspects these encounters with media and technology bring. In a development of this theme, Robinson and Turnbull consider the multi-media practices of a very young child, Verónica, who is passionate about encounters with dinosaurs on adverts, in books, television programmes, films, computer games and in toy form. They argue that:

Her asset bank of experiences has in it a wide variety of texts to be drawn on in an equally wide range of communicative practices and events. What might in deficit models be rated as either irrelevant or damaging (the Disney film, the computer games) add to her overall awareness and understanding in a way which cannot be separated out from the lessons she has learned from the traditionally respectable medium of print.

(Robinson and Turnbull, 2005:68)

What Robinson and others (Marsh and Millard, 2000; Mackey, 2002) argue is that children's understanding of narrative is enhanced and developed through these multiple forms, not diminished. In this study, therefore, the complex relationships between different aspects of children's popular cultural interests were of interest. Children's responses to a range of technologies and media were explored, in addition to the way in which their interests in particular themes or characters were carried across media boundaries.

---

<sup>2</sup> Throughout the report, the term 'parents' is used to refer to any adults who have parental responsibility for children, whether biological parents or not.

This study also acknowledges the vital role that popular culture plays in the self-identities and self-esteem of young children (Marsh, 2005b). Many children develop a sense of themselves through the media, they use the media to perform different identities and try out new roles and their social and cultural worlds are permeated with their favourite popular cultural and media narratives. Activities relating to favourite characters, television programmes and films offer a means of forging relationships with family members and friendships with peers (Pahl, 2002); they become the cement which binds together the varied building blocks of their lives. It is important for parents, carers and educators to understand the role that these texts and artefacts play in contemporary childhoods; to dismiss them as 'fads' is to underestimate their impact.

In the past, educational institutions have not always valued the cultural practices of childhood (Dyson, 1997; Marsh and Millard, 2000). Pushed to the margins of classroom life, popular culture and media have been seen to pose threats to the educational attainment of children (Marsh and Millard, in press). There have been very few studies which have explored the attitudes and experiences of early years practitioners in particular in relation to the use of popular cultural, media and new technologies. Makin et al. (1999), in a study conducted in 79 early childhood settings in Australia, found that, whilst many parents expressed favourable attitudes towards their children's engagement with popular culture, practitioners did not, complaining that media are a corrupting and negative influence on children. Arthur (2005) conducted a similar study a few years later and found that educators who had moved on and acknowledged the role that popular texts could play in the curriculum enjoyed the increased engagement in learning that they brought. She argues that:

Increased dialogue and collaborative partnerships between educators, children and families can open up new possibilities for culturally responsive literacy-enriched play that connects to children's interests and expertise.

(Arthur, 2005:178)

The use of children's popular culture in educational institutions can offer recognition of their identities and the things they value, thus enhancing their self-esteem and motivating them to engage in learning (Dyson, 1997, 2002; Marsh, 2000; Marsh and Millard, 2000). In this study, practitioners' views in English early childhood settings were sought in order to identify how far they embraced children's out-of-school practices and used them within the foundation stage<sup>3</sup> curriculum.

Valuing and utilising children's out-of-school practices are not just about engaging them in classrooms, however. It also offers recognition of the new kinds of learning they are undertaking outside school and accepts that some of these emerging skills, knowledge and understanding need to be developed

---

<sup>3</sup> The foundation stage in England caters for children aged 3 to 5. The *Curriculum Guidance for the Foundation Stage* (QCA, 2000) outlines the curriculum framework relevant for this stage. See: <http://www.qca.org.uk/223.html#currguid>, (accessed 20.9.05).

further in an educational environment (Knobel, in press). The recent emphasis on the development of 'media literacy' (Ofcom, 2004) has implications for schooling. If children are encountering texts in a wide range of media outside nurseries and schools, then it makes sense for them to be able to analyse, understand, respond to and produce texts using these media in nurseries and schools. Whilst there have been opportunities for children in the later years of schooling to do so through the subject of Media Studies, younger children have, traditionally, not had extensive experience of media in the curriculum. They may have watched film versions of books in order to understand the books in greater depth, but they have had limited opportunities to study the films themselves as texts, or even make films themselves. Whilst this might be changing in primary schools (PNS/UKLA, 2005), it is still relatively rare to see this kind of work taking place in foundation stage settings. This study, therefore, not only looks at the potential of popular culture to inform the communications, language and literacy curriculum, it also explores the possibilities for developing the 'media literacy' of young children. In addition, it focuses attention on the way in which young children are engaged in digital literacy practices – practices which involve them in reading and writing on screen (Knobel, in press; Merchant, 2005). No longer are paper and pencil the preferred modes of communication for many in society (Kress, 2003), including very young children. Examining the way in which these 'toddler netizens' (Luke, 1999) are navigating the worlds of technologically-mediated childhoods is a significant task for early years educators in the twenty-first century.

This report begins from the premise that the study of young children's use of popular culture, media and new technologies is of central importance in the provision of educational, social and cultural experiences that are appropriate for children in contemporary societies. It contributes to the literature outlined here by providing evidence of the ways in which childhoods in England are changing and evaluating the impact of educational practice which attempts to meet these challenges.

### **1.3 Research Aims**

The project had four key aims, as follows:

*1. To identify young children's access to and use of popular culture, media and new technologies.*

(Key research questions: Which children have access to which media? What are the variations in access in relation to age, socio-economic status, gender and ethnicity? What are the patterns of use of popular culture, media and new technologies?)

*2. To identify parents'/carers' attitudes towards children's use of popular culture, media and new technologies.*

(Key research questions: How do parents/carers react to their children's use of these media? What do they feel are the educational opportunities afforded by these media? What interactions do they have with regard to

the development of their children's skills, knowledge and attitudes when engaged with these media? What are parents' attitudes towards the development of media education in nurseries and early years settings?)

3. *To identify early years educators' knowledge of and attitudes towards children's use of popular culture, media and new technologies.*

(Key research questions: What do early years educators know about the media literacy practices of children in the home? What do they feel are the educational opportunities afforded by these media? What do they feel this range of media have to offer the communications, language and literacy curriculum in the early years setting? What are their attitudes towards the development of media education in nurseries and early years settings? What kind of professional development would they like to develop their practice in this area?)

4. *To evaluate the impact of a professional development initiative in which early years educators are supported in using the information about young children's popular culture and media practices to inform the communications, language and literacy curriculum.*

(Key research questions: How effective was the professional development programme in changing educators' attitudes towards the use of popular culture and media in the curriculum? What changes were made to the curriculum as a result of this work, and what were the effects of these changes in terms of children's levels of engagement in communications, language and literacy activities?)

In order to explore the range of research questions embedded within these four aims, a study which incorporated both quantitative and qualitative methods was conducted. The research design is outlined briefly in the following section.

## **1.4 Methodology**

Brief details of methodology are outlined here for initial information. A detailed discussion of methodology, sampling process, profile of participants, methods used and approaches to data analysis can be found in Appendix 1.

The research study consisted of two stages. In Stage One, a stratified random sample was drawn in order to identify ten Local Education Authorities (LEAs) across England to take part in the study. The LEAs were randomly chosen to represent different geographical locations in England (North, Midlands, South) and different types of LEAs (Metropolitan, Shire, Unitary).

Twenty maintained and non-maintained early years settings in each LEA were randomly selected to take part in the study, 200 in total. Questionnaires<sup>4</sup> for parents and carers of children attending these settings were sent out, along

---

<sup>4</sup> The questions posed in both questionnaires are reprinted in the dataset in Appendix 7.

with questionnaires for practitioners working in the early years settings. Settings were supplied with a Freepost envelope for the return of all questionnaires. A total of 120 settings returned parents' questionnaires (an overall response rate of 60%) and 104 settings returned practitioners' questionnaires (an overall response rate of 52%).

In this publication, the responses of 1,852 parents (which represented a response rate of 27% for the parents' questionnaires) and 524 practitioners (which represented a response rate of 45% for the practitioners' questionnaires) are analysed. Whilst these response rates are comparable with other postal surveys of educational practitioners (Atkin, Rose and Shier, 2005), concerns are raised by low response rates in that non-respondent bias may occur. However, some empirical studies have been conducted which have suggested that this is not necessarily always the case and that non-response bias is not always present in responses to surveys with low response rates (Roszkowski and Bean, 1990). Nevertheless, in the present study, it could be argued that parents were more likely to respond if they had an interest in the topic and, therefore, the media usage of children in these families might be different than in the wider population. However, many of the statistics regarding children's use of media broadly correlate with the US study (Rideout et al., 2003), which suggests that the figures are not aberrant.

Nine of the original 200 settings took part in Stage Two of the study. All nine settings conducted action research projects in which they introduced an aspect of popular culture, media and new technologies into the communications, language and literacy curriculum of the foundation stage. In each setting, a focus group of up to eight children, four boys and four girls, was randomly selected in order to evaluate the impact of the intervention projects (67 children were selected for the focus groups in total, 37 boys and 30 girls). The impact of the interventions was evaluated using a range of methods including: open observations and observations using *The Leuven Involvement Scale for Young Children* (Laevers, 1994); interviews with parents and staff; photographs; videos and collection of children's work and artefacts. Sixty parents of the focus group children took part in telephone interviews before the start of Stage Two (Appendix 2), and 33 were interviewed by telephone once the project had been completed (Appendix 3). Twelve practitioners in the nine settings also took part in semi-structured interviews before the start of Stage Two (Appendix 4), and nine of the same group of practitioners were interviewed on its completion (Appendix 5). An inventory (Appendix 6) was undertaken in each setting before the action research projects took place and after their completion.

## **1.5 Summary**

In this first part of the report, the rationale and aims of the study, the background to the study and details of the research design have been presented. In the following sections, findings are presented and analysed in three separate sections which outline:

- Children's use of popular culture, media and new technologies in the home.
- Practitioners' views on current use of popular culture, media and new technologies in early childhood settings.
- Changing views and practices: the action research projects.

In each case, data from various strands of the project have been triangulated and major themes identified. Excerpts from qualitative data (interview transcripts, observations, research diaries, and children's work) have been selected to represent dominant themes. Care has been taken not to present isolated examples as representative of the larger dataset. Names of all settings, practitioners and children have been changed to protect anonymity. All of the quantitative data from the parents'/carers' and practitioners' questionnaires are presented in full in Appendix 7.

## **SECTION TWO**

### **CHILDREN'S USE OF POPULAR CULTURE, MEDIA AND NEW TECHNOLOGIES IN THE HOME**

#### **2.1 Introduction**

In this section, the key findings from the questionnaire completed by 1,852 parents (see full dataset in Appendix 7) and structured interviews with 60 parents will be outlined. This section addresses issues relating to access and children's use of popular culture, media and new technologies in the home. The views of parents towards their children's use of popular culture, media and new technologies will also be explored.

#### **2.2 Overall patterns of media access and use**

##### **2.2.1 Access**

###### *2.2.1.1 Family ownership of media*

As was the case in the *Zero to Six* study (Rideout et al., 2003), which indicated that young children in the USA were immersed in media-rich homes, children in this study had access to a wide range of media and technologies. The ownership of televisions and video/DVD players was almost universal, with only 2% of homes not having access to these technologies. White families were more likely to own two or more of this type of hardware than Black and Minority Ethnic families<sup>5</sup>, but there were no significant differences in ownership of televisions and videos in relation to socio-economic status (SES). Neither were there any differences in relation to ownership of satellite/cable or digital television, with 73% of all families owning these.

A total of 81% of families owned one or more desktop computers and/or laptops. This is a slightly lower number of respondents with access to computers in the home than in the recent study by Livingstone and Bober (2005) *UK Children Go Online*, in which 87% of 9- to 19-year-olds stated that they had access to a computer at home. This might be due to the fact that previous studies have indicated that some families buy computers when their children are of school age in order to help them with their education (Holloway

---

<sup>5</sup> All differences reported have a statistical significance of either  $p < 0.001$  or  $p < 0.01$ . Doing large numbers of statistical tests risks Type 1 errors, that is, finding statistically significant differences artefactually. In order to address this, a stricter alpha level has been set, i.e. the p value below which a result is taken to be reliably significant. The level set is  $p < 0.01$ . Differences at the conventional level of significance of  $p < 0.05$  are not reported. Full details of levels of significance are reported in Appendix 7.

and Valentine, 2003), and the mean age of children in this study was 3 years 4 months.

There were significant differences in relation to socio-economic status (SES) and ethnicity, with white families and families in social groups ABC1 more likely to own two or more computers than other families. Fewer families owned console games, such as PlayStation and XBox, games which are played using a television screen. Forty-eight per cent of families owned these, with working-class and Black and Minority Ethnic families more likely than other families to own two or more of these. The age of children also impacted on console game ownership, with parents of older children more likely to own this hardware.

The ownership of mobile phones was, like television and video/DVD players, almost universal. Only 2% of families did not own mobile phones, with 71% of all families owning two or more. There were significant differences in relation to SES and ethnicity, with white families and families in social groups ABC1 more likely to own two or more mobile phones.

Music was a central part of young children's lives in the home. Ninety-five per cent of families owned at least one CD/audiocassette player, and 90% of families owned radios, the majority owning two or more of each of these. Again, there were significant differences in relation to SES and ethnicity, with white families and families in social groups ABC1 more likely to own two or more of these items.

There was more evidence of ownership of video cameras than of digital cameras. Fifty-nine per cent of families owned one or more digital cameras, whilst 62% of families owned video cameras. Families in social groups C2DE and white families were less likely to own digital cameras than other families, but, although SES had an impact on ownership of video cameras, ethnicity was not a significant factor here.

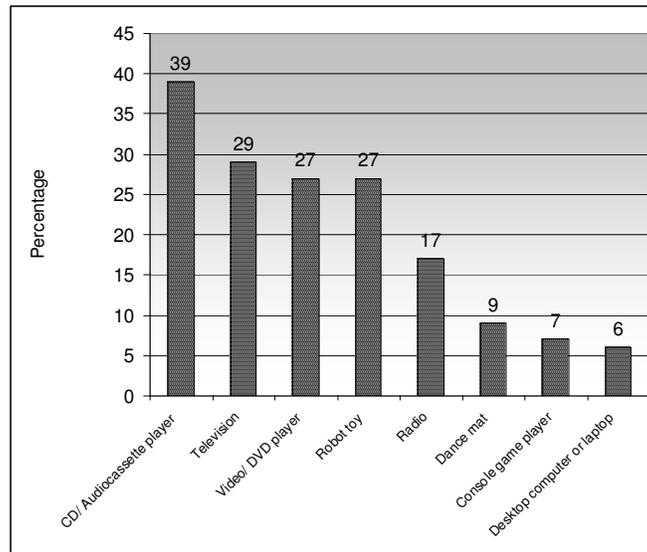
Seventy per cent of families had access to the internet (33% of this was access through broadband technology), which was broadly comparable with the *UK Children Go Online Study*, where internet access was 71% (Livingstone and Bober, 2005). This suggests that when families own computers, there is a high chance that they will also have internet access. In this study, SES and ethnicity impacted on internet access, with white families and families in social groups ABC1 more likely to have access to the internet. Whilst this pattern was also the same for broadband access in relation to social class, this was not the case with ethnicity, as there was no significant difference between white families and Black and Minority Ethnic families having access to broadband.

### *2.2.1.2 Children's ownership of media*

Although these data suggest that children have wide access to new technologies in the home, access does not equate simply to use, of course,

as other factors can impact on level of use, such as confidence of parents to scaffold use, location of hardware and their use by other family members (Holloway and Valentine, 2003). It has been suggested that having access to these technologies in a bedroom increases use (Rideout et al., 2003). Figure 1 outlines the hardware that the children in this study had located within their bedrooms:

**Figure 1: Children’s ownership of media in bedrooms (n= 1,846)**



The overall level of television ownership in bedrooms (29% of all children aged 0-6) is slightly lower than the figure reported in the *Zero to Six* (Rideout et al, 2003) study (36%) of American children. As in other studies (Livingstone and Bovill, 1999), age and SES both impact on level of television ownership in bedrooms, with older children and children in social groups C2DE more likely to have television in bedrooms. In this study, children in social groups C2DE were more likely to have all of this range of media (apart from CD/audiocassette players) in their bedrooms than other children. There were no significant differences between boys and girls in relation to ownership of televisions in bedrooms, but there were differences for console games (boys were more likely to have these in bedrooms) and dance mats (girls were more likely to have these in bedrooms).

Children’s ownership of books was higher than their ownership of other media, such as videos/DVDs, computer games and music CDs, as indicated in Table 1.

**Table 1: Children's ownership of media (n = 1,708)**

	<i>Gender</i>		<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>		
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
<b>Books</b>										
0	<b>0</b>	0	0	0**	0**	0**	0**	0**	0**	0**
1-10	<b>11</b>	11	10	18**	10**	10**	6**	19**	31**	5**
11-20	<b>14</b>	15	13	27**	13**	14**	12**	20**	23**	12**
21-30	<b>18</b>	19	16	24**	18**	16**	18**	18**	16**	18**
31-40	<b>13</b>	11	16	8**	14**	16**	14**	12**	8**	14**
More than 40	<b>44</b>	44	45	22**	46**	46**	50**	30**	21**	50**
<b>Videos/ DVDs</b>										
0	<b>39</b>	5	4	22**	3**	4**	5	4	11**	3**
1-10	<b>34</b>	33	35	53**	36**	23**	36	31	45**	31**
11-20	<b>28</b>	29	28	12**	30**	30**	30	25	20**	30**
More than 20	<b>31</b>	31	31	8**	30**	42**	29	35	18**	34**
<b>Computer games</b>										
0	<b>57</b>	54	60	83	61	41	60**	53**	46**	60**
1-10	<b>28</b>	30	26	4	26	42	29**	26**	28**	28**
11-20	<b>4</b>	5	3	0	4	5	4**	4**	5**	4**
More than 20	<b>4</b>	4	3	1	2	6	2**	6**	6**	3**
<b>Music CDs</b>										
0	<b>21</b>	23	18	33*	19*	22*	20	24	26**	20**
1-10	<b>61</b>	60	64	54*	64*	59*	65	54	47**	65**
11-20	<b>9</b>	9	10	5*	9*	11*	9	9	8**	9**
More than 20	<b>4</b>	4	4	2*	4*	4*	4	6	6**	4**

\*\*statistically significant difference p < 0.001

\* statistically significant difference p < 0. 01

As this table indicates, gender, age, SES and ethnicity all had a significant impact on the ownership of books – girls, older children, children in social groups ABC1 and white children were more likely to own more than 30 books than other children. This pattern was reversed in some categories in relation to computer games, with children in social groups C2DE and Black and Minority Ethnic children more likely to own more than ten computer games than other children. Livingstone and Bovill (1999) have pointed to the differences in ownership of types of media between social groups and indicated that ownership cannot be simply equated with income, but is also linked to cultural capital (Bourdieu, 1990). Families with high income and greater degrees of cultural capital (e.g. levels of education) are more likely to own more books and have access to the internet than other families, whereas lower income families with less cultural capital are more likely to demonstrate higher levels of ownership of screen entertainment media. This was a pattern seen in this study.

## **2.2.2 Patterns of use**

### *2.2.2.1 Levels of use*

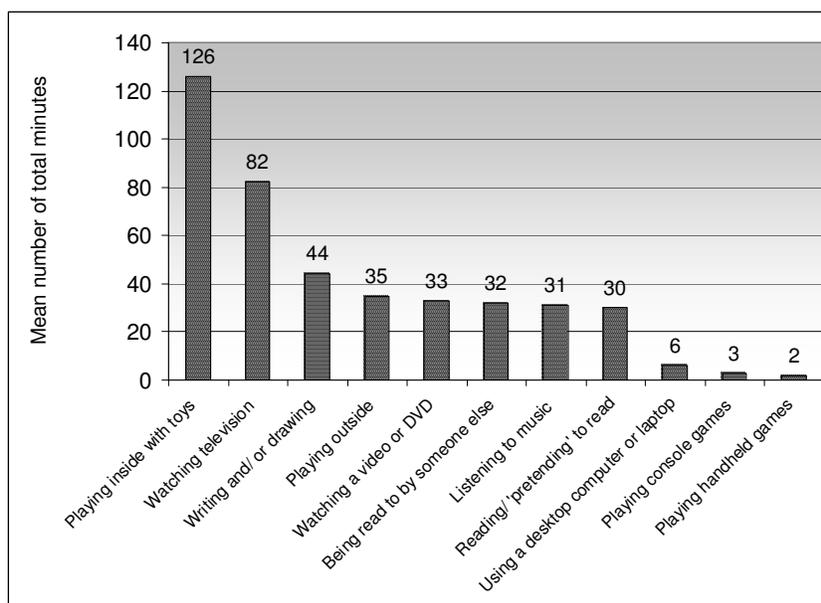
As suggested previously, patterns of use are different from patterns of access. However, the data suggest that the children in this study were avid users of a range of technologies from birth. On a typical day, the mean number of minutes children engaged in screen use (including watching television, watching videos/DVDs, using computers, playing console games and playing handheld games, such as Gameboy) was 126, which is **2 hours and 6 minutes**. This is eight minutes longer than the average time spent on screen use by American children in the *Zero to Six* (Rideout et al, 2003) study, but this may be accounted for by the year-long gap between these two studies taking place. As media become ever more ubiquitous in children's lives, their use will increase. In addition, the two studies took place at different times of year, which could also account for this difference. The *Zero to Six* study took place from April to June, whilst the present study took place from October to January. In the winter months, children are more likely to spend time inside the house and are therefore their screen use is likely to increase<sup>6</sup>.

There has been general concern about the amount of time children engage with screens, as suggested in Section 1.2. However, the children in this study spent an equal period of time playing inside with toys on a typical day as they did in screen use, and Figure 2 suggests that children, on a typical day, enjoyed a well-balanced diet consisting of varied activities.

---

<sup>6</sup> This might also account for the two main areas in which there was distinct discrepancy in the results between the US survey and this one. In the US survey, children spent an average of 2 hours and 1 minute playing outside on a typical day; in this study, children played outside for an average of 35 minutes on a typical day. Children in this study spent more time with books on a typical day (62 minutes on average, as opposed to 39 minutes in the US study). Again, this could be accounted for by differences in the times of year when the studies took place.

**Figure 2: Children’s activities on a typical day (n = 1,731)**



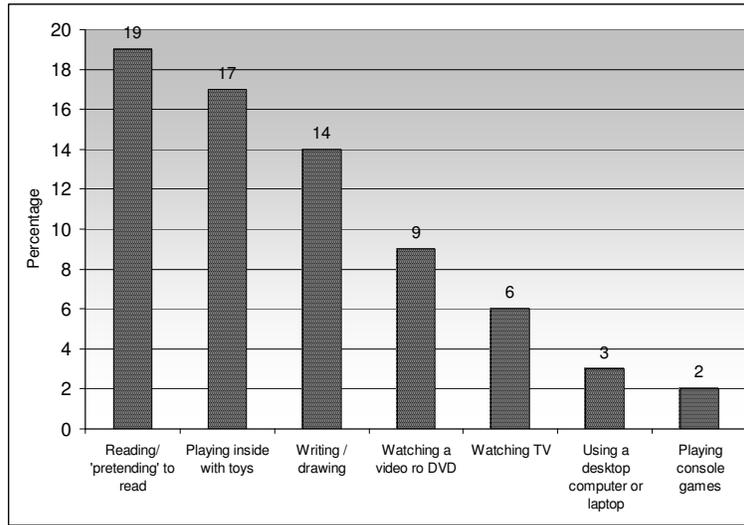
However, it should be noted that this study relied on reports by parents. As Buckingham (2004) suggests, more longitudinal, observational studies of children’s media use are needed in order to confirm, or refute, such claims. Nevertheless, these figures confirm the conclusions drawn by Livingstone and Bovill (1999), when they pointed out that their study of children and young people’s media use ‘found very few children who viewed large amounts of television to the exclusion of other activities...Nor did we find children so addicted to computer games that they had become socially isolated’ (1999: Ch. 12.p19). Similarly, the data in this study indicate that the majority of very young children whose parents were surveyed are not excessive users of media.

#### 2.2.2.2 *Social nature of media use*

A frequent source of anxiety for some is the thought that children and young people’s use of media is driving them into engagement in excessive solitary activities. However, this study suggests that this is far from the case. Instead of decreasing time with family members, media use appears to provide opportunities for social interaction. The percentage of children engaging in specific activities entirely on their own is outlined in Figure 3. As this illustrates, the activity which appears to be least social in nature is reading/‘pretending’<sup>7</sup> to read.

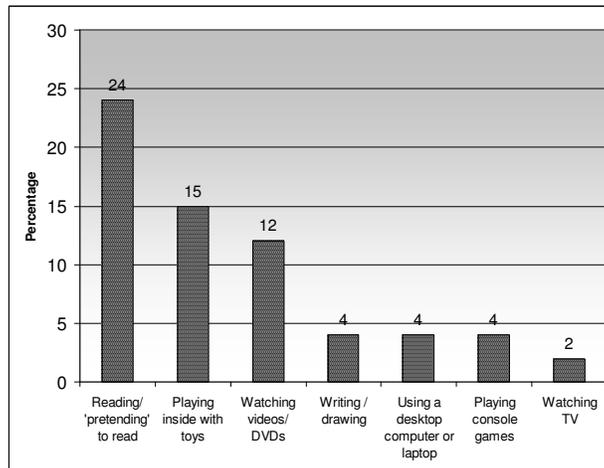
<sup>7</sup> In a previous study (Marsh, 2004a), it was clear that parents did not consider early literacy behaviour, such as retelling a story, or pointing to words in a text without one-to-one correspondence, to be ‘reading’, even though early literacy educators do see it as part of the continuum of learning to read (Hall et al., 2003). Therefore, the phrase ‘pretending to read’ was added to this survey in order to capture this behaviour.

**Figure 3: Proportions of children engaging in activities on their own, most of the time (n=1,656)**



This may be due to a number of factors, one of which is the location of hardware and artefacts. Children may be more likely to engage in social practices with media because of where they are situated, e.g. in shared family rooms. Parents were asked where specific activities were most likely to take place. It was clear that the use of media most often took place in shared family rooms, such as the living room, kitchen or study. The level of activities occurring in children's bedrooms rather than in shared locations was always the lowest for all media, but slightly higher for reading and being read to (see Figure 4). This perhaps reflects the fact that many parents read stories to children at bedtime, but also indicates that the least social activity, reading/'pretending' to read, as indicated in Figure 3, is also one which often occurs in a child's bedroom, away from other family members.

**Figure 4: Percentage of time children spent on the following activities in their bedrooms as opposed to shared rooms in the house (n=1,521)**



Parents did comment that their children liked to spend time with their families rather than engage with media on their own:

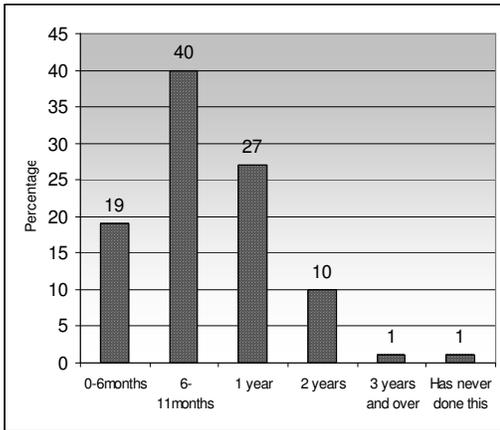
*She has got one [a PlayStation game] in her bedroom but she doesn't like playing in her bedroom on her own.*

This pattern was also evident in the study conducted by Livingstone and Bovill (1999), in which they found that the youngest age group in their study (6 to 8 years of age) preferred family spaces, 'especially when parents are present' (1999:Ch4:30).

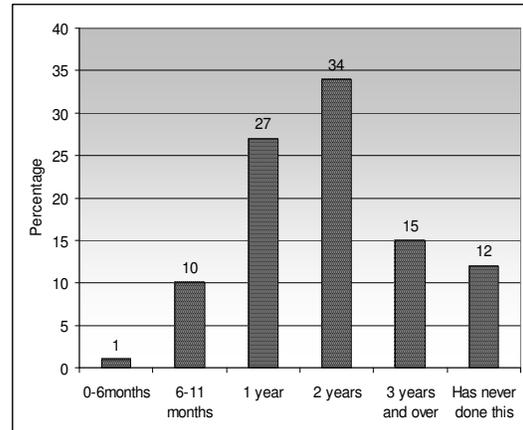
### *2.2.2.3 Age patterns in use of media and new technologies*

As might be expected, age does have a significant impact on children's use of media and new technologies. As children become more competent with specific hardware and software, their use of them increases. However, children's initial use of some media and new technologies occurs at an early age, as indicated in Figures 5 –10.

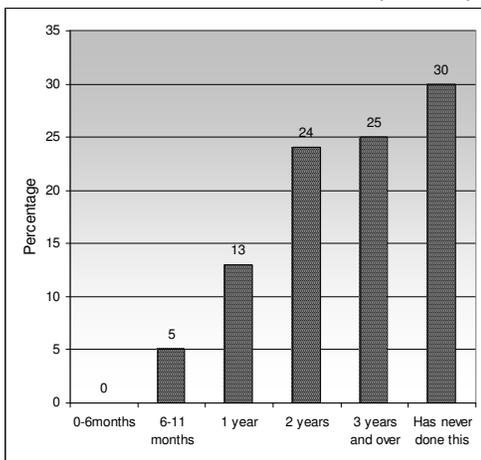
**Figure 5: Age at which child first watched TV (n=1,808)**



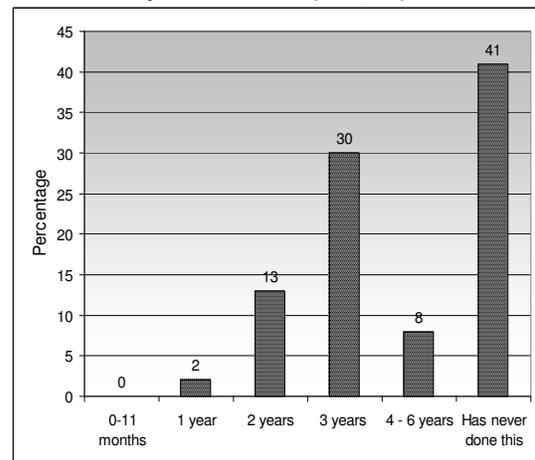
**Figure 6: Age at which child first turned TV on by her/himself (n=1,819)**



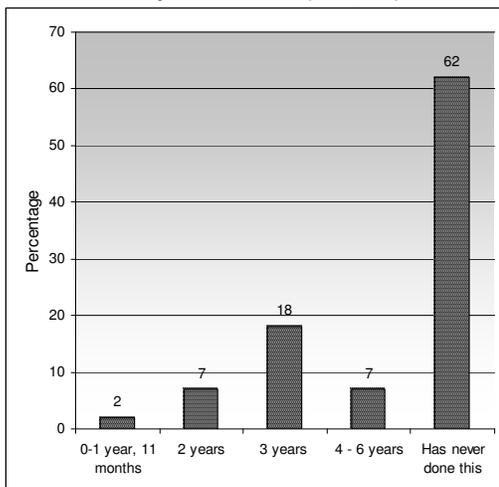
**Figure 7: Age at which child first changed channels with a remote control (n=1,804)**



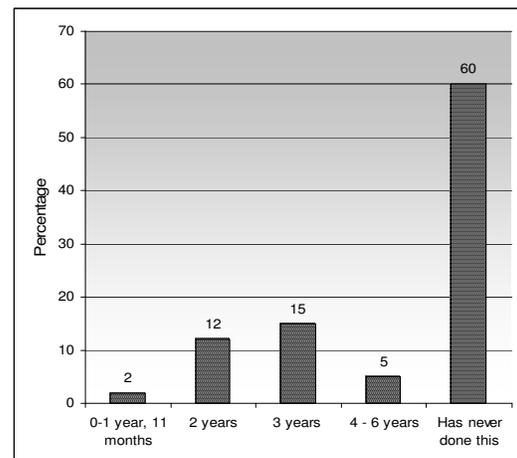
**Figure 8: Age at which child first used a mouse to point and click (n=1,788)**



**Figure 9: Age at which child first used a computer on own (n=1,787)**



**Figure 10: Age at which child first looked at websites for children (n=1,782)**



This, in addition to the data presented in the tables in Appendix 7 in relation to this question, suggests that children are engaged in a wide range of media practices from birth. Indeed, some parents remarked on this technological competence in the interviews:

*It amazes us how he can't read but he can actually shut everything down properly.*

The term 'independent' was used frequently in relation to children's media use:

Parent: *...we would probably go to the CBeebies web page and have the icon and just click on the characters and play games.*

Interviewer: *So, she is quite independent, then, in using the computer?*

Parent: *She is, she is a very independent girl anyway. She is always batting my hand away*

Although only 9% of parents in the survey had agreed or strongly agreed in response to the statement, 'I know less than my child about computers', in the interviews a number of parents did suggest that their children were, in fact, more competent than they were with technology:

Interviewer: *How independent is she, would she be able to switch it [the computer] on, put a disc in or click on an icon?*

Parent: *Yes.*

Interviewer: *She's fairly independent, then?*

Parent: *She's possibly better than we are...I don't think she is quite as competent as some, but she is certainly better than we are.*

Parents reported that their children did demonstrate impressive skills and knowledge in relation to media and new technologies, given their young age, a finding which replicates smaller-scale studies of children in England (Marsh, 2004a and 2004b). In the following sections, children's use of individual media will be considered.

## **2.3 Television and film**

### *2.3.1 Amount of television viewing*

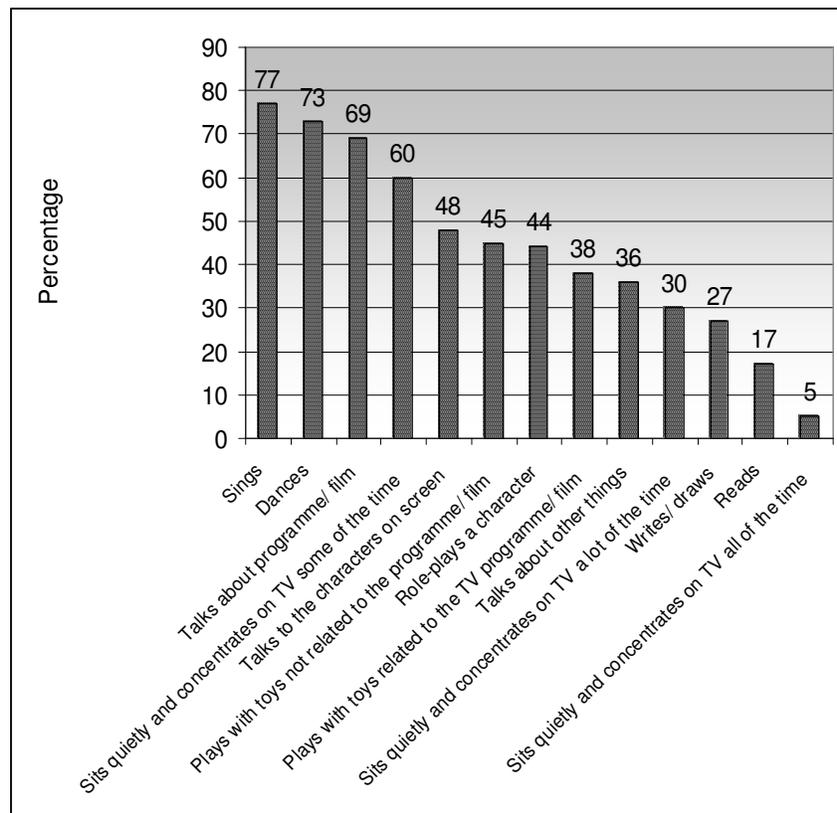
Playing inside with toys was the most frequent form of leisure activity for young children aged 0-6, a fact which might reassure those parents who worry that their children spend too much time looking at screens of various kinds. However, the second most frequent leisure activity was watching

television. On a typical day, the mean number of minutes spent watching television was 82 (1 hour and 22 minutes). This figure is slightly higher than children in the US study (Rideout et al., 2003), which was 1 hour and 5 minutes. Again, this might be accounted for by the difference in timings of the two surveys. As this study took place in the winter months, time spent indoors watching television was likely to be higher. Both of these television viewing figures are, as one would expect, lower than the time older children (aged 6-17) in the Livingstone and Bovill (1999) study suggested that they watched television (an average of 2 hours and 26 minutes).

### 2.3.2 Type of television viewing

One of the most frequently-voiced criticisms of children’s television-watching is that it causes them to become inactive, ‘couch potatoes’ (see, for example, Winn, 1985). However, the children in this study were highly active television viewers. Figure 11 outlines the activities children engaged in whilst watching television.

**Figure 11: Activities children engaged in as they watched television (n= 1,836)**



The interviews with parents also confirmed that children were actively engaged with television content for some of their viewing time, with singing,

dancing, copying characters' actions, shouting out answers and role-playing stories constituting some of the more popular activities. Parents intimated that activity patterns whilst watching television were varied and this depended on the nature of the programme, with some actively encouraging singing and dancing, such as *The Tweenies* or *The Wiggles*:

*They will sit and watch bits intently and then they'll go and play really, they do other things whilst it is on or they will just copy it. Different scenes they will be running around, or another type of one that they liked is 'The Wiggles'. We went to Australia and they saw those there and it is a lot of dance with it...so if they are watching that one it is like they are having an aerobics class or something because they know the words and they know the steps so they just copy the whole thing, singing and dancing to the whole thing.*

The data offer insights into the generally active nature of the children's television viewing. Much of this may be due to the fact that children were often watching dedicated children's channels which broadcast programmes that were specifically aimed for this age group. These programmes frequently embed interactive elements which include dancing and singing and the children were obviously responding positively to these features. Although the majority of children in all age groups were identified by parents as being likely to sing and dance in front of the television, this did peak in the 2-4 year age range, the age at which programmes such as *The Tweenies* are targeted.

### 2.3.3 Favourite programmes and channels

Parents were asked to name their children's favourite television programmes. Over 100 different programmes were named, but there were clear favourites. These can be seen in Table 2.

**Table 2: Children's favourite television programmes**

1. <i>The Tweenies</i>	6. <i>Bob the Builder</i>
2. <i>Balamory</i>	7. <i>The Fimbles</i>
3. <i>Big Cook, Little Cook</i>	8. <i>Noddy</i>
4. <i>Dora the Explorer</i>	9. <i>Come Outside</i>
5. <i>Scooby Doo</i>	10. <i>Teletubbies</i>

The most popular programmes were all age-appropriate. Some parents did name adult programmes as their children's favourite (e.g. *The Bill*, *Richard and Judy*), but these were only a very small minority. There were gender differences in relation to favourite programmes, as can be seen in Table 3.

**Table 3: Choice of favourite programmes, by gender**

<b>Boys' favourite TV programmes</b>	<b>Girls' favourite TV programmes</b>
1. Big Cook, Little Cook	1. Tweenies
2. Bob the Builder	2. Balamory
3. Balamory	3. Dora the Explorer
4. Scooby Doo	4. Big Cook, Little Cook
5. Thomas the Tank Engine	5. Fimbles
6. Tweenies	6. High Five
7. Dora the Explorer	7. Come Outside
8. Noddy	8. Noddy
9. Teletubbies	9. Teletubbies
10. Power Rangers	10. Scooby Doo

The majority of titles were popular with both genders; others appeared on the boys' list only (*Bob the Builder*, *Thomas the Tank Engine*, *Power Rangers*) or girls' list only (*Fimbles*, *High Five*, *Come Outside*).

Over 25 different channels were named by parents when asked to name their child's favourite. Children's favourite channel by far was CBeebies, with parents nearly four times as likely to name this channel as their children's favourite rather than any other.

1. CBeebies
2. CBBC/BBC<sup>8</sup> channels
3. Nickelodeon Junior/Nickelodeon
4. Milkshake/Channel 5
5. CITV /ITV
6. Cartoon Network/Boomerang
7. Disney Playhouse/Disney
8. Fox Kids/Fox
9. Tiny Pop
10. Discovery Kids/Discovery

Some parents intimated on the questionnaire that CBeebies/CBBC/BBC channels were the only channels their children were allowed to watch, with responses such as: 'BBC1 (never watched anything else)' and 'CBeebies – it's the only channel I select for him'. This was also a theme in the interviews, with parents suggesting that they felt 'safe' allowing their child to watch BBC channels:

*They only watch CBeebies as a channel just because I can trust it not to have on anything, you know, they are going to be frightened of, because both my children are quite sensitive.*

---

<sup>8</sup> In this list, some categories were combined because of the way in which parents identified programmes. For example, some parents were specific that it was the children's programming on a channel which children watched (e.g. CBBC; CITV), others simply named the channel (e.g. BBC1 and/or 2; ITV).

Some of the channels named on the questionnaire were those aimed at specific Black and Minority Ethnic audiences; for example, 'VTV4, Vietnamese channel' and 'Zee Music channel' were amongst those named. As in previous studies (Marsh, 2004b), watching channels which related to families' linguistic and cultural heritages was a family activity that was led by the parent rather than the child:

- Parent: *He hasn't been to the cinema but he watches, like, Asian films sometimes. He'll watch like dramas or stuff like that, Asian ones.*
- Interviewer: *Right and why does he watch those?*
- Parent: *Just because I watch them at that time and he's with me so...*

Parents were not asked about children's channel-hopping, although from the responses, there was evidence of this occurring. For example, one parent stated that she regularly put CBeebies on for her child, but the child would change the channel to CBBC using the remote control (67% of all children aged 0-6 had independently used a remote control). The influence of siblings on channel choice was also evident, as those children with older siblings sometimes had to watch channels that contained programmes aimed at older children.

#### *2.3.4 Favourite films*

The viewing of films on videos and DVDs was also a favourite activity of children. Previous research has highlighted the importance for young children of watching repeated viewings of films in terms of developing their understanding of narrative structure, oral language and aspects of film language (Robinson, 1997; Robinson and Turnbull, 2005).

For the children in this study, favourite films were ones which had been produced and distributed by major companies and targeted at a wide age group (e.g. *Shrek, Finding Nemo, Toy Story, Spider-man, Lion King*) or film-length versions of favourite television programmes (*Thomas the Tank Engine; Scooby-Doo*). *The Tweenies* appeared in this list, although at the time the questionnaire was completed, there was not a feature-length film related to this television programme, therefore parents were referring to DVD/video versions of the programme.

**Table 4: Children’s favourite films (top ten only named here)**

1. <i>Shrek</i>
2. <i>Finding Nemo</i>
3. <i>Thomas the Tank Engine</i>
4. <i>Toy Story</i>
5. <i>Scooby Doo</i>
6. <i>Spider-man</i>
7. <i>Barney</i>
8. <i>The Tweenies</i>
9. <i>Lion King</i>
10. <i>Peter Pan</i>

Some of these titles were popular with both boys and girls – *Shrek* and *Finding Nemo* appearing in the top five for both genders. However, there were films which were gender-specific, as can be seen in Table 5. Some of these choices appear to reflect stereotypical interests, with boys’ favourite film being identified as *Thomas the Tank Engine* and girls’ third favourite film named as *Barbie*.

**Table 5: Children’s favourite films (by gender)**

<b>Boys’ favourite films</b>	<b>Girls’ favourite films</b>
1. <i>Thomas the Tank Engine</i>	1. <i>Shrek</i>
2. <i>Shrek</i>	2. <i>Finding Nemo</i>
3. <i>Toy Story</i>	3. <i>Barbie</i>
4. <i>Finding Nemo</i>	4. <i>Barney</i>
5. <i>Scooby Doo</i>	5. <i>The Tweenies</i>
6. <i>Spiderman</i>	6. <i>Cinderella</i>
7. <i>Bob the Builder</i>	7. <i>Scooby Doo</i>
8. <i>Harry Potter</i>	8. <i>Lion King</i>
9. <i>Peter Pan</i>	9. <i>Toy Story</i>
10. <i>Lion King</i>	10. <i>Snow White</i>

As with television, there was evidence that children were active viewers of films, taking on various roles and re-playing the narratives whilst the films were playing, as well as after viewing. Identification with main characters appeared to be important, as the parent of a child whose favourite film was *Aladdin* recounts:

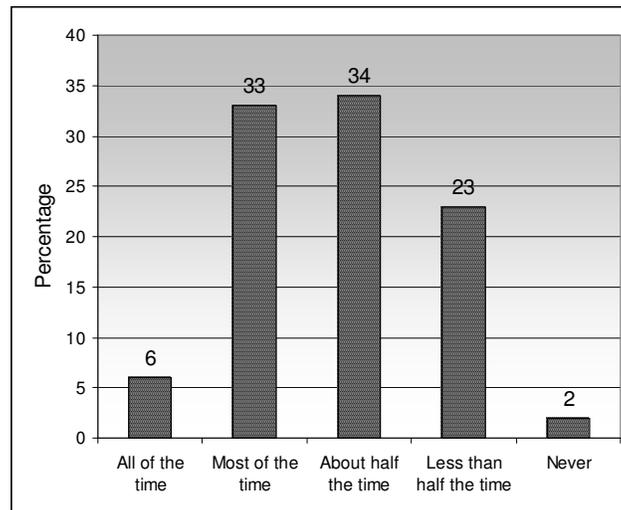
Parent: *And when that comes on she says, “Quick, get Jasmine, get Jasmine” and she dresses up.*

This type of play is important, as it enables children to rehearse film language, develop understanding of characterisation and story structure and try out new social roles and identities.

### 2.3.5 Parental and family involvement in television viewing

The data from both questionnaires indicated that television was often a family occasion. Parents frequently watched television with their young children, as shown in Figure 12.

**Figure 12: How often parents watched television with their children (n=1,835)**



There were differences in relation to age, with parents of children under two more likely either to never watch television with their child, or watch it all of the time, than parents of older children. In terms of SES, parents in social groups C2DE were more likely to watch television with their child for most or all of the time than parents in social groups ABC1. The latter pattern may be about differing parental attitudes to the role of television in children's lives across the various social class groups, or be related to the time parents have or make available to become involved with their children's daily lives.

In the interviews, parents discussed watching children's programmes with their children, but also mentioned occasions when children watched television aimed at an adult audience, such as soap operas, with them. Younger children frequently watched television with older and younger siblings and were introduced to new programmes in this way. As previous studies have indicated (Livingstone and Bovill, 1999) family patterns around television viewing are often related to the type of interactions which take place in families, with families who spend a lot of time together on non-media activities also spending more time together on media-related activities.

In previous studies of young children's family viewing, parents have described how they become involved in their children's role-playing activities which are related to television, taking on the role of characters and performing under the direction of their children (Marsh, 2004a). This was also the case in this study, with 83% of all parents surveyed stating that they took part in their child's TV-

related play at least occasionally (16% often; 39% sometimes; 28% occasionally; 13% never). As in the previous study, parents reported going to some lengths to support this play by providing props:

*The latest thing at the moment has been a musketeer because he has got 'The Three Musketeers', the Mickey Mouse DVD, so he likes to be a musketeer at the moment [laughs]... He did have a cowboy hat but I've had to put feathers in because Mickey Mouse's musketeers have a feather in their cap.*

Many parents also bought dressing-up clothes and props for television-related role play. The extensive level of involvement in young children's play demonstrated by parents is very encouraging and provides a strong platform for further development by early years practitioners.

### *2.3.6 Educational benefits of television*

Parents were overwhelmingly positive about the role of television in their children's lives. In the interviews, the majority of parents expressed positive attitudes, commenting on the high quality of children's programmes compared to those around when they were children and outlining the benefits they felt television brought their children. A minority of parents interviewed did express reservations, with one parent suggesting that in fact children's programmes were more interactive when she was a child, and others concerned about the effects of violence, advertisements or the potential for encouraging what parents considered to be precocious behaviour:

*I would say like the music videos and things, even on GMTV or something, say a kiddies channel for music, even, like, on there, even... some of the dances and things that they do and, like, when Eileen and her sister dance it is nothing like what I used to do. I used to step back and forward but they are jigging their bums and that kind of thing.*

The negative comments were, however, in the minority, with the majority of parents expressing approval for the role of television in their children's lives.

The data from the questionnaires also suggest that parents were more likely to agree with positive statements about the media than negative. For example, in response to the statement 'Media is harmful to my child's education', 18% agreed or strongly agreed; 75% disagreed or strongly disagreed. In response to the statement 'Television helps my child's language development', 79% agreed or strongly agreed (20% of these strongly agreeing); 17% disagreed or strongly disagreed. This is, of course, an area in which parents are often bombarded with negative messages about the harmful effects of television on children's social, emotional, linguistic and cognitive development. These data suggest that parents prefer to rely on judgements based on their own experiences of bringing up their children.

There is evidence to indicate that television has a range of educational benefits (Singer and Singer, 2001), although, of course, this is a complex field and more research needs to be undertaken about how such learning occurs and in what contexts. Parents, however, appeared to have little hesitation in specifying what their children had learned from watching television. When asked in the questionnaires to give some examples of things children had learned from television, 1,331 parents recorded a very wide range of skills, knowledge and understandings. A total of 56 parents (4% of those who responded to this question) recorded negative responses (e.g. 'nothing'; 'bad influence from adverts'); the rest were all positive. The list of skills, knowledge and understandings parents specified in response to this question is far too extensive to list in its entirety here, but was categorised in relation to the areas of learning specified in the curriculum for the foundation stage in England, the *Curriculum Guidance for the Foundation Stage*<sup>9</sup> (CGFS) (QCA, 2000). This outlines six broad areas of learning for young children: Personal, social and emotional development; Communications, language and literacy ; Mathematical development; Knowledge and understanding of the world; Physical development; Creative development. Table 6 maps parents' responses onto these six areas, with statements from the curriculum document linked to examples from the parents' responses.

---

<sup>9</sup> This curriculum document was used rather than *Birth to Three Matters* (DfES, 2002) because the mean age of children in the study was 3.4 years. However, the responses of parents also relate closely to the four aspects identified in *Birth to Three Matters* (A strong child; A skilful communicator; A competent learner; A healthy child) and their components.

**Table 6: What parents felt their children had learned from television**

Area of learning	Examples given by parents of what they think their children have learned from television (parents' examples in italics, linked to statements from CGFS (DJES/ QCA, 2000))
<b>Personal, social and emotional development</b>	<ul style="list-style-type: none"> <li>• Maintain attention, concentrate and sit quietly when appropriate (e.g. <i>'follow instructions, learn to sit still concentration'</i>).</li> <li>• Be sensitive to the needs, views and feelings of others (e.g. <i>'manners, helping, sharing'</i>; <i>'she has learned about making friends, sharing and being kind'</i>; <i>'empathy between characters'</i>)</li> <li>• Have a developing respect for their own cultures and beliefs and those of other people ( e.g. <i>'about other cultures'</i>; <i>'that not everybody has a comfortable life like they have'</i>; <i>'that people in different countries look and talk different'</i> ).</li> <li>• Value and contribute to own well-being and self-control (<i>'when feeling frustrated, to 'stop, breathe, think' from Blue's Clues'</i>; <i>'control fear'</i> ).</li> <li>• Understand that there needs to be agreed values and codes of behaviour for groups of people, including adults and children, to work together harmoniously ( e.g. <i>'he learnt that you should tidy everything up and clean away after you've been in the kitchen'</i>; <i>'how to behave with other children'</i>; <i>'importance of sharing'</i>).</li> <li>• Have an awareness of ...behavioural expectations (e.g. <i>'fighting is bad, being nice is good'</i>; <i>'good manners'</i>).</li> <li>• Understand what is right, what is wrong, and why (e.g. <i>'certain programmes talk about the rights and wrongs of behaviour which he picks up and becomes aware of what is naughty and what is right'</i>; <i>'knows when someone has been naughty on programme that it is wrong'</i>).</li> <li>• Dress...independently and manage their own personal hygiene (e.g. <i>'she has learnt to dress herself...by watching TV'</i>; <i>'importance of washing hands'</i>; <i>'how to wash hands before cooking'</i>).</li> <li>• Understand that people have different needs, views, cultures and beliefs, that need to be treated with respect (e.g. <i>'about that not everyone is the same and that she has to be kind'</i>; <i>'that everybody is different'</i>).</li> </ul>
<b>Communications, language and literacy</b>	<ul style="list-style-type: none"> <li>• Use words, gestures, simple statements and questions to communicate (e.g. <i>'asks questions'</i>; <i>'talks'</i>).</li> <li>• Listen to nursery rhymes, stories and songs, joining in with repeated refrains (e.g. <i>'she has learnt singing nursery rhymes from TV'</i>; <i>'stories'</i>; <i>'songs'</i>).</li> <li>• Enjoy listening to and using spoken language (e.g. <i>'able to talk to friends about Bob the Builder'</i>; <i>'shouts out animals – pig, cow, sheep etc.'</i> <i>'a lot, it helps pick up new topics and speech'</i>).</li> <li>• Sustain attentive listening, responding to what they have heard by relevant comments/ questions (<i>'learned sitting still, paying attention for a set time'</i>; <i>'she usually always asks questions after the programme'</i>).</li> <li>• Extend vocabulary, exploring meaning and sounds of new words (e.g. <i>'poems and lots of words'</i>; <i>'he has learnt a lot of new words'</i>; <i>'when he is in the room and hears a word in a sentence and doesn't understand, he will ask'</i>; parents also gave examples of children learning vocabulary in Spanish, French and Italian).</li> <li>• Use language to recreate experiences (<i>'he discusses programmes after'</i>; <i>'playing on his own with toys, says lots of words from programme when playing with his toys'</i>; <i>'I feel her language has improved and encouraged her to talk about things she sees'</i>).</li> <li>• Use talk to clarify thinking, ideas, feelings and events (e.g. <i>'states moral of programme, then links it in with his own example'</i>; <i>'describing how characters feel and why'</i>; <i>'she is able to give her own opinion about the story or film – if it was good or boring'</i>).</li> <li>• Link sounds to letters, naming and sounding the letters of the alphabet (e.g. <i>'she has learned some letters of the alphabet'</i>; <i>'learnt her alphabet'</i>).</li> <li>• Begin to be aware of the way stories are structured (e.g. <i>'story structures'</i>).</li> </ul>
<b>Mathematical development</b>	<ul style="list-style-type: none"> <li>• Willingly attempt to count; Count actions or objects that cannot be moved (e.g. <i>'how to count'</i>; <i>'counting backwards'</i>; <i>'counts along with programmes which include counting'</i>).</li> <li>• Recognise numerals 1 to 9 (e.g. <i>'numbers'</i>; <i>'numeral recognition'</i>).</li> <li>• Talk about, recognise and recreate simple patterns (<i>'matching pairs'</i>, <i>'repetitive patterns'</i>).</li> <li>• Begin to use mathematical names for shapes (e.g. <i>'shape recognition'</i>; <i>'she has learnt how to pronounce the different shapes'</i>).</li> </ul>

<p><b>Knowledge and understanding of the world</b></p>	<ul style="list-style-type: none"> <li>• Find out about, and identify, some features of living things, objects and events (e.g. ‘<i>about their bodies, how food digests, about skin, how it sweats; ‘how toothpaste, pots, glass is made, what happens to water when toilet is flushed’; ‘at the train station what to do’; caterpillars turning to butterflies, how lights work</i>’).</li> <li>• Find out about, and identify, some features in the place they live and the natural world (e.g. ‘<i>interest in the environment; he knows all about the seasonal changes that happen around us’; ‘life in different countries – how children live in cold countries and hot countries</i>’).</li> <li>• Ask questions about why things happen and how things work (e.g. ‘<i>asking questions, observing things around her</i>’).</li> <li>• Know how to operate simple equipment; Find out and identify the uses of everyday technology (e.g. ‘<i>how to operate TV, video and DVD’; ‘machinery videos, how they work</i>’).</li> <li>• Begin to differentiate between past and present (e.g. ‘<i>about Pompeii and Vesuvius, pyramids, Michelangelo’; ‘history</i>’).</li> <li>• Find out about...present events in their own lives (e.g. ‘<i>events of 9/11 and Iraq war</i>’).</li> <li>• Gain an awareness of the cultures and beliefs of others (e.g. ‘<i>about other cultures on news’; ‘Diwali – how it affects other children</i>’).</li> </ul>
<p><b>Physical development</b></p>	<ul style="list-style-type: none"> <li>• Move with control and coordination (e.g. ‘<i>songs and dance actions’; ‘can copy movements of dances</i>’).</li> <li>• Show awareness of a range of healthy practices with regard to...hygiene (e.g. ‘<i>personal hygiene – the importance of brushing teeth’; ‘reinforce brushing of teeth and hand washing</i>’).</li> <li>• Recognise the importance of keeping healthy and those things which contribute to this (e.g. ‘<i>safety issues’; ‘road safety</i>’).</li> </ul>
<p><b>Creative development</b></p>	<ul style="list-style-type: none"> <li>• Respond to sound with body movement, joining in with dancing, moving rhythmically (e.g. ‘<i>dances and actions to songs</i>’).</li> <li>• Recognise and explore how sounds can be changed, sing simple songs from memory, recognise repeated sounds and sound patterns and match movements to music (e.g. ‘<i>learned songs’; ‘dance routines</i>’).</li> <li>• Make constructions, collages, paintings, drawing and dances (e.g. ‘<i>drawing, gluing, painting</i>’).</li> <li>• Explore colour, texture, shape, form and space in two or three dimensions (e.g. ‘<i>making objects from recycled items’; ‘making models</i>’).</li> <li>• Use their imagination in art, design, music, dance, imaginative role play and stories (e.g. ‘<i>create music from everyday things’; ‘creative play; ‘imaginative storying and story plots’; ‘stimulates imaginary play</i>’).</li> </ul>

In the interviews, parents also talked about how their children had learned from watching television, listing many of the areas identified in Table 6:

*Social interaction, consideration of others, how to deal with situations. She learns about things that she may not be able to experience first hand, you know, like certain programmes go into a sweet factory. She learns about people in the community and people she might meet. I could go on forever.*

Many of the parents whose children spoke English as an additional language commented on how television had helped their children to acquire English, as this parent, who was a refugee seeker from Bosnia, suggested:

Parent: *He’s now four years old and he can count to 20 in English.*  
Interviewer: *Has he learnt that from the TV?*  
Parent: *Yes, definitely. He’ll tell me all the names of things when children’s programmes are on and he’ll explain which one is called that.*

Previous studies have also indicated that bilingual parents feel that watching television and films helps their children to acquire English (Marsh, 2004b).

## 2.4 Computers

### 2.4.1 Frequency of computer use

Eighty-one per cent of all families in the survey reported that they owned one or more laptops. Parents reported that, on a typical day, 53% of children aged 0-6 used a desktop computer or laptop at home, 45% for less than an hour, 8% for an hour or more. Forty-two per cent of this age group were reported as never using a desktop computer or laptop at home on a typical day. In the *Zero to Six* (Rideout et al., 2003) study, 48% of US children under six had used a computer. The slight increase (5%) in number in the current, English study may be due to the fact that the survey was undertaken a year later, as computer access rises steadily, as comparison with previous studies (e.g. Livingstone and Bovill, 1999) shows.

### 2.4.2 Type of computer use

In the interviews, parents reported that their children's favourite use of the computer was to play games, either games on websites or on CDROMs/ DVDs they had purchased.

For those families that had internet access (70%), children were able to visit websites. Children's favourite websites were strongly related to their television viewing preferences, with the BBC websites clear favourites:

**Table 7: Children's favourite websites**

1. CBeebies
2. CBBC
3. Nickolodeon Junior
4. Bob the Builder
5. Barbie
6. Tweenies
7. Thomas the Tank Engine
8. and 9. Teletubbies joint with Disney
10. Balamory

Although the top three favourite sites were not gender-specific, there were gender differences in the fourth and fifth choices, as indicated in Table 8.

**Table 8: Favourite websites by gender**

<b>Boys' favourite websites</b>	<b>Girls' favourite websites</b>
1. CBeebies	1. CBeebies
2. CBBC	2. CBBC
3. Nickolodeon Junior	3. Nickolodeon Junior
4. Bob the Builder	4. Barbie
5. Thomas the Tank Engine	5. Tweenies

Children were attracted to these websites for the games they could play on them, and parents also reported that children liked to colour in pictures of their favourite characters and print them off. The narrow range of tasks children can undertake independently on websites aimed at this age group has been critiqued by Lankshear and Knobel (2003) who suggest that, often, adult help is needed to navigate them. There certainly appeared to be a lack of independence in relation to web use in this study, with only 5% of children aged 0-6 reported as ever having gone to a particular website on their own. However, parents did report that, although children used the computer with adult help, it was their interests which drove its use:

*I think she saw it [CBeebies website] on an advert on CBeebies. She said, "Mummy, let's go on the CBeebies website"... So in actual fact it is probably her that has worked out from the advert, because the little girl holds the mouse, I think she has worked out that that is the computer. That is when it all started really.*

Parents also suggested that children were aware of the uses to which the internet could be put:

*You know, being up-to-date with things that are going on, you know being aware what it's there for and other things like – just, for instance, my husband wanted to look up some dates of a motorbike race and John was aware that we went on the computer to do that sort of thing, to look at what is available, for information.*

As is the case with literacy practices related to print-based texts (Cairney and Ruge, 1998), children were immersed in the use of digital literacy for a range of purposes and so were acquiring understanding of the uses to which particular media and artefacts were put.

### *2.4.3 Educational benefits*

Parents who were interviewed were asked what they felt their children learned from using computers. As was the case with television, parents were able to specify a range of skills, knowledge and understandings, although these were often related to particular games that were designed to develop specific skills e.g. knowledge of the alphabet (phoneme-grapheme relationships), counting and so on, and had been bought by parents for this purpose. Some parents did recognise the generic computer skills such use was developing:

*She knows how to put the disk in, take the disk out, that sort of thing. I think it helps her motor skills, she has got very good control of the mouse.*

Parents were keen that their children develop skills with computers, because they recognised the importance for the future:

*...computers is just part of their everyday life and I think that's very positive because obviously that's the way the world is going and it's just another part of life. Whereas, you know, my secondary school had one computer in it between 1500 children or something...*

There were no concerns voiced about children's use of computers, other than one parent remarking that she was wary of letting her child use a computer independently in case he caused damage or loss:

*To be honest with you, at this age you don't know if they are going to mess it up a bit, do you know what I mean?*

This, however, was an isolated example; parents who were interviewed were overwhelmingly positive about the role of computers in their children's lives.

## **2.5 Console games**

### *2.5.1 Frequency of console game use*

Just under half (48%) of families in the survey owned console games. Families in social groups C2DE were more likely to own console games than families in social groups ABC1. Although there was relatively wide ownership, parents did not indicate that the majority of children in this age group were prevalent players, with 17% of children reported as likely to be playing console games on a typical day. There were significant differences here in relation to gender, age, class and ethnicity, with boys, older children, children from social groups C2DE and Black and Minority Ethnic children more likely to play console games than other children.

### *2.5.2 Type of games playing*

In the interviews, parents who reported that their children played console games named a number of popular titles, many of them aimed at children older than six (e.g. *Crash Bandicoot*), as has been the case in previous studies (Marsh, 2004a). Most of the games played appeared to be adventure and racing games, rather than 'shoot-em-ups'. There also appeared to be the same gender patterns as identified in the earlier study, in that it was fathers who were identified as playing console games with their children more frequently than mothers. In addition, a similar level of scaffolding appeared to be taking place, with parents and older siblings allowing young children to play with a set of controls which were not plugged in:

*She'll give him the spare remote control and he thinks that he's doing it...*

The playing of these games did appear to be family affairs rather than independent use, and there was little evidence that children played the games with peers.

### 2.5.3 Educational benefits

Parents who were interviewed, and whose children played console games, were asked if they felt there were any educational benefits. Many of the parents stated that hand-eye co-ordination and concentration were developed through the games. There were few concerns expressed about the games, but, as the wider survey data indicate, perhaps children in this age group were playing them less extensively than older siblings and other family members and, therefore, parents generally appeared not to be worried about their own children playing them.

## 2.6 Mobile phones

As reported in Section 2.2.1, family ownership of at least one mobile phone was almost universal. There appeared to be minimal independent use of mobile phones by children in this age group, with only 14% of parents reporting that their child had ever used a mobile phone to make a call and only 1% stating that this had been done independently. However, using phones with the help of others was part of some families' communication practices with their young children:

*Sometimes I put a little bit of money on it just for her to play with her friend because she goes away to the caravan with my mum, her grandma on a weekend, so she will text little pictures to us and things.*

Play related to mobile phone technology was also a feature in the data. Parents in the interviews described how their children had used toy mobile phones and discarded real mobile phones to pretend to talk to other family members. As is the case with telephone play in general (Gillen et al., 2005), children demonstrated that they were quite adept at picking up on adults' practices and were able to mimic these practices in their own play:

*We were in the car and I picked up her best friend because I take them both to nursery together and they picked up the toys on the back seat and used them as mobiles, not as the games, they didn't know how the games work, and one said, 'Hello, darling, are you coming to pick the kids up?' and the other said, 'I'm not a taxi service, you know.' I mean, yes, they get the concept.*

A significant minority of children in the questionnaire survey had, at some point, played with the ringtones on mobile phones (24%) and it should be noted that to do this requires some dexterity, as the ringtone menu is often embedded in a larger menu on the phones, e.g. 'Settings'. Eighteen per cent had pretended to send a text-message, and this was also described by parents in interviews.

Interviewer: *Is she aware of text-messaging at all?*

Parent: *She'll pretend to press the buttons, she wouldn't know obviously how to do one but she does know, yeah.*

Parents suggested that their children, as was the case with oral use of the mobile phones, were sensitive to the literacy practices which occurred in relation to mobile phones and were aware of the purposes of texting:

*She can't send one but she knows exactly... She got my phone the other day and she was taking a right paddy because my mam had forgotten to bring - I bought her a castle when we were in America a couple of years ago, and my mam had forgotten to bring it down. She got my phone and said, "Text my Nanna and tell her to bring the castle down." I said, "Well, we will phone your Nanna", "No," she said, "Text her". So I had to text my mam and tell her not to forget this castle, and then she said, "No, I will phone her because she is silly."*

Perhaps this young child knew only too well the difficulties some older adults have with relatively newer forms of communicative practices such as texting.

Some children were reported as having taken photographs using the camera feature of the mobile phones:

Interviewer: *Well, I'm talking to you on a mobile phone, does Billy watch you using it?*

Parent: *Yeah.*

Interviewer: *Does he ever try using it himself?*

Parent: *Yeah, because I've got a camera phone so he takes pictures with it.*

Interviewer: *Is he aware of text-messaging?*

Parent: *Yes.*

Interviewer: *Would he be able to have a go at it do you think?*

Parent: *He tries to do it, but he can't spell at the moment.*

As with computers, some parents reported that their young children were more competent at using mobile phones than they were, as this mother of a four-year-old boy reported:

*My daughter's got one of these dead complicated ones and I cannot get into the phone book - he can. He can get into the camera, he can take videos with it, he can do anything.*

It was clear that children were being inducted into mobile phone use from a young age and, whilst not using phones independently for most of the time, were developing understanding of their role, nature and the uses to which they were put in social contexts.

## **2.7 Radio and CD/audiocassette players**

As in the *Zero to Six* (Rideout et al., 2003) study, music played a central role in young children's lives. On a typical day, the mean number of minutes children spent listening to music was 31, with 68% of all children listening to music at some point during the day. Thirty-nine per cent of children had a CD/audiocassette player in their bedroom, with parents in interviews suggesting that their children enjoyed tapes relating to their favourite television and film programmes and characters.

## **2.8 Books and comics**

There appeared to be little evidence that books were playing a minimal role in children's lives, a fear which is sometimes expressed by those who are concerned about the implications of the new media age (Birkerts, 1998). Seventy-five per cent of children owned more than 20 books, although there were differences related to age, SES and ethnicity, with younger children, children from social groups C2DE and Black and Minority Ethnic children likely to own fewer books than other children.

A total of 82% of all children spent time with books on a typical day (compared with 79% in the Rideout et al.(2003) US study). Parents reported that children read, or 'pretended' to read, for an average of 30 minutes on a typical day. They were read to by someone else for an average of 32 minutes. Engaging with books either as an individual or with others, therefore, was the third most frequent activity for children (after playing inside with toys and watching television). There were no significant differences in relation to SES in terms of children being read to by someone else. Not surprisingly, older children were more likely to read/ 'pretend' to read than younger children, and girls were more likely to spend longer periods than boys doing this.

Eighty-one per cent of children owned books related to their favourite television programmes or characters. Sixty per cent of parents in the survey felt that these books motivated their child to read or write, and this was supported by data from the interviews with parents, which indicated that many parents felt that this was the case for their child:

*He's got the monsters book, he's got the 'Bug's Life' book, 'Toy Story' book and they are the ones he always goes for. If I say, "Go and choose a book", he will choose generally one of his favourite films. It motivates him to pick a book up in the first place, certainly.*

Some parents noted that children deliberately related the books to the film/ television programme, drawing on the language experienced with the moving image to retell the stories:

*I mean, he'll sit there and he'll watch the 'Jungle Book' on the DVD and then maybe the next couple of days he'll get his books and he'll look at the pictures and say, "Oh, I've seen that bit on the telly". He does sit there and he makes up his own words, do you know what I mean, like he's reading the book.*

Children were also motivated to read by comics and magazines which were related to their media interests. Children's favourite comics/magazines are outlined in Table 9.

**Table 9: Children's favourite comics/magazines (top ten only named here)**

1. <i>Thomas the Tank Engine</i>
2. <i>Toybox</i>
3. <i>The Tweenies</i>
4. <i>CBeebies/ BBC magazines</i>
5. <i>Barbie</i>
6. <i>Bob the Builder</i>
7. <i>Disney magazines</i>
8. <i>Disney Princess</i>
9. <i>Teletubbies</i>
10. <i>Scooby Doo</i>

As with other media, there were gender differences evident, with *Barbie*, *The Tweenies* and *Disney Princesses* featuring exclusively on the girls' list of favourites, and *Thomas the Tank Engine* and *Bob the Builder* appearing only on the boys' list.

**Table 10: Favourite comics by gender**

<b>Boys' favourite comics/magazines</b>	<b>Girls' favourite comics/magazines</b>
1. <i>Thomas the Tank Engine</i>	1. <i>Toybox</i>
2. <i>Toybox</i>	2. <i>Barbie</i>
3. <i>Bob the Builder</i>	3. <i>The Tweenies</i>
4. <i>Disney magazines</i>	4. <i>Disney princess</i>
5. <i>CBeebies/BBC magazines</i>	4. <i>Disney magazines</i>

Books and comics related to children's favourite media narratives therefore played an important role in developing many children's reading habits.

## 2.9 The role of popular culture in children’s lives

As is evident from the data discussed so far, popular culture was a highly prevalent feature of young children’s lives. Favourite television programmes, films and characters played an important role in their leisure pursuits. Children’s favourite popular cultural characters were closely related to their film and television viewing (see Table 11).

**Table 11: Children’s favourite TV characters (top ten only named here)**

1. Tweenies characters
2. Bob the Builder
3. Dora the Explorer
4. Scooby Doo
5. Noddy
6. Thomas the Tank Engine
7. Fimbles
8. Postman Pat
9. Barney
10. Spider-man

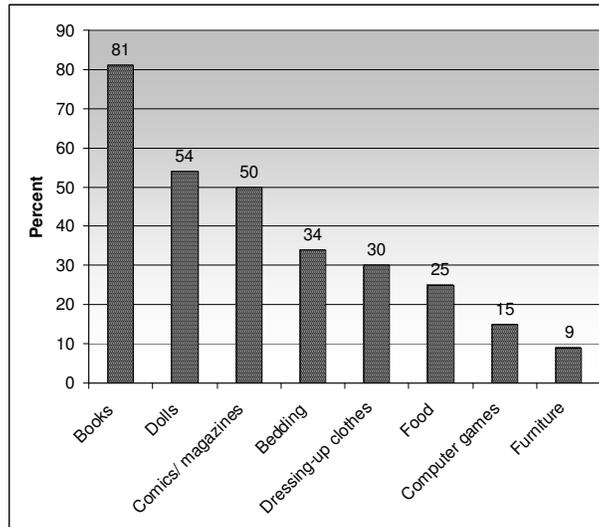
There were gender differences, with some characters appearing on both boys’ and girls’ lists, but some only appearing on boys’ lists (*Bob the Builder*, *Thomas the Tank Engine*, *Postman Pat*, *Power Rangers*) and some only appearing on girls’ lists (*Fimbles*, *Winnie the Pooh*, *Balamory* characters, *Barbie*, *Angelina Ballerina*).

**Table 12: Children’s favourite TV characters by gender (top ten only named here)**

<b>Boys’ favourite TV characters</b>	<b>Girls’ favourite TV characters</b>
1. Bob the Builder	1. Tweenies characters
2. Thomas the Tank Engine	2. Dora the Explorer
3. Scooby Doo	3. Scooby Doo
4. Tweenies	4. Fimbles
5. Noddy	5. Teletubbies
6. Spider-man	6. Barney
7. Dora the Explorer	7. Winnie the Pooh
8. Postman Pat	8. Balamory characters
9. Barney	9. Barbie
10. Power Rangers	10. Angelina Ballerina

Children owned a range of merchandise related to their favourite characters, as Figure 13 indicates.

**Figure 13: Percentages of children who owned various forms of merchandise related to their favourite media characters (n=1,843)**



These media icons were very important to young children. Parents often described their children as being 'obsessed' with them and were aware of the pervasiveness of this consumer culture:

*There's Spider-man everything – spaghetti, toilet paper and, you know, it could dominate your life*

As indicated in previous studies, children's interest in these figures is part of their identity construction and can play a part in building social networks with other children (Marsh, 2005b), as parents themselves commented on:

*I think they [media icons] are quite important to her, she's not got any particular favourite but she likes to, you know when she goes to play school she knows what all the other children are talking about you know, she has a 'Spot' and 'Thomas' lunch box, a 'Bob the Builder' lunch box, and I think because she's seen and been exposed to it, it helps her with sort of interpersonal skills of both sexes. I think it's, like, if she wasn't exposed to it she wouldn't maybe have anything to talk about or any relationship with these children, because she wouldn't know what they were talking about.*

This is not to gloss over the concerns that many have expressed about the influences of peer pressure or the commercial pressures on children (see Kenway and Bullen, 2001, for a review), but, as studies of childhood and youth media cultures suggest, children are much more active agents in taking up and shaping these discourses than is often assumed (Ito, 2004).

## 2.10 Parental views on children's use of popular culture, media and new technologies

Parents were generally very supportive of the role that popular culture, media and new technologies played in their children's lives. Few concerns were voiced in the interviews, and those that were expressed were related to issues of violence in the media and the lure of adverts. Data from the questionnaires suggested that parents felt their children learned much from television and computers and that watching television promoted language development.

In the interviews, parents were asked if media education should play a role in schools. The majority of parents agreed that it should, citing various reasons to support their opinions:

*Well, rather than just being a box that's in front of them, at least they know what is happening and where it is coming from.*

Many parents saw such work as essential preparation for the digital future:

*I think it is very important because its going to be an IT-literate community and without it they will suffer, so I think nurseries and schools do need to use new technology and they do need to introduce it but it depends, though. I mean, as parents you know what is good for your child and what's not and then there's certain things you can't go without so the internet, computers, text messages, mobiles, all these are things that the children are going to come across some time in their life, so learning about it, there's nothing wrong with that. Actually going on the internet to do research, that will be something that will benefit them.*

Some parents saw the introduction of 'media literacy' as a means of preventing children from being persuaded by adverts, ascribing to an 'inoculation model'<sup>10</sup> of media education:

*Yeah, because I try to say with the adverts and things that that's not always ....just telling you that it is very big, but actually it's probably only this size, you know, sometimes they just want you to buy things and they are trying to tell you the best of it and not the bad things that might be with it. So I think yes, I think television is a very confusing thing probably...yeah, it would be good to learn.*

A few parents suggested that yes, children should have opportunities to develop 'media literacy' at school, but perhaps at an older age:

*I think they should, yes. I mean, four is a bit young. But, certainly, well, the oldest is in school now and I think she should be learning about it by now, she's five and a quarter.*

---

<sup>10</sup> See Buckingham (2003) for an overview of models of media education.

Parental backing for the development of media education from the earliest stages of schooling was strong across all social and ethnic groups and this support and interest can obviously be drawn upon by early years practitioners as they begin to develop this work.

## **2.11 Summary**

This section has presented a wealth of data that paint a picture of early childhood in the twenty-first century as technologically-mediated, littered with popular cultural icons and shaped by the fashions and passions of media. However, the evidence does not suggest that children are the media-saturated, passive couch potatoes we read about in the more extreme accounts of contemporary childhoods (Winn, 1985). The children in this study led relatively well-balanced lives, with popular culture, media and technology playing a central, but not overwhelming role. These were children who were very often technologically astute and digitally competent, some developing these skills from a very young age, but who also enjoyed spending time playing with toys, reading and being read to, and playing outside. This is not to suggest that the picture is entirely rosy; like all analyses of contemporary childhoods, the picture was complex, with poverty and other social and cultural factors having an impact on the opportunities children are afforded. However, the majority of children moved across various multimedia activities in the course of a day and appeared to be benefiting in a number of ways from this rich array of experiences. As Robinson and Mackey (2003) suggest, rather than children's media-informed lives being seen as deficient in some way, we should begin to appreciate the assets they gain and build on these assets in early childhood settings and schools. How far this is currently the case is explored in the next section of the report.

## **SECTION THREE**

### **PRACTITIONERS' VIEWS ON, AND CURRENT USE OF, POPULAR CULTURE, MEDIA AND NEW TECHNOLOGIES IN EARLY CHILDHOOD SETTINGS**

#### **3.1 Introduction**

In this section, the findings from the questionnaires returned by 524 practitioners in 104 early years settings will be outlined (see full dataset in Appendix 7). This will be supplemented with data from interviews with 12 practitioners in nine settings, interviews which took place before the start of Stage Two of the project. The practitioners' attitudes towards the use of popular culture, media and new technologies will also be explored, in addition to current practice in the settings in which they work.

#### **3.2 Practitioners' views on children's use of popular culture, media and new technologies**

Practitioners held mixed views about the role and importance of popular culture and media in children's lives. Although 92% agreed or strongly agreed that children learn from television, and 67% disagreed with the suggestion that television is harmful for children's language development, 83% felt that they generally watched too much of it. Of course, these views are not mutually exclusive, but this picture does reflect something of the anxiety which many educators feel towards the media. Indeed, a significant minority (40%) agreed or strongly agreed with the statement that 'Children spend enough time watching TV without wasting more time on it in nursery'. Certainly, in the first set of interviews prior to the action research projects commencing, a mixture of both favourable and unfavourable views towards the media were expressed by the same practitioners, almost in the same breath at times:

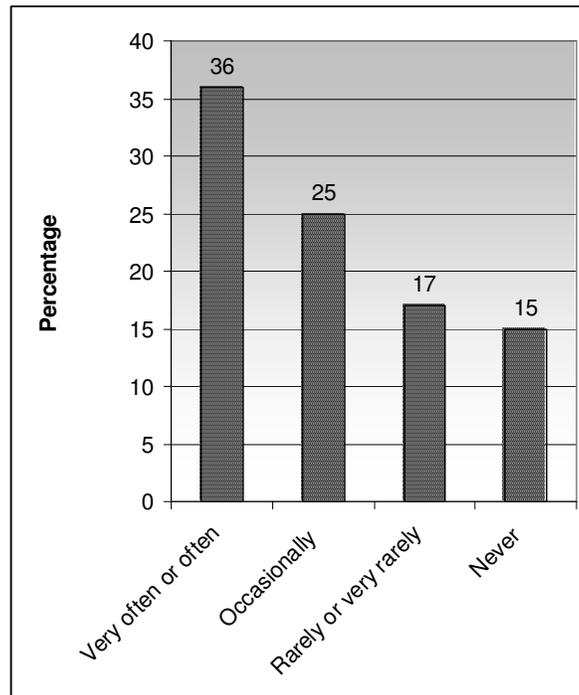
*I think they watch a lot of TV and are in it for long enough, rather than us throw that in as well. Yes, it's good to get them involved in it, such as using the video of 'Spot' and things like that, but there's so many other things that we need to do and we haven't got time to do everything, you know what I mean?*

The views of practitioners towards the use of video/console games were surprisingly favourable, given the negativity with which they are normally received (Marsh, in press). Sixty-three per cent disagreed with the statement that 'Playing video games is harmful', and 66% agreed with the statement that 'Children can learn skills from playing video games'. It may be the case that work by educators such as James Paul Gee (2003), who has demonstrated how such games embed key learning skills, has permeated educational discourse. The practitioners also indicated that they felt that children's popular culture had a role to play in education, with 63% agreeing that more activities based on this should be included in the curriculum.

### 3.3 Current use of popular culture in settings

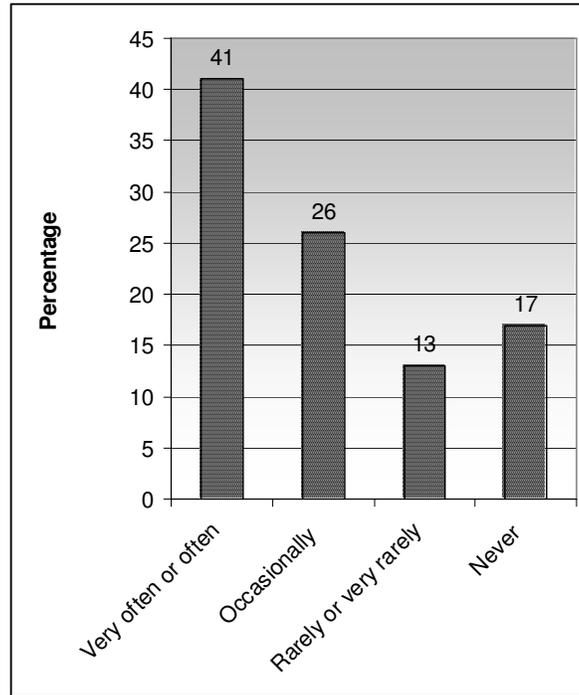
The evidence from the questionnaire suggested that the majority of practitioners did use popular culture in the foundation stage curriculum, at least occasionally (e.g. two or three times a half-term), as indicated by Figure 14.

**Figure 14: Frequency with which practitioners used popular TV or popular culture characters in role-play areas (n=493)**



The pattern was similar with regard to the use of popular culture to promote reading, writing, speaking and listening (Figure 15).

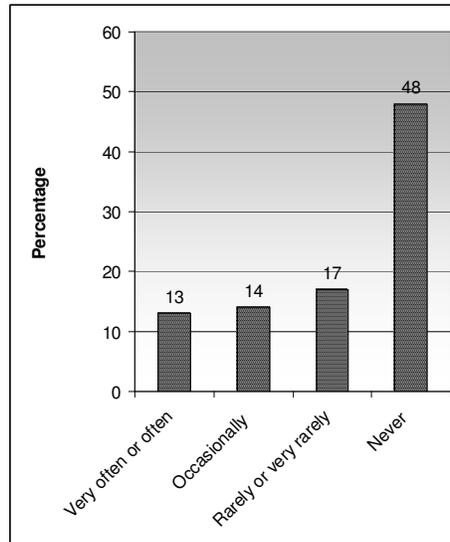
**Figure 15: Frequency with which practitioners used popular TV or popular culture characters to promote reading, writing, speaking and listening (n=483)**



Popular culture was used thematically, with popular characters and programmes providing props and narratives to infuse already well-established early years practices, such as role-play and small-world play. These data suggest that the use of popular culture in early childhood settings is more widespread than has been identified previously (Makin et al., 2001), which may be due to the increased prominence of the research and scholarship in this area and the permeation of this into professional discourse (e.g. in-service training, articles in professional magazines).

However, some aspects of popular culture were less extensively used. Comics have frequently met with the disapproval of educators (Marsh and Millard, 2000), inflected as they are with the scatological humour of childhood. However, the comics produced for this age group are generally benign affairs and, in fact, are designed to promote learning, with activities which require adult interaction often embedded within them. Despite this overt orientation to learning, the comics are infrequently used in early childhood settings, as Figure 16 indicates.

**Figure 16: Frequency of practitioners' use of comics (n=483)**

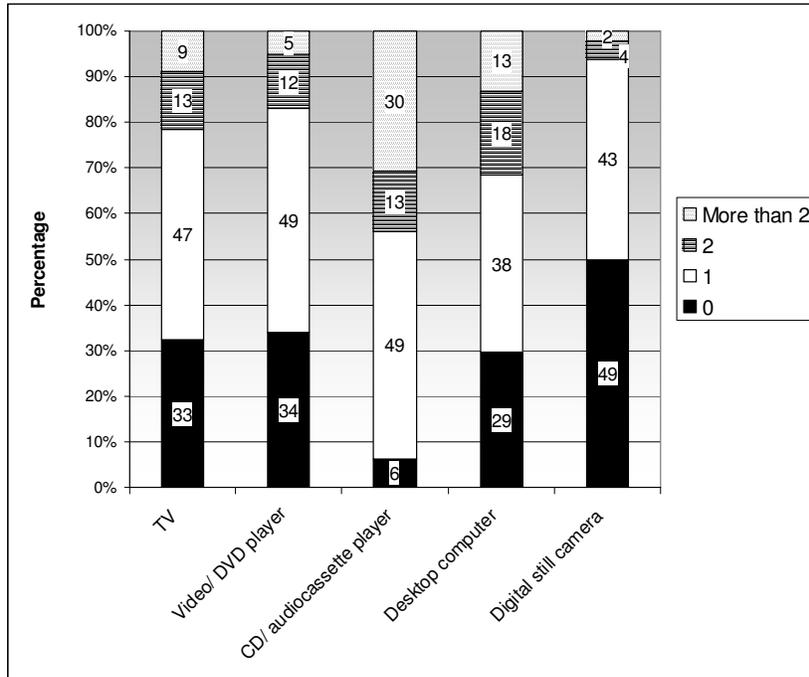


The reasons for this did not emerge from the data, but previous studies have found that educators often think comics present inferior reading tasks for children, with a lack of challenge and an over-reliance on images and colloquial language (Marsh and Millard, 2000; Millard and Marsh, 2001).

### **3.4 ICT resources**

Practitioners were asked to outline the resources they had for engaging in work that utilised new technologies. Whilst the majority of practitioners worked in settings that had at least one television, DVD/video player, desktop computer, CD/audiocassette player or digital still camera (see Figure 17), at least a third of practitioners were based in settings that did not own one of these, with the figure rising to 48% lack of ownership in the case of digital still cameras. This figure was higher in relation to video cameras – only 11% of settings owned one or more video cameras, a figure which is surprising, given the emphasis on recording children for formative assessment purposes (Clark and Moss, 2001). Eighteen per cent of practitioners worked in settings that did have access to an interactive whiteboard, which is somewhat encouraging (although only 7% of practitioners stated that they had used one in the week prior to the survey).

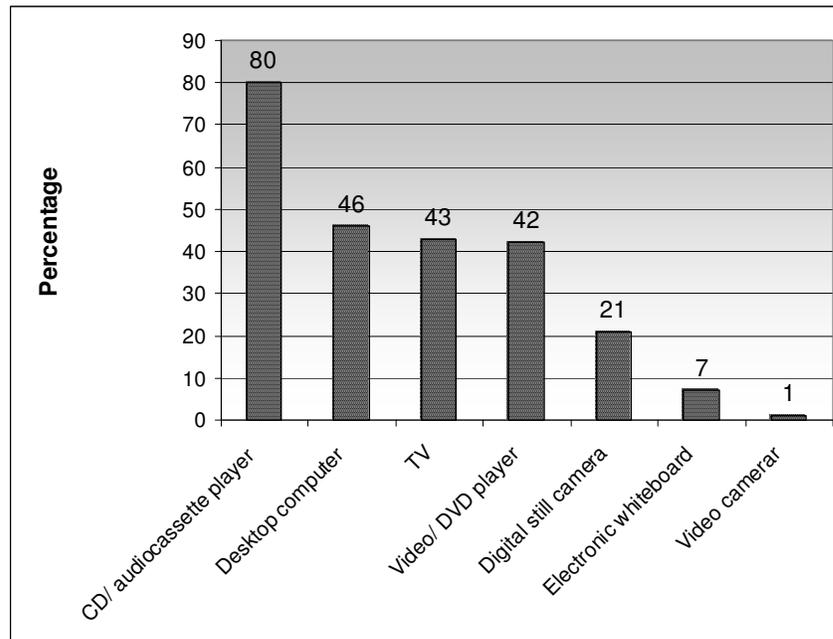
**Figure 17: Numbers of hardware in settings in which practitioners were based (n=510)**



Across all of this ownership of hardware, there were clear differences between practitioners who worked in maintained and non-maintained settings, with the latter less likely to state that their setting owned this hardware, or had multiple copies.

The ownership of hardware was reflected in the statistics relating to overall usage. Practitioners were asked which of the ICT hardware they had used in the week prior to the survey. Figure 18 indicates that there was little use of hardware other than CD/ audiocassette players, desktop computers, televisions and video/ DVD players.

**Figure 18: Percentage of practitioners who had used specific hardware in week prior to survey (n=514)**



There were significant differences in relation to level of qualification of the practitioners. Practitioners with Level 4 qualifications were more likely to use this hardware than others, unqualified staff least likely, which emphasises the importance of high quality training for early years staff.

Level of qualification also had an impact on the confidence practitioners expressed towards the use of various technologies, as did age. Practitioners expressed more confidence in their levels of expertise in some aspects of popular culture, media and new technologies than others. Seventy-four per cent stated that they were confident or very confident in their knowledge of children's popular cultural interests, with 55% expressing confidence in their knowledge of how to use these interests in the foundation stage curriculum. But only 32% expressed confidence in their ability to analyse film and television, and even fewer felt confident with photo-editing software (21%) and film-editing software (5%). Practitioners expressed more confidence about the use of digital cameras, although there was a sizeable minority (28%) that expressed a lack of confidence. Older practitioners were more likely to feel less confident, and this was also the case in relation to the use of computers. Twenty-five per cent of all practitioners stated that they did not feel very confident with computers (5% of these not at all confident). However, only 8% of the 18-21 age group felt this way, whilst 42% of the 46-65 age group expressed this lack of confidence. This appears to corroborate the claims of Lankshear and Knobel (2004) and others (Robinson and Mackey, in press), that there appears to be a 'digital divide' with regard to digital insiders and outsiders – between people who have been immersed in technology from a

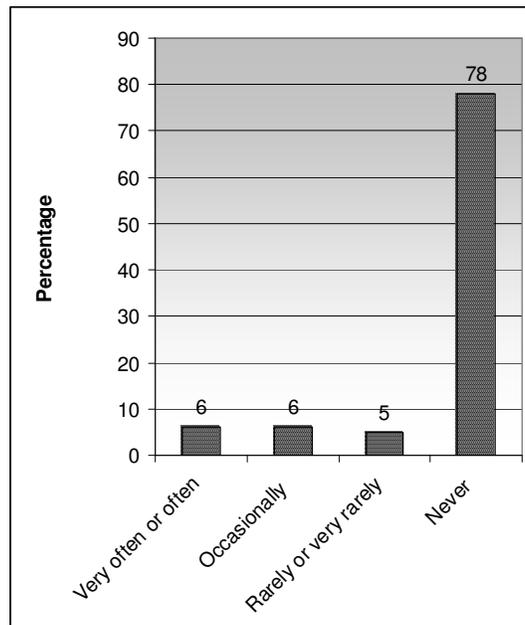
young age and people who have had to acquire the skills at a later stage in life.

### 3.5 Current use of computers

Practitioners were asked to specify how often they planned for the use of computers in the setting, both by individual children and by groups. A total of 32% of practitioners reported that they rarely (7%) or never (25%) planned for children to use computers individually. There was a significant difference between kinds of settings here, with practitioners in non-maintained settings much more likely never to plan for this use (30%). The number of practitioners that rarely or never planned for children to use computers as a group was higher, at 37%. Practitioners were asked if they had used computers in the setting in the week prior to the survey. Only 46% had. Children were therefore more likely to use a computer at home, if their families owned one (53% of children used a computer at home on a typical day), than in an early years setting. This has obvious consequences for the minority of children who do not have regular access to a computer at home.

When questioned in interviews about the uses made of the computers, the practitioners emphasised age-specific software which aimed to introduce 'key skills', such as phoneme/grapheme relationships, numbers and shapes. There was also regular use of art packages. Use of the internet was less frequent, as demonstrated in Figure 19. Practitioners were more likely to use specific websites with children if they had a broadband connection.

**Figure 19: Frequency of practitioners' use of internet in settings (n=493)**



Practitioners were asked to identify the websites they visited most frequently. They identified the websites linked to children's popular cultural and media interests (Table 13).

**Table 13: Most frequently visited websites in early years settings**

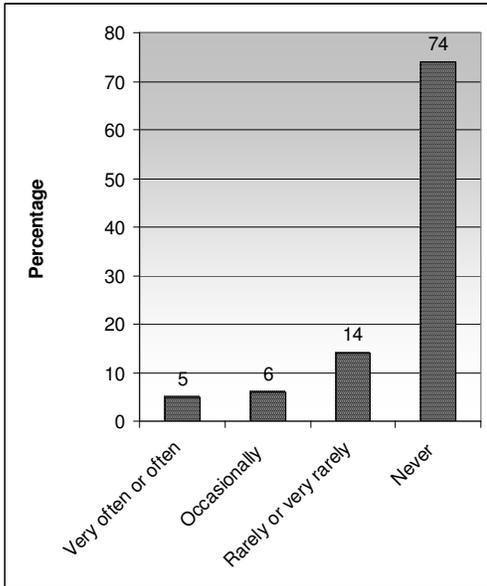
1. CBeebies
2. Bob the Builder
3. BBC
Joint 4 and 5. Noddy and Tweenies

This is an indication of the educational or 'edutainment' nature of these websites, which obviously met with approval from these practitioners.

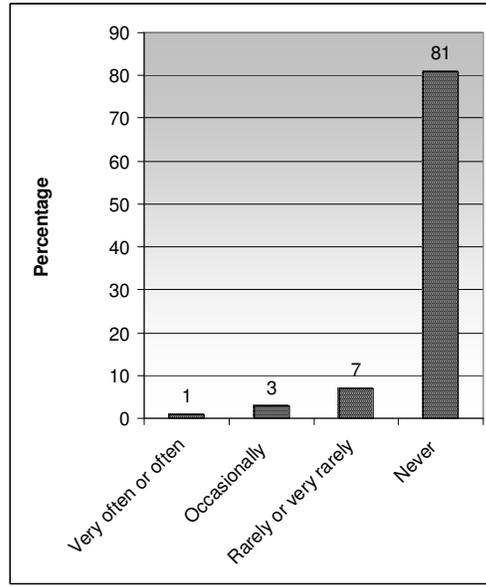
### **3.6 Current use of other technologies**

Perhaps unsurprisingly, given the numbers of settings which did not own certain technologies, and given the lack of confidence expressed by many practitioners in their abilities to use these technologies, there was less frequent use of digital still cameras, video cameras, photo-editing software and film-editing software, as suggested in Figures 20 to 23.

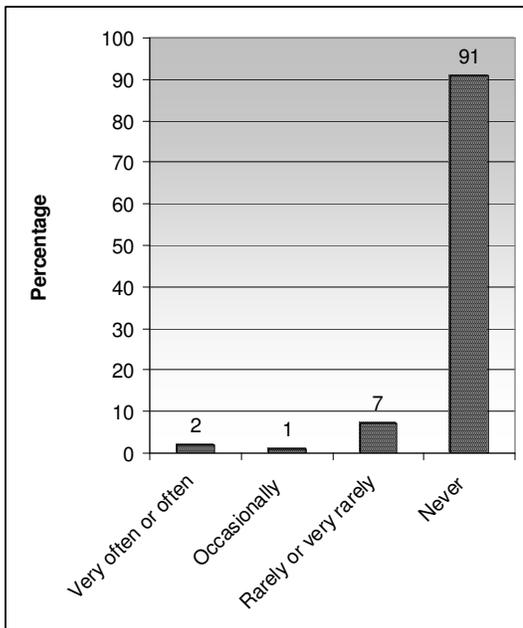
**Figure 20: Frequency of use of digital still cameras (n=486)**



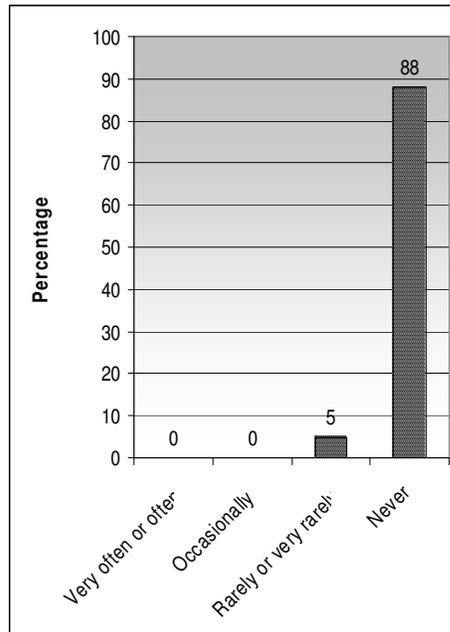
**Figure 21: Frequency of use of video cameras (n=482)**



**Figure 22: Frequency of use of photo-editing software (n=488)**



**Figure 23: Frequency of use of film-editing software (n=488)**

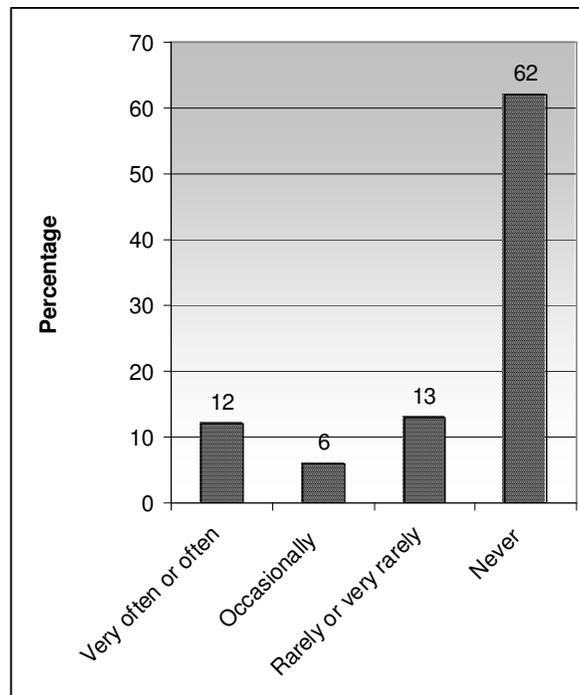


The majority of practitioners, therefore, made very little use of technologies for media production, although there are now materials which provide support for this task (see bfi, 2003)

### 3.7 Current level of media analysis

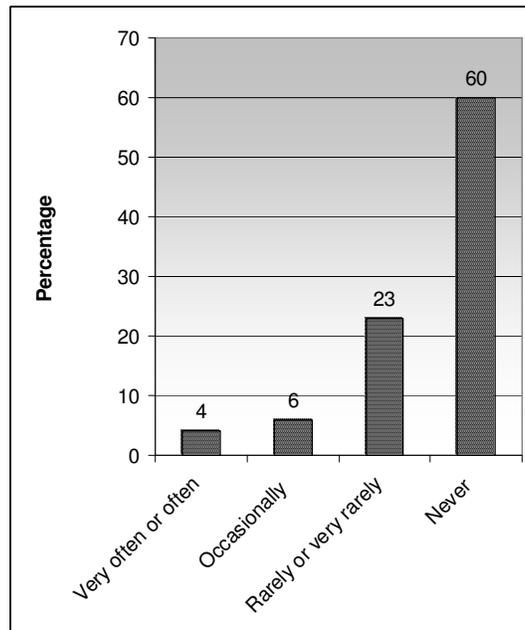
As suggested in Section 1, 'media literacy' includes the ability to analyse aspects of communication. Whilst a minority of practitioners did engage in this kind of activity in relation to film and television, the majority did not (see Figure 24).

**Figure 24: Frequency with which practitioners used TV/film to discuss media effects e.g. lighting/soundtrack (n=485)**



A number of practitioners did state that they used videos/DVDs in work with children (although some of this was clearly linked to specific phonics programmes, e.g. the 'Jolly Phonics' videos and 'Letterland' videos were named). Often, popular media texts were appropriated for specific purposes. For example, one setting stated that they used the '*video of dingle dangle scarecrow from 'Balamory' to learn the song for harvest festival performance*'. There were very few instances of television and film texts being analysed in order to develop 'media literacy'. This lack of attention to the analysis of media texts was not just about the lack of access to technologies, however. Even when the media referred to were paper-based, e.g. newspapers, they were rarely used in the settings (see Figure 25). This may be related to the reading abilities of children, but effective media analysis work on aspects of newspapers such as photographs and advertisements has been conducted with young children (O'Brien, 1998) and such material can be used to stimulate reflection and discussion.

**Figure 25: Frequency with which items in newspapers were discussed in settings (n=483)**



Again, this is an area which is in development, with examples of young children engaging in media analysis emerging in the literature (bfi, 2003). However, given that there are very few professional development materials available, it is hardly surprising that practitioners rarely engage in media analysis with children.

### **3.8 Practitioners' understandings of 'media literacy'**

Practitioners were asked to state what their understanding of the term 'media literacy' was. The majority of answers demonstrated that the practitioners defined the term in relation to 'access' and 'understanding', two of the three aspects identified by Ofcom (2004):

- *Ability to access information and use ICT effectively.*
- *Understanding of the uses and messages given by various types of media.*
- *Being able to interpret and understand information sourced from all forms of media, i.e. film, newspaper, TV, etc.*
- *Being able to understand what is being said in the magazine, TV programme or computer game.*
- *To have a good understanding and be well educated, learned and cultured and show skills and techniques relating to the various means of mass communication.*
- *Understanding of how media of many different types can give information, be accessed on different levels and influence the users.*

There were few references to the third aspect of 'media literacy', to create media texts, but that is perhaps due to the fact that practitioners have not had access to professional development relating to media education, in which they would be introduced to aspects of media production as well as analysis.

Sixty-eight per cent of practitioners stated they felt that 'media literacy' was important or very important for children's future development and, when asked to provide reasons for their answers, many focused, like the parents, on the needs of a generation that was growing up in a digital world:

- *Because the culture is now very digital and technical and children need to learn about it from an early age.*
- *Children are very much aware and competent in new technologies, especially computers and computer games. Future requirements might certainly require technologically skilled people*
- *Children need to have media literacy to enable them to progress. They need to be aware of the world around them to prepare them in life.*
- *I think children need to be media-literate so as to be confident with new technology as they get older.*
- *To use and understand new technology is important for in the future computers etc. will be a big part of life. Also media literacy will help children understand about the world they live in.*
- *We need to 'move with the times'.*

Practitioners were similarly committed to the need to develop children's skills, knowledge and understanding in relation to new technologies, with 80% stating that this was important or very important. As was the case with media literacy, comments which supported responses focused on the needs of a generation growing up in a technologically-mediated world:

- *As educators we need to have a great amount of knowledge on all agendas that will affect a child's future.*
- *As technology becomes more defined and extensive, and because more relied upon, knowledge and skills are necessary for this.*
- *As technology continues to advance apace, and is commonplace in so many educational and employment situations, a good grasp of how to use it will be imperative in future years.*
- *In our culture, more and more information is available through the use of new technologies and advances in technology have resulted in the wider availability of products. Early years skill in these allows children to access the modern world.*
- *It is the future – computers are everywhere today and children need the skills to use them.*

As the responses to these questions demonstrate, the majority of early years educators were committed to the development of children's skills and

knowledge in relation to media and technologies and need appropriate resources and professional development in order to realise these ideals.

### **3.9 Views on professional development in the area of ‘media literacy’**

One of the barriers to increased use of popular culture, media and new technologies in early childhood settings is lack of subject knowledge in the field (Marsh, in press). This certainly appeared to be the case in this study. Sixty-eight per cent of practitioners agreed that they would like more information on how to use popular culture productively in the foundation stage, 63% wanted more training on how to develop children’s understanding of media, 58% stated that they would like training on developing children’s media production skills, and 70% agreed that they would like more training on how to use ICT in the foundation stage.

### **3.10 Summary**

From the survey evidence, it would appear that the use of children’s popular culture to promote learning in early years settings is more prevalent than has been previously identified (Makin et al., 2001). Practitioners expressed generally positive views towards this material and acknowledged the role it played in children’s lives. However, although they exhibited equally positive views about the role of media and new technologies, practitioners were less confident in this area, with little evidence of media analysis and production being undertaken in early years settings. Given the general lack of professional development materials in this area, with the exception of materials produced by the bfi (2003), this is to be expected. There is a need to develop case studies of effective early years practice in the use of popular culture, media and new technologies in order that practitioners can draw from it. However, despite the now extensive body of work on the role such material can play in children’s social, emotional and cognitive lives (Dyson, 1997, 2002; Marsh, 2005), there are still few examples of action research projects that indicate how popular culture, media and new technologies can inform early years curricula and pedagogy. For that reason, this study incorporated action research into its design, in order to explore the effect that work in this area could have on children’s motivation and achievement and practitioners’ professional development. In the next section of this publication, the outcomes of this stage of the study are reported.

## SECTION FOUR

### CHANGING VIEWS AND PRACTICES: THE ACTION RESEARCH PROJECTS

#### 4.1 Introduction

In this section, the findings from the action research projects which took place in nine early years settings in England will be discussed. The data used to inform this analysis are outlined in Appendix 1. The settings are not considered separately; rather the over-arching themes which emerged from the data analysis are outlined.

Each of the nine settings involved in this stage of the project introduced an aspect of popular culture, media and new technologies into the communications, language and literacy area of learning in the foundation stage curriculum. They were free to choose any aspect and were supported with materials and resources from the project team where possible. The majority of settings focused on using popular culture in role play areas, but some did include work on the analysis of moving images and the production of digital texts. This emphasis on popular culture was, perhaps, inevitable, given the findings outlined in Section Three with regard to the prior level of confidence and expertise in media analysis and production. Although practitioners were introduced to approaches to this area on a project visit to the University of Sheffield, such input was insufficient to enable the majority of practitioners to feel able to engage in 'media literacy' approaches. Table 14 provides an overview of the projects undertaken:

**Table 14: Description of projects undertaken**

	<i>Project description</i>
<i>Setting 1</i>	<ul style="list-style-type: none"><li>• Role play area related to popular culture (<i>Spider-man</i>)</li><li>• Barbie writing area</li><li>• Use of comics to promote reading</li></ul>
<i>Setting 2</i>	<ul style="list-style-type: none"><li>• Role play area related to popular culture (<i>Bob the Builder</i>)</li></ul>
<i>Setting 3</i>	<ul style="list-style-type: none"><li>• Role play area related to popular culture (Buzz Lightyear and then <i>Bob the Builder</i>)</li><li>• Outdoor area linked to theme of <i>Bob the Builder</i></li><li>• Theme week in which different popular characters were focused upon each day and communications, language and literacy activities planned to relate to them</li></ul>
<i>Setting 4</i>	<ul style="list-style-type: none"><li>• Role play area related to popular culture (<i>Finding Nemo</i>)</li><li>• Children watched excerpts of films and discussed them</li><li>• Production of media boxes<sup>11</sup> for home use</li></ul>
<i>Setting 5</i>	<ul style="list-style-type: none"><li>• All areas of foundation stage related to popular cultural theme (<i>Balamory</i>)</li><li>• Outdoor area linked to the theme</li></ul>

---

<sup>11</sup> Media boxes are resources which promote parent-child interaction around a media text. They include games and props for language play and are modelled on story sacks (see Marsh and Thompson, 2001).

<i>Setting 6</i>	<ul style="list-style-type: none"> <li>• Role play area related to popular culture (<i>Big Cook, Little Cook</i>)</li> </ul>
<i>Setting 7</i>	<ul style="list-style-type: none"> <li>• Role play area related to popular culture (Batman)</li> <li>• Production of media boxes for home use</li> <li>• Use of comics to promote reading</li> </ul>
<i>Setting 8</i>	<ul style="list-style-type: none"> <li>• Use of comics to promote reading</li> <li>• Discussion of <i>Balamory</i> videos</li> </ul>
<i>Setting 9</i>	<ul style="list-style-type: none"> <li>• Use of digital cameras and editing software</li> <li>• Use of software to create animated stories</li> <li>• Use of Powerpoint software to create presentation</li> <li>• Use of bfi material <i>Starting Stories</i> to analyse films</li> </ul>

Although some of the settings had used popular cultural narratives and themes previously, this had not been extensive. In these projects, activities were planned to take place over a minimum period of three weeks, with some settings extending this to five and six weeks.

#### **4.2 Impact on practitioners' attitudes towards and approaches to the use of popular culture, media and new technologies in the foundation stage**

The projects were highly successful in developing settings' approaches to the use of popular culture, media and new technologies. All the practitioners involved reported that the projects had been effective in enhancing children's motivation and interest and raising achievement. They had had an impact in all the settings on practitioners' attitudes towards the use of this material:

*It's opened everybody's eyes and everybody has I think realised the benefits of it. I mean we were talking about it yesterday because we knew I was coming here and they all said how it had been a really big success. This next topic has seemed to be flat...*

They indicated that the ownership of the projects by children had been an important element:

*The thing that probably was the best from it was that they really owned it because they told us what they do, they told us the songs. They were very confident in using anything and talking about it, so it did give them a lot of ownership which is obviously when they are at their best. You didn't need to tell them, they were just using it to tell stories, they had seen it and were that familiar with it and if ever I pulled a book out, a 'Balamory' book, they'd seen the episode and they could tell you the story before you read it.*

They indicated that such work would now occur much more frequently in future planning:

*I think we've learned that this is an area we will develop and we will plan round it more in future...we always had, because we have wrap around care at our nursery, and we always felt that the home toys*

*should be at nursery, because the children are familiar with them, but we never thought of using it in the educational sense of planning. We never thought of developing activities around media, so I think we will do that more and more, as we have seen how children relate to it.*

Some practitioners also stated that they would integrate more work on technologies into their general planning:

*I think we'll be using it a lot more and integrating it and taking ideas more from what they do watch and are interested in at home. And integrating that into whatever we have planned anyway, so there is more use of IT and technology, cameras.*

Prior to the start of the project, the project team had undertaken inventories of settings' resourcing of popular culture, media and new technologies. These inventories were then repeated some weeks after the projects had been completed (not immediately afterwards, as some resources might still be in evidence). An analysis of the inventories undertaken at both these stages suggested that the projects did have an impact on settings' provision for aspects of popular culture, media and new technologies, as indicated in Table 15.

In addition, the projects had a positive impact on practitioners' attitudes towards and use of such material, as demonstrated when responses to questions asked in interviews prior to the project were compared with responses to questions in interviews on completion of the project. This is also documented in Table 15.

**Table 15: Changes in settings during project**

<b>Setting 1</b>			
<i>Resources identified prior to start of project</i>	<i>Resources identified at the end of the project</i>	<i>Attitudes to and use of popular culture, media identified at the start of the project</i>	<i>Attitudes to and use of popular culture, media identified at the end of the project</i>
<ul style="list-style-type: none"> <li>• Extensive evidence of resources related to popular culture - books, videos, dressing-up clothes.</li> <li>• ICT equipment in the setting, but not switched on or in use on day of visit: television, video/ DVD player; music CD/ audiocassette player; desktop computer.</li> </ul>	<ul style="list-style-type: none"> <li>• Extensive evidence of resources related to popular culture – comics, books, videos, dressing-up clothes.</li> <li>• ICT equipment in the setting, but not switched on or in use on day of visit: television, video/ DVD player; music CD/ audiocassette player; desktop computer.</li> </ul>	<ul style="list-style-type: none"> <li>• Positive attitudes expressed towards popular culture, had been used as means of motivating children.</li> <li>• Some use of ICT – desktop computer.</li> <li>• Little prior use of media texts.</li> </ul>	<ul style="list-style-type: none"> <li>• More positive attitudes expressed towards popular culture, more extensive use as means of motivating children and valuing their cultural capital.</li> <li>• More extensive use of ICT – desktop computer; digital camera; video camera.</li> <li>• More extensive use of media texts – discussion of films.</li> </ul>
<b>Setting 2</b>			
<ul style="list-style-type: none"> <li>• Evidence of some resources related to popular culture e.g. books, videos, dressing-up clothes.</li> <li>• ICT equipment in use on the day of the visit: music CD player/ audiocassette; laptop.</li> <li>• ICT equipment in the nursery, but not switched on or in use on day of visit: television, video/ DVD player; 3 desktop computers.</li> <li>• Some use of electronic toys, e.g. keyboard.</li> </ul>	<ul style="list-style-type: none"> <li>• Wider evidence of resources related to popular culture, e.g. books, toys, displays, dressing-up clothes.</li> <li>• ICT equipment in use on the day of the visit: music CD player/ audiocassette; 2 desktop computers.</li> <li>• ICT equipment in the nursery, but not switched on or in use on day of visit: television, video/ DVD player.</li> <li>• Some use of electronic toys, e.g. keyboard.</li> </ul>	<ul style="list-style-type: none"> <li>• Positive attitudes expressed towards popular culture, had been used as means of motivating children.</li> <li>• Some use of ICT – desktop computer and digital camera.</li> <li>• Little prior use of media texts.</li> </ul>	<ul style="list-style-type: none"> <li>• More positive attitudes expressed towards popular culture, more extensive use as means of motivating children and valuing their cultural capital.</li> <li>• Same use of ICT – desktop computer; digital camera.</li> <li>• Little use of media texts.</li> </ul>
<b>Setting 3</b>			
<ul style="list-style-type: none"> <li>• Evidence of some resources related to popular culture – books, videos, jigsaws, tapes, dressing-up clothes.</li> <li>• ICT equipment in use on the day of the visit: music CD/ audiocassette player.</li> <li>• ICT equipment in the nursery, but not switched on or in use on day of visit: television; video/ DVD player; desktop computer.</li> </ul>	<ul style="list-style-type: none"> <li>• Extensive evidence of resources related to popular culture - books, toys, displays, comics, dressing-up clothes, small-world play artefacts, jigsaws.</li> <li>• ICT equipment in use on the day of the visit: television; video/DVD player; music CD player/ audiocassette; desktop computer.</li> <li>• ICT equipment in the setting, but not in use on the day of the visit: V-tech laptop; digital blue camera.</li> </ul>	<ul style="list-style-type: none"> <li>• Positive attitudes expressed towards popular culture</li> <li>• Used in a limited way as a means of motivating children</li> <li>• Some use of ICT – desktop computer, disposable cameras.</li> <li>• Little prior use of media texts.</li> </ul>	<ul style="list-style-type: none"> <li>• More positive attitudes expressed towards popular culture, more extensive use as means of motivating children and valuing their cultural capital.</li> <li>• More extensive use of ICT – desktop computer; digital camera.</li> <li>• More extensive use of media texts – children discussing aspects of film.</li> </ul>

<b>Setting 4</b>			
<i>Resources identified prior to start of project</i>	<i>Resources identified at the end of the project</i>	<i>Attitudes to and use of popular culture, media identified at the start of the project</i>	<i>Attitudes to and use of popular culture, media identified at the end of the project</i>
<ul style="list-style-type: none"> <li>• Evidence of limited resources related to popular culture - books, videos.</li> <li>• ICT equipment in use on the day of the visit: music/CD player/audiocassette; desktop computer.</li> </ul>	<ul style="list-style-type: none"> <li>• More extensive evidence of resources related to popular culture – comics, books, role-play area, dressing-up clothes, soft toys, small world play artefacts, displays.</li> <li>• ICT equipment out but not in use on the day of the visit: television; video/DVD player; music/CD player/audiocassette; desktop computer.</li> </ul>	<ul style="list-style-type: none"> <li>• Negative attitudes expressed towards popular culture</li> <li>• Used in a very limited way.</li> <li>• Extensive use of ICT – desktop computers, ICT suite, interactive whiteboard.</li> <li>• Little prior use of media texts.</li> </ul>	<ul style="list-style-type: none"> <li>• More positive attitudes expressed towards popular culture, more extensive use as means of motivating children and valuing their cultural capital.</li> <li>• Same extensive use of ICT – desktop computers, ICT suite, interactive whiteboard reported (not evident on visit).</li> <li>• More extensive use of media texts – children discussing aspects of film.</li> </ul>
<b>Setting 5</b>			
<ul style="list-style-type: none"> <li>• Evidence of limited resources related to popular culture – dressing up clothes.</li> <li>• ICT equipment in use on the day of the visit: 1 music CD/audiocassette player; 1 desktop computer.</li> </ul>	<ul style="list-style-type: none"> <li>• More evidence of resources related to popular culture – CD, books, dressing-up clothes, jigsaw; soft toys, displays.</li> <li>• ICT equipment in use on the day of the visit: 2 music CD/audiocassette players; 2 desktop computers.</li> </ul>	<ul style="list-style-type: none"> <li>• Positive attitudes expressed towards popular culture</li> <li>• Used in a limited way as a means of motivating children</li> <li>• Extensive use of ICT – desktop computer; digital camera.</li> <li>• Little prior use of media texts</li> </ul>	<ul style="list-style-type: none"> <li>• More positive attitudes expressed towards popular culture, more extensive use as means of motivating children and valuing their cultural capital.</li> <li>• Same extensive use of ICT – desktop computers.</li> <li>• More extensive use of media texts – children discussing aspects of film.</li> </ul>
<b>Setting 6</b>			
<ul style="list-style-type: none"> <li>• Evidence of some resources related to popular culture - books, video tapes, jigsaws, soft toy, display.</li> <li>• ICT equipment in use on the day of the visit: desktop computer; interactive whiteboard.</li> <li>• ICT equipment out but not in use on the day of the visit: 2 music/CD player/audiocassettes; 3 desktop computers.</li> </ul>	<ul style="list-style-type: none"> <li>• More evidence of resources related to popular culture – comics, books, CD-Roms, video tapes, books, dressing-up clothes, soft toy, poster.</li> <li>• ICT equipment in use on the day of the visit: desktop computer.</li> <li>• ICT equipment out but not in use on the day of the visit: music/CD player/audiocassette; 1 desktop computer.</li> </ul>	<ul style="list-style-type: none"> <li>• Positive attitudes expressed towards popular culture</li> <li>• Used in a limited way as a means of motivating children</li> <li>• Extensive use of ICT – desktop computer; digital camera; interactive whiteboard.</li> <li>• Little prior use of media texts.</li> </ul>	<ul style="list-style-type: none"> <li>• More positive attitudes expressed towards popular culture, more extensive use as means of motivating children and valuing their cultural capital.</li> <li>• Same extensive use of ICT – desktop computers, ICT suite, interactive whiteboard.</li> <li>• Some use of media texts – children discussing television programmes.</li> </ul>

<b>Setting 7</b>			
<i>Resources identified prior to start of project</i>	<i>Resources identified at the end of the project</i>	<i>Attitudes to and use of popular culture, media identified at the start of the project</i>	<i>Attitudes to and use of popular culture, media identified at the end of the project</i>
<ul style="list-style-type: none"> <li>Evidence of some resources related to popular culture - books, story sacks, tapes, dressing-up clothes, jigsaws.</li> <li>ICT equipment out but not in use on the day of the visit: 1 music/CD player/audiocassette; 1 desktop computer.</li> </ul>	<ul style="list-style-type: none"> <li>Evidence of more resources related to popular culture – comics, books, story sacks, tapes, dressing-up clothes, artefacts, jigsaws.</li> <li>ICT equipment in use on the day of the visit: television/video player; music CD player/audiocassette; 1 desktop computer.</li> </ul>	<ul style="list-style-type: none"> <li>Positive attitudes expressed towards popular culture</li> <li>Used in a limited way as a means of motivating children</li> <li>Limited use of ICT - desktop computer.</li> <li>Little prior use of media texts.</li> </ul>	<ul style="list-style-type: none"> <li>More positive attitudes expressed towards popular culture, more extensive use as means of motivating children and valuing their cultural capital.</li> <li>More extensive use of ICT- desktop computer.</li> <li>Some use of media texts – children discussing television programmes.</li> </ul>
<b>Setting 8</b>			
<ul style="list-style-type: none"> <li>Evidence of some resources related to popular culture - books, videos, dressing-up clothes, jigsaws, display.</li> <li>ICT equipment out but not in use on the day of the visit: 2 televisions; video/DVD player; 1 music CD/audiocassette player; 1 desktop computer.</li> </ul>	<ul style="list-style-type: none"> <li>Evidence of a few more resources related to popular culture – comics, books, videos, dressing-up clothes, jigsaws, small-world play.</li> <li>ICT equipment in use on the day of the visit: 1 desktop computer.</li> <li>ICT equipment out but not in use on the day of the visit: 1 television; 1 music CD/audiocassette player.</li> </ul>	<ul style="list-style-type: none"> <li>Positive attitudes expressed towards popular culture</li> <li>Used in a limited way as a means of motivating children</li> <li>Moderate use of ICT - desktop computer.</li> <li>Little prior use of media texts.</li> </ul>	<ul style="list-style-type: none"> <li>More positive attitudes expressed towards popular culture, more extensive use as means of motivating children and valuing their cultural capital.</li> <li>Same moderate use of ICT- desktop computer.</li> <li>Some use of media texts – children discussing television programmes.</li> </ul>
<b>Setting 9</b>			
<ul style="list-style-type: none"> <li>Evidence of limited resources related to popular culture -videos, dressing-up clothes.</li> <li>ICT equipment in use on the day of the visit: music CD/audiocassette player.</li> <li>ICT equipment out but not in use on the day of the visit: television; video/DVD player; 3 desktop computers.</li> </ul>	<ul style="list-style-type: none"> <li>Evidence of more resources related to popular culture –books, videos, dressing-up clothes and artefacts.</li> <li>ICT equipment in use on the day of the visit: television/video player; music CD player/audiocassette; 2 desktop computers.</li> </ul>	<ul style="list-style-type: none"> <li>Positive attitudes expressed towards popular culture</li> <li>Used in a limited way as a means of motivating children</li> <li>Moderate use of ICT – desktop computer; digital cameras.</li> <li>Little prior use of media texts.</li> </ul>	<ul style="list-style-type: none"> <li>More positive attitudes expressed towards popular culture, more extensive use as means of valuing their cultural capital.</li> <li>More extensive use of ICT – desktop computers, digital cameras.</li> <li>Extensive use of media texts – children discussing television programmes.</li> </ul>

Further research is needed to determine how long-lasting the impact of these action research projects were on the practice of settings and the attitudes of staff, but this evidence does suggest that the action research projects were successful in establishing improved practices with regard to the use of popular culture, media and new technologies.

### 4.3 Impact on motivation and engagement

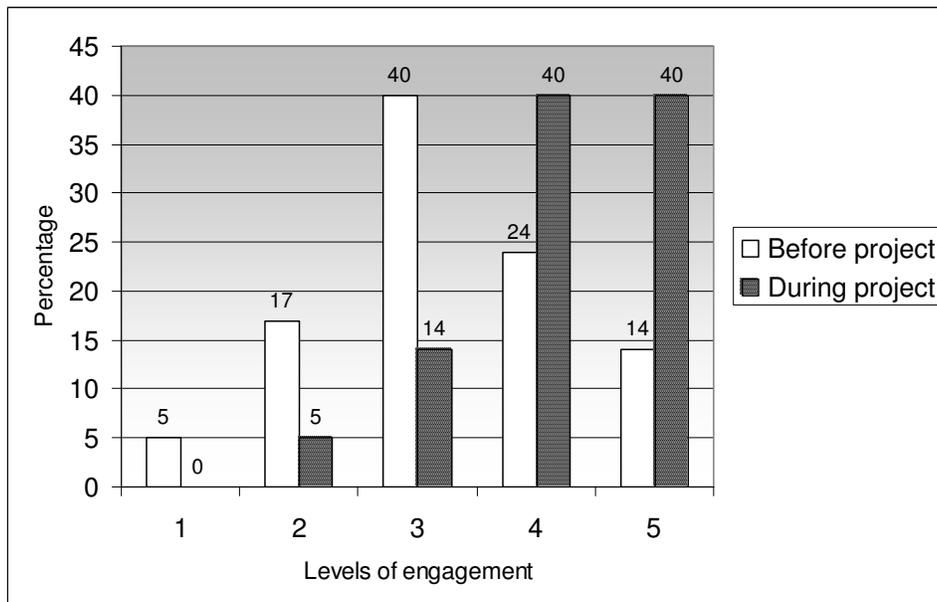
One of the aims of the study was to examine the impact of the action research projects on the motivation and engagement of children in curriculum activities related to communications, language and literacy. In order to identify this, practitioners were asked to undertake three observations of children prior to the project and three observations of children during the project, using *The Leuven Involvement Scale for Young Children* (Laevers, 1994) (see Appendix 1 for full details of this process). The levels of involvement are described as follows.

**Table 16: The Leuven Involvement Scale –level descriptors**

Level 1	No activity
Level 2	Frequently interrupted activity
Level 3	More or less continuous activity
Level 4	Activity with intense moments
Level 5	Sustained intense activity

A total of 84 observations of 14 children were used for this analysis. As Figure 26 indicates, during the project levels of engagement were higher, with 80% of scores at levels 4 and 5 (as opposed to 38% of scores at these levels prior to the project).

**Figure 26: Scores on The Leuven Involvement Scale prior to and during the project (n = 84)**



In the interviews, practitioners suggested that many of the children had been highly motivated by the activities:

*We played theme tunes to the group, the whole group, and it was amazing. Before the first two notes had played they were shouting out the names of the tunes, and, you know, we had done a lot of other music with them and we didn't have the same reaction. So they became so animated...they were dancing in their seats, wriggling to this music. Oh, it was fantastic, they were tapping their feet and when it came to the Woody song from Buzz Lightyear they were practically jumping up and joining in with the tunes, some of them more than others, but they recognised most theme tunes we didn't know at all.*

Although the majority of children had been motivated by the work, practitioners did emphasise the effect on children who previously had not necessarily engaged fully in nursery and school life:

*So I think we'll definitely will be using it [popular culture], and now we're thinking, 'Why haven't we used this before?' We just haven't thought about using it...and that has been really quite good for all the team to discover. You can get so much more out of it because the children are so enthusiastic about it, they are so engaged. Then also, children who don't necessarily talk that much about home, for example, or talk full stop, because this was something they were familiar with, or relate to, they were just talking all the time and wanted to share and tell about their experiences of seeing the programme.*

The level of excitement generated by the projects appeared to also affect the staff:

*It was really good and they've all got into it, haven't they? It was really good and we were excited as well.*

As the comments above indicate, all of the practitioners suggested that it wasn't just the focus children who responded well to the activities, the rest of the children were highly motivated as well, but their observations centred on the 63 children who were the focus group. Observations and photographs of this group of children indicate that, for the majority, the projects had enhanced their interest in taking part in communications, language and literacy activities. As previous studies (Dyson, 1997, 2002; Marsh, 2000) have indicated, allowing children to bring popular culture in from their home experiences to the site of the classroom can have an electrifying effect on children and orient them to schooled practices.

#### 4.4 Impact on progress in language and communications

Although no formal measures of children's attainment pre- and post-intervention were taken, practitioners reported that they felt that the projects had had a significant impact on the development of oracy:

*A lot of what we did was speaking and listening. Once we'd done the puppet show and invented the puppets, one day I walked around the corner and they'd put all the big blocks and made a puppet theatre and they were acting puppet stories. One of the little boys from the project, he's very hard to get onside, and he was PC Plum and I could hear him say, "One day, PC Plum..." and he's just, he has never used that story language before, at all.*

This was a strongly recurrent theme in the data. Children who had previously not spoken much in the setting were finding a voice through the projects:

*Shafeeq, who doesn't particularly talk a lot unless it's, "I'm gonna shoot you", that kind of thing, he really got into it and he wanted to tell us a story. His story came alive and it was alive for him and everyone was listening to his story. Well usually it's, "Come on, don't talk about guns, don't talk about that." So he really found a vessel to tell his story and to... I think he's got more friends now through it.*

For some children, the projects were giving them an opportunity to become the 'experts' and placed the practitioners in the position of learners. A nursery nurse in one of the settings recorded her thoughts on the project and echoed some of the practitioners' reflections in the interviews when she wrote:

*The strangest thing, I suppose, and slightly unnerving, was the realisation that the children had more knowledge than I did; they became the teachers with the names of characters, places and phrases that were new to me. I entered into a whole new learning experience, which was that I was learning new vocabulary, new concepts and new knowledge.*

Practitioners who worked with children who spoke English as an additional language also suggested that work on popular culture and media had boosted opportunities for language development:

*We introduced, we showed them the characters, which they introduced to us, we didn't need to really introduce them. They knew them all and they knew all the words from the video, all the language...it really, really, developed their language. But the nice thing about it was, we have a huge proportion of children with English as an additional language and to them, they could really relate to it. It was so familiar to them and they kept going back to it. It was something from home that they knew, which was great, because you could see the difference, they really were excited about it.*

The potential for popular culture and media to provide a familiar starting point for bilingual pupils in the early stages of acquiring English as an additional language has also been noted in previous projects (Marsh, 2000; Kenner, 2005; Orrellana, 1994). Seiter (1993) has suggested that popular culture is the 'lingua franca' of playgrounds and, as such, it can offer a means for children from different linguistic, cultural and economic backgrounds to build communication and forge friendships.

#### 4.5 Impact on progress in literacy

Again, although no formal measures of children's attainment pre- and post-intervention were taken, practitioners reported that they felt that the projects had had a significant impact on the development of literacy, in particular children's interest in and engagement with reading and writing activities:

*She'd got these and I obviously let her laminate them because I thought they were really good...then we turned around and they'd all got lolly sticks on the backs of paper and they were writing on the backs of the sticks, 'Miss Hooley' and 'PC Plum'. They just really took it to the extreme and the puppet theatre that they made with these wooden blocks, he, Derek, said, "I'm going to put an opening time" because he was getting annoyed that everybody was coming in and out. So I said, "Well, good idea". So I went back and it had got 'Open' and then I went back and it had got 'Closed' next to them and then I went back and it had got some times and the next thing there were seven of them beavering away on the carpet, sticking these pieces of paper up and they just made sign upon sign and really concentrating on this sign they were writing and really eager to get it up - which is obviously really a good literacy experience for them, it's about writing, isn't it, and doing it for a real [purpose]?*

Many of the practitioners reported that the project had provided motivation for writing and that some children had, therefore, demonstrated accelerated progress in a short space of time. There had also been some impact on literacy practices related to digital technologies in those settings which had incorporated this aspect into their planning. For example, one practitioner discussed how photo-editing had improved children's understanding of manipulation of visual images:

*Once they'd taken the photographs, we'd got them onto the laptops and the desktop and they had to go through a review process, "Oh, we don't like that one because", or "That one's not very good because" it was usually because there were fingers in. And peer coaching was fantastic, because they were saying to each other, "Well no you can't have that one, it's wonky".*

Although the children had managed this software, some of the practitioners did suggest that software for editing purposes, either film or photograph

editing, had not been designed with the needs of young children in mind, and this needed addressing.

The data do suggest that the projects had a significant impact on children's engagement in activities and their achievements in the areas of oracy and literacy. Further research is needed, however, on how long-term this impact is and if such gains can be sustained over time.

#### **4.6 Gender**

Although both boys and girls appeared to benefit greatly from the projects, practitioners frequently commented on the fact that boys in particular appeared to respond to the increased use of popular culture, media and new technologies:

*Even just having the 'Batman' logos on the top of paper was enough. We'd put these headed paper all over, in the construction area, in the water area, and the boys couldn't write enough, whereas when we usually put paper in these places, they ignore them.*

Again, this is a pattern which has been noted in other studies (Dyson, 1997, 2002; Marsh, 2001; PNS/ UKLA, 2005). However, both boys and girls respond well to these themes and practitioners were careful to ensure that activities were appropriate for both genders. For example, in the setting which introduced the Batman role play area, discussion took place about girl superheroes in order to ensure that girls did not feel inhibited about taking part.

#### **4.7 Parental responses**

The majority of parents in all settings had responded positively to the project. In the interviews, parents expressed positive attitudes towards their children's interest in popular culture and media. The practitioners gave numerous examples of how parents had demonstrated interest in the project whilst it was occurring, bringing in artefacts from home and generally showing enthusiasm, sometimes for the first time:

*As soon as they'd walk in they'd say, "Oh Balamory" ...which I had never ever seen them do about any display. Even at Christmas, I can remember because I'm a newly qualified teacher so this has been my first year and we stayed late and put all the Christmas displays up and I can remember none of them saying anything the next morning and I'm thinking, 'How can you not be excited?' But Balamory, they went, "Oh, it's Balamory, we watch Balamory, don't we?"*

The projects appeared to provide increased opportunities for parents to become involved in the life of the setting. As previous studies have suggested (Marsh and Thompson, 2001), work on popular culture and media can make

parents feel that the daily lives and practices of their families are being valued and that their knowledge can make a contribution to a topic, drawing on the families' 'cultural capital' (Bourdieu, 1990).

It was noticeable that the positive response of parents was consistent across settings, given that the social class groups of parents differed across them. The majority of parents from social groups ABC1 did demonstrate similar positive attitudes towards the projects as parents in social groups C2DE. For example, a middle-class parent in one of the settings wrote a letter to the head of the setting, expressing her delight:

*As a parent, I can see that Bernadette has thoroughly enjoyed exploring 'theme' tunes and well-known media characters over the last week. Because of her familiarity with 'Postman Pat' etc...Bernadette has been able to engage with the various activities and discussions on terms that are clearly recognisable to her. Consequently, much of her enjoyment has been down to the fact that she has felt 'safe' within her comfort zone of existing knowledge. At 3½ years old, this is the first time that Bernadette has organised herself at night-time to ensure that she is equipped for the following day's festivities...As parents, we are thrilled by the benefits gained from [name of setting's] approach to theme tunes and media characters. More and more of the same, please...*

One setting reported a middle-class parent stating that she would prefer nursery to be a sanctuary away from media because children got so much of it at home, but she appeared to be an isolated voice in comparison to the overwhelming majority of parents. The positive response by parents to such work has also been noted in Australian studies (Makin et al., 1999; Arthur, 2005).

#### **4.8 Impact on professional development**

The project had a positive impact on the professional development of the practitioners involved. They all indicated that they had learned a great deal from it and that it had enhanced their professional practice. Some suggested that it had encouraged them to consider further study, either on specific aspects of media and new technologies (such as film-making) or more generally:

*It's made me want to learn more and also update myself.*

In addition, practitioners also reported that the projects had been highly beneficial for the development of other staff in the setting and, indeed, nursery nurses in one setting wrote letters to the project team which detailed the ways in which they felt they had developed knowledge and understanding. Some practitioners indicated that being part of a project had been an important element for them. They were able to get ideas and support from outside the setting and the involvement of the University had provided further legitimacy for the work, work which otherwise might have been viewed as

contentious. This was a pattern noted by Millard (in press) in her survey of teachers who had been engaged in action research projects focused on media and popular culture.

#### **4.9 Successful factors**

An analysis of the data from this stage of the project suggests that there were particular factors which contributed to the success of an intervention in which an aspect of popular culture, media and new technologies was introduced into the curriculum. These were as follows:

*(i) Projects started with the interests of children*

In the most successful projects, practitioners had spent time prior to the project identifying the interests of children through discussions in group time. They did not introduce topics and characters they assumed to be of interest; instead, the subjects emerged from the stated preferences of children. However, universal knowledge of the topics used was not assumed; practitioners spent time introducing them to all children.

*(ii) Parents were closely involved with the projects from their inception*

Where projects were most successful, parents had been fully informed from the beginning and invited to participate in aspects of them (e.g. through taking home media boxes, being asked to bring in particular items). Given the wealth of knowledge parents demonstrated of their children's interest in popular culture, media and new technologies, it is clear that they have a valuable role to play in projects which focus on these aspects of children's lives. Children's popular culture is also a part of the families' 'cultural capital' (Bourdieu, 1990), and provides a valuable means of building bridges between homes and educational settings for both children and parents.

*(iii) The projects involved all members of staff*

The projects worked successfully because practitioners reported that all members of staff were involved and committed to them. In all cases, if senior managers were not the representatives of the setting directly involved in the project, they were highly supportive of it.

*(iv) Settings were supported by 'critical friends'*

Practitioners suggested that being part of the project had offered them support for new initiatives, support which was important because it provided new ideas, resources and the opportunity to work with a group of others with whom they could discuss progress. Being part of an externally-monitored research project also meant that practitioners were encouraged and supported in collecting data systematically. Although collecting data on children is an integral part of early years practice, the project did impose

additional demands and the advice and support offered by the project team in relation to the research methods were valued.

*(v) Activities were sustained and integrated*

Settings did not plan 'one-off' activities or events, but carefully planned integrated units of work which offered development and progression. One highly successful project had developed the themes from a children's television programme and had planned the curriculum in all six areas of learning from this programme. Practitioners felt that this enhanced the project further, as it enabled children to integrate aspects of their learning across the curriculum.

*(iv) Activities drew on a range of modes and media*

The most successful projects drew on a wide range of modes and media in their planning. Children enjoyed encountering, playing with and producing narratives across a broad range of multimodal<sup>12</sup> texts, as this reflected their encounters with media texts outside of early years settings.

#### **4.10 Summary**

All the action research projects undertaken in the nine settings were very successful in enhancing motivation and engagement of children, extending opportunities for children to engage in literacy and language activities and developing skills, knowledge and understanding in a range of areas. They had a positive impact on the professional development of the practitioners involved and on the future planning of these settings.

---

<sup>12</sup> 'Multimodal' refers to texts which draw from a range of communicational modes (e.g. print, visual, oral), not just one, and such texts are frequently encountered in the use of media and new technologies e.g. the internet, moving images on film and television.

## **SECTION FIVE**

### **CONCLUSIONS**

#### **5.1 Introduction**

In this final section, the implications of this study for policy, practice and research will be discussed. Initially, however, the key findings will be summarised.

#### **5.2 Key findings**

There are a number of key findings from this study, which can be summarised thus:

- (xi) Young children are immersed in practices relating to popular culture, media and new technologies from birth. They are growing up in a digital world and develop a wide range of skills, knowledge and understanding of this world from birth. Parents and other family members scaffold this learning, either implicitly or explicitly, and children engage in family social and cultural practices which develop their understanding of the role of media and technology in society.
- (xii) Parents report that their young children generally lead well-balanced lives, with popular culture, media and new technologies playing an important, but not overwhelming role, in their leisure activities. Engagement with media is generally active, not passive, and promotes play, speaking and listening and reading. In addition, engagement with media and new technologies appears to be a primarily social, not individual, activity, taking place most often with other family members and in shared parts of living spaces.
- (xiii) Parents are generally very positive about the role of media in their young children's social, emotional, linguistic and cognitive development. They feel that their children learn a great deal from film and television and that it has a positive impact on many aspects of their lives.
- (xiv) Parents support their children's interest in popular culture, media and new technologies through the provision of resources and interactions with children (e.g. shared play, visits to theme parks) around their interests.
- (xv) Parents feel that media education should be included in the school curriculum; many think this should be so from when children are very young. Parents would also welcome further work in schools on new technologies. They feel that this is needed in order to prepare children for the demands of the new technological age.
- (xvi) Early years practitioners generally express positive attitudes towards the role of popular culture, media and new technologies in children's lives, including demonstrating

- positive attitudes towards their use of video/console games. However, they do have concerns about the perceived amount of time children spend on these activities.
- (xvii) The majority of early childhood practitioners have used popular culture to promote learning in the communications, language and literacy curriculum at least occasionally. There is less extensive use of media and new technologies.
  - (xviii) Early years practitioners would like more professional development on the use of ICT, media and popular culture to promote learning in the foundation stage.
  - (xix) There is disparity in the provision of resources for work on media and new technologies in maintained and non-maintained settings. Practitioners based in maintained settings reported being generally better equipped with technological hardware and software than practitioners based in non-maintained settings.
  - (xx) The introduction of popular culture, media and/or new technologies into the communications, language and literacy curriculum has a positive effect on the motivation and engagement of children in learning. Practitioners report that it has a positive impact on children's progress in speaking and listening and literacy, although the present study did not include methods which could determine if this was the case.

### **5.3 Implications for policy and practice**

This study has a number of implications for policy and practice in early childhood education. These can be summarised thus:

- (i) There needs to be further attention paid to the needs of early years practitioners with regard to subject knowledge and pedagogical content knowledge in the use of media and new technologies.
- (ii) Professional development materials and programmes which address these areas need to be developed and disseminated if early years settings are to develop curricula which attend to the needs of the 'new media age' (Kress, 2003).
- (iii) Non-maintained settings in particular need to be supported in the acquisition and use of technological hardware and software, although this is the case for all settings in relation to some technologies (i.e. digital cameras, video cameras, interactive whiteboards).
- (iv) Given the findings with regard to parental knowledge of, and support for, children's use of media, popular culture and new technologies, family literacy/ learning programmes need to draw on these aspects of families' cultures in order to ensure relevance and enhance interest.
- (v) Content producers (e.g. television programme producers, film companies) could work more closely with early years educators in designing and producing resources which can be incorporated into

the foundation stage curriculum. Given the positive impact of the introduction of media narratives and characters in the curriculum, there is scope for further collaboration and development.

- (vi) Software producers need to be more attuned to the needs of very young children in the development of software which can facilitate media analysis and production. It should not be assumed that the children's age precludes such work; many young children demonstrate a wide range of skills and knowledge in relation to technologies. More extensive collaboration with early years educators is needed in order to develop appropriate software.

#### **5.4 Implications for research**

Whilst this study has provided a wide range of information on various aspects of young children's engagement with popular culture, media and new technologies, more extensive research is needed if we are to develop further understanding of children's capabilities, needs and potential in this area. Specifically, the following priorities for future research are suggested:

- (i) Longitudinal, observational studies of children's use of popular culture, media and new technologies in homes and early years settings are needed in order to determine the contexts in which skills, knowledge and understanding develop and how parents and educators can best scaffold and extend this development.
- (ii) Closer studies are needed of the impact of technological developments on the communicative practices of young children, in particular the specific demands made by various media and how they inter-relate. The relationship between young children's reading and writing of print-based texts and the receptive and productive processes in which they engage in relation to media texts needs a more focused analysis.
- (iii) Studies with an experimental design are needed in order to determine the impact of the introduction of culture, media and new technologies into the foundation stage curriculum on children's progress and attainment in speaking and listening, reading and writing.
- (iv) Further action research projects based on these themes should be developed, which will enable practitioners to create collaborative networks that provide opportunities for professional development.

#### **5.5 Summary**

This study has offered a variety of perspectives on the changing worlds of very young children in contemporary society. It has provided evidence of the extensive nature of children's engagement with popular culture, media and new technologies and suggests that they are competent and confident navigators of digital worlds. There is now a need for educators to respond to

the challenge this presents by developing curricula and pedagogy which enable children to build on their digital 'funds of knowledge' (Moll et al., 1991) and provide them with opportunities to engage fully with the technological, social and cultural demands of the knowledge economy (Luke and Carrington, 2002). Not to do so is to assign our youngest children to an education which, although generally successful in preparing children for encounters with the written word on paper, is not yet as successful in ensuring that they are proficient with the multimodal, multimedia texts and practices which permeate everyday life in the twenty-first century.

## REFERENCES

- Arthur, L. (2005) Popular culture: views of parents and educators. In J. Marsh (ed) *Popular Culture, New Media and Digital Technology in Early Childhood*. (pp165-182) London: RoutledgeFalmer.
- Atkin, C., Rose, A. and Shier, R. (2005) *Provision of, and learner engagement with, adult literacy, numeracy and ESOL support in rural England: A comparative case study*. London: NRDC.
- Birkerts, S. (1998) Sense and Semblance: The implications of virtuality. In Cox, B. *Literacy is Not Enough: Essays on the Importance of Reading*. Manchester: Manchester University Press.
- Bourdieu, P. (1990) *The Logic of Practice*, trans. R.Nice, Cambridge: Polity Press (original work published in 1980).
- British Film Institute (bfi) (2003) *Look Again: A Teaching Guide to using Film and Television with Three-to-Eleven-Year Olds*, London: BFI Education.
- Buckingham, D. (2000) *After the Death of Childhood: Growing Up in the Age of Electronic Media*. Cambridge: Polity Press
- Buckingham, D. (2003) *Media Education: Literacy, Learning and Contemporary Culture*, Oxford: Polity.
- Buckingham, D. (2004) *The Media Literacy of Children and Young People: A Review of the Research Literature*. London: Ofcom.
- Cairney, T.H. and Ruge, J. (1998) *Community Literacy Practices and Schooling: Towards Effective Support for Students*. Canberra: DEET.
- Clark, A. and Moss, P. (2001) *Listening to Children: The Mosaic Approach*. London: National Children's Bureau.
- Cohen, S. (1987) *Folk Devils and Moral Panics: The Creation of the Mods and Rockers* (2<sup>nd</sup> ed.). Oxford: Blackwell.
- Dyson, A.H. (2002) *Brothers and Sisters Learn to Write: Popular Literacies in Childhood and School Cultures*, New York: Teachers College Press.
- Dyson, A.H. (1997) *Writing Superheroes: Contemporary Childhood, Popular Culture, and Classroom Literacy*, New York: Teachers College Press.
- Giddens, A. (2000) *Runaway World : How Globalization is Reshaping Our Lives*, London: Routledge.
- Gillen, J., Gamannossi, B.A. and Cameron, C. A. (2005) 'Pronto, chi parla? (Hello, who is it?): Telephones as artefacts and communication media in

- children's discourses. In J. Marsh (ed) *Popular Culture, New Media and Digital Literacy in Early Childhood*. London: RoutledgeFalmer.
- Hall, N., Larson, J. and Marsh J. (eds) (2003) *Handbook of Early Childhood Literacy*. London, New Dehli, Thousand Oaks, CA: Sage.
- Holloway and Valentine (2003) *Cyberkids: Children in the Information Age*. Sage, London.
- Ito, M, (2004) *Technologies of the Childhood Imagination: Yugioh, Media Mixes, and Otaku* . Paper presented at the Digital Generations: Children, Young People and New Media Coference, Insititue of Education, University of London, July 2004. Accessed at: <http://www.itofisher.com/mito/publications.html>. July 2005.
- Kenway, J and Bullen, E. (2001) *Consuming Children: Education – Entertainment – Advertising*, Buckingham: Open University Press.
- Knobel, M. (in press) Technokids, Koala Trouble and *Pokémon*: Literacy, new technologies and popular culture in children's everyday lives. In J. Marsh and E. Millard (eds) *Popular Literacies, Childhood and Schooling*. London: RoutledgeFalmer.
- Kress, G. (2003) *Literacy in the New Media Age*, London: Routledge.
- Laevers, F (1994), *The Leuven Involvement Scale for Young Children*, LISYC Manual and video tape, Experimental Educational Series No. 1. Leuven, Belgium: Centre of Experimental Studies.
- Lankshear, C. and Knobel, M. (2004) Text-related roles of the digitally 'at home'. Paper presented at the American Education Research Association Annual Meeting, San Diego, April 15, 2004.
- Leach, E. (1968) *A Runaway World: the 1967 Reith Lectures*, Oxford: Oxford University Press.
- Livingstone, S. and Bober, M. (2005) *UK Children Go Online: Final report of key project findings*. London: London School of Economics and Political Science.
- Livingstone, S. and Bovill, M. (1999) *Young People, New Media: Report of the Research Project: Children, Young People and the Changing Media Environment*. London: London School of Economics and Political Science.
- Luke, C. (1999) What next? Toddler Netizens, Playstation Thumb, Techno-literacies, *Contemporary Issues in Early Childhood*, 1, 1, pp95-100.
- Luke, A. & Carrington, V. (2002). Globalisation, literacy, curriculum practice. In R. Fisher, M. Lewis & G. Brooks (Eds.) *Language and Literacy in Action*. London: Routledge/Falmer.

- Mackey, M. (2002) *Literacies Across Media: Playing the Text*. London: RoutledgeFalmer.
- Makin, L., Hayden, J., Holland, A., Arthur, L., Beecher, B., Jones Diaz, C. & McNaught, M. (1999). *Mapping Literacy Practices in Early Childhood Services*. Sydney: NSW Department of Education and Training and NSW Department of Community Services.
- Marsh (in press) Tightropes, tactics and taboos: Pre-service teachers' beliefs and practices in relation to popular culture and literacy In J. Marsh and E. Millard (eds) *Popular Literacies, Childhoods and Schooling*. London: Routledge.
- Marsh, J. (2005a) Introduction: Children of the digital age. In J. Marsh, (ed) (2005) *Popular Culture, New Media and Digital Technology in Early Childhood*. London: RoutledgeFalmer.
- Marsh, J. (2005b) Ritual, performance and identity construction: Young children's engagement with popular cultural and media texts . In J. Marsh, (ed) (2005) *Popular Culture, New Media and Digital Technology in Early Childhood*. London: RoutledgeFalmer.
- Marsh, J. (2004a) The Techno-literacy practices of young children, *Journal of Early Childhood Research*, 2, 1: 51-66.
- Marsh, J. (2004b) *BBC Child of Our Time: Young Children's Use of Popular Culture, Media and New Technologies*. Sheffield: University of Sheffield.
- Marsh, J. (2000) Teletubby Tales: Popular Culture in the Early Years Language and Literacy Curriculum, *Contemporary Issues in Early Childhood*, Vol.1, 2, pp119-136.
- Marsh, J. and Millard, E. (eds) (in press) *Popular Literacies, Childhoods and Schooling*. London: Routledge.
- Marsh, J. and Millard, E. (2000) *Literacy and Popular Culture: Using Children's Culture in the Classroom*, London: Paul Chapman.
- Marsh, J. and Thompson, P. (2001) Parental Involvement in Literacy Development: Using Media Texts, *Journal of Research in Reading*, 24, 3, pp 266-278.
- Millard, E. and Marsh, J. (2001) Sending Minnie the Minx Home: Comics and Reading Choices, *Cambridge Journal of Education*, 31,1, 25 –38.
- Merchant, G. (2005) *Barbie meets Bob the Builder at the Workstation: The word on screen/ E-mergent literacies in the early years*. In J. Marsh (ed) *Popular Culture, New Media and Digital Technology in Early Childhood*. (pp165-182) London: RoutledgeFalmer.

O'Brien, J. 1998, 'Experts in Smurfland', In *Critical Literacies in the Primary Classroom*, ed. M. Knobel & A. Healy, Primary English Teaching Association, Newtown, New South Wales.

Ofcom (2004) *Ofcom's strategies and priorities for the promotion of media literacy: A Statement*. Accessed at: [http://www.ofcom.org.uk/consult/condocs/strategymedialit/ml\\_statement/strat\\_prior\\_statement.pdf](http://www.ofcom.org.uk/consult/condocs/strategymedialit/ml_statement/strat_prior_statement.pdf), March 2005

Orellana, M.F. (1994) Appropriating the Voice of the Superheroes: Three Preschoolers' Bilingual Language Uses in Play, *Early Childhood Research Quarterly*, 9, pp171-193.

Pahl, K. (2002) 'Ephemera, Mess and Miscellaneous Piles: Texts and Practices in Families', *Journal of Early Childhood Literacy*. Vol. 2, 2: 145-165.

PNS/ UKLA (2005) *Raising Boys' Achievement in Writing*. London: HMSO.

QCA (2000) *Curriculum Guidance for the Foundation Stage*, London: HMSO.

Rideout, V.J., Vandewater, E.A.. and Wartella, E.A. (2003) *Zero to Six: Electronic Media in the Lives of Infants, Toddlers and Preschoolers*. Washington: Kaiser Foundation.

Robinson, M. (1997) *Children Reading Print and Television*, London: Falmer Press.

Robinson, M. and Turnbull, B. (2005) Verónica: An asset model of becoming literate. In J. Marsh, (ed) *Popular Culture, New Media and Digital Technology in Early Childhood*. London: RoutledgeFalmer.

Robinson, M. and Mackey, M. (2003) 'Film and Television' in N.Hall, J.Larson and J.Marsh (eds) *Handbook of Early Childhood Literacy*, London, New Dehli, Thousand Oaks, CA: Sage.

Robinson, M. and Mackey, M. (in press) Assets in the classroom: Comfort and competence with media among teachers present and future. In J. Marsh and E. Millard (eds) *Popular Literacies, Childhoods and Schooling*. London: Routledge.

Roszkowski, M.J. and Bean, A.G. (1990) Believe it or not! Longer questionnaires have lower response rates. *Journal of Business Psychology*, Vol. 4:495-509.

Seiter, E. (1993) *Sold Separately: Children and Parents in Consumer Culture*, New York: Rutgers University Press.

Singer, D.G. and Singer, J.L. (2001) *Handbook of Children and the Media*. London: Sage.

Winn, M. (1985) *The Plug-in Drug : Television, Children, and the Family* (Revised edition). London: Penguin.

## **APPENDIX 1: METHODOLOGY**

### **STAGE ONE**

In Stage One of the project, a stratified random sample was drawn in order to identify ten Local Education Authorities (LEAs) across England to take part in the study. One of each category of LEA indicated in Table A1 was randomly selected in order to ensure a representation in terms of geographical location in England (North, Midlands, South) and also type of LEA (Metropolitan, Shire, Unitary).

**Table A1: Types of LEA included in sample**

Inner London
Outer London
North Shire
Midland Shire
South Shire
North Unitary
Midlands Unitary
South Unitary
North Metropolitan
Midlands Metropolitan

LEAs from each category (in each cell) were chosen randomly, contacted and invited to take part in the survey. If the LEAs initially contacted did not wish to take part, then a second LEA from that category was randomly chosen and approached, and this sequence was maintained until an LEA in that category had agreed to take part. Once ten LEAs had been recruited to the project, letters were sent out to all maintained and non-maintained early years settings in each LEA, informing them about the project. Follow-up telephone calls were then made randomly to settings until 20 settings in each LEA had been recruited, 200 in total. This resulted in a wide range of types of early years settings being included in the project: nursery schools, nursery classes, foundation stage settings and classes, children's centres, private day nurseries, playgroups and toddler groups.

Each setting was sent sufficient numbers of questionnaires to be completed by all parents and carers whose children, aged 0-6, attended the setting. This questionnaire was based on previous surveys undertaken by Marsh (2004) and also drew from the interview schedule used in the *Zero to Six* study (Rideout et al., 2003). Settings were also sent sufficient numbers of questionnaires for all adult workers at the setting. A Freepost, self-addressed envelope was included for return of all of the questionnaires by settings. A total of 120 settings returned the parents' questionnaires, an overall response rate of 60%; 104 settings returned the practitioners' questionnaires, an overall response rate of 52%.

The response rates from individual settings for each of the questionnaires varied. The overall response rate for the parents' and carers' questionnaires was 27% (n = 1865, 13 of which could not be used in the data analysis because they related to children older than 6), and for the practitioners' questionnaire, 45% (n = 524). Response rates were calculated by dividing the number of questionnaires returned for each category (parents/carers and practitioners) by the number of questionnaires sent out in each category and multiplying by 100. Some settings asked for more questionnaires to be sent to them than necessary, e.g. in case further child places were taken up in the near future. However, it was decided not to try and factor this into the response rate calculation and so response rates took account only of the total number sent out, including any questionnaires sent out which were additional to settings' needs, even though this had a negative impact on response rates.

Various factors may have impacted on these response rates. A number of settings which had not returned questionnaires were contacted in order to identify reasons. Reasons proffered included:

- Practitioners said that parents had not wished to take part.
- Settings had been too busy to send the questionnaires out.
- Relevant staff in settings had not received the questionnaires as they had not been passed on by managers/owners.

Other factors could have included the length of questionnaire and the level of interest respondents may have had in the subject. However, as suggested in Section One of the report, whilst these response rates are comparable with other postal surveys of educational practitioners (Atkin, Rose and Shier, 2005), concerns are raised by low response rates in that non-respondent bias may occur. Some empirical studies have been conducted which have suggested that this is not necessarily always the case and that non-response bias is not always present in responses to surveys with low response rates (Roszkowski and Bean, 1990). Nevertheless, in the present study, it could be argued that parents were more likely to respond if they had an interest in the topic and, therefore, the media usage of children in these families might be different than in the wider population. However, many of the statistics regarding children's use of media broadly correlate with the US study (Rideout et al., 2003), which suggests that the figures are not aberrant.

### **Data entry**

The data from the questionnaires were entered into a database using the Statistical Package for the Social Sciences (SPSS). A check was undertaken to ascertain the accuracy of data input (10% of data inputted by research assistants were double-checked). The data included the following information about participants:

*Children (Questionnaire for Parents/carers):* Age; Gender; Social class; Ethnicity.

*Practitioners (Questionnaire for Practitioners):* Age; Level of qualification; Type of setting.

The social class classifications used were those utilised by social science market research, based on occupation, and are categories which have been used in prior research on children's and families' use of media (Livingstone and Bovill, 1999; Livingstone and Bober, 2005).

**Table A2: Social Class Classifications**

<b>Social grade</b>	<b>Social group</b>	<b>Occupations</b>
<i>A</i>	Upper middle class	Higher managerial, administrative or professional occupations, top level civil servants
<i>B</i>	Middle class	Intermediate managerial, administrative or professional
<i>C1</i>	Lower middle class	Supervisory or clerical and junior managerial, administrative or professional
<i>C2</i>	Skilled working class	Skilled manual workers
<i>D</i>	Working class	Semi-skilled and unskilled manual workers
<i>E</i>	Those at lowest levels of subsistence	All those entirely dependent on the state long term, low paid casual workers, those without regular income.

The level of qualification of practitioners was identified as follows:

**Table A3: Early Years Qualifications**

<i>Unqualified</i>	No early years qualification
<i>Level 1</i>	CACHE Foundation Award in Caring
<i>Level 2</i>	BTEC First Diploma in Early Years; CCE; Certificate in Pre-School Practice; Introduction to Pre-School Practice; NVQ2 Early Years Care and Education
<i>Level 3</i>	BTEC Teaching Assistants; Diploma in Childcare and Education; Diploma in Nursery Nursing; Diploma in Pre-School Practice; National Certificate Early Years; National Diploma Early Years; NNEB; NVQ3 Early Years Care and Education; NVQ3 Teaching Assistants.
<i>Level 4</i>	Advanced Diploma in Childcare and Education (ACDE); BA (Hons) Early Childhood Studies; BA or BEd (Hons) with QTS; Diploma in Post-Qualifying Studies (DPQS); HNC Early Childhood Studies; PGCE Early Years.
<i>Other</i> <sup>13</sup>	None of the above.

<sup>13</sup> Examples of 'other' given: Degrees in Psychology, Certificate in Education; PGCE; NNEB. Majority in this category had Level 4 qualifications.

## Profile of sample

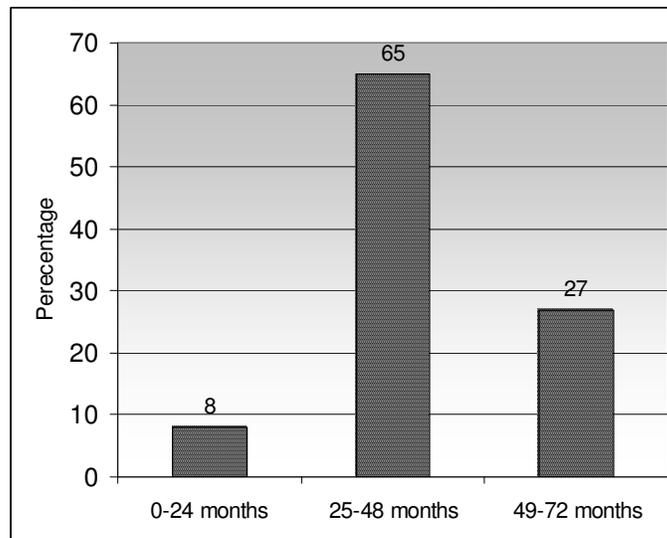
### *Parents, carers and children*

The report is based on the responses of 1,865 parents and carers of children aged 3 months to 6 years. The majority of the respondents, 91%, were mothers, with only 6% of fathers responding (0.4% stated that they were carers and the rest were classified as 'other' or the information was missing).

### *Age of children*

The mean age of children in the study was 3 years, 4 months. Figure A1 outlines the age profile of children:

**Figure A1: Age profile of children in the study (in months) (n=1,852)**



### *Class background*

The social class categories of parents were determined by nature of employment of the highest-paid worker in the household. The largest group represented was C1, which is lower middle class (42% of sample). For the purpose of analysis, social groups A, B and C1 were grouped (upper and middle-class, total 66% of sample) and social groups C2, D and E were grouped (working-class, total 30% of sample).

### *Ethnic background*

Seventy-eight per cent of the sample identified their children as white. Eleven per cent identified their children as Asian or Asian British, 4% Black or Black British, 1% Chinese and 5% Dual Heritage.

For the purposes of analysis, the category 'Black and Minority Ethnic' includes Asian or Asian British, Black or Black British, Chinese, Dual Heritage and any other Black or Minority Ethnic background. The category 'White' includes white British, white Irish and any other white background.

### *Practitioners*

This report is based on the response of 524 early years practitioners who worked in maintained and non-maintained settings in England.

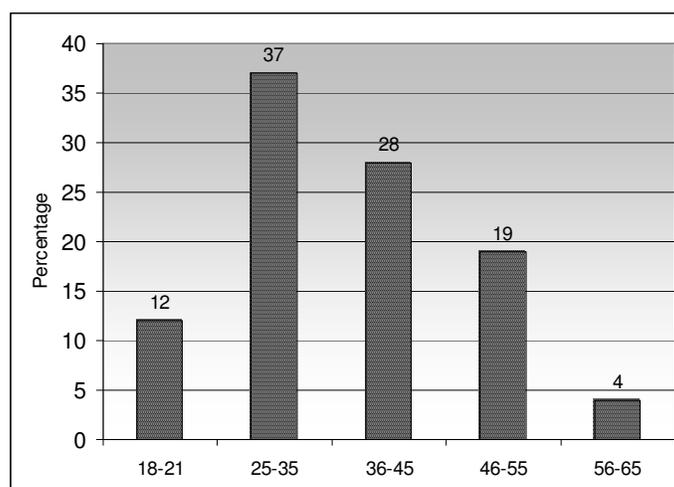
Ninety-five per cent of practitioners were female, and 2% male. Fifty-three per cent worked full-time, 42% part-time and 1% were volunteers. Eighty-eight per cent were white, 10% Black and Minority Ethnic.

The average time practitioners had spent working in their current setting was 59 months. Sixty-seven per cent had worked in the early years sector for ten years or less, 26% for eleven years or more.

### *Age profile*

Forty-nine per cent of the respondents were aged 35 or under; 51% were over 36 years of age (see Figure A2).

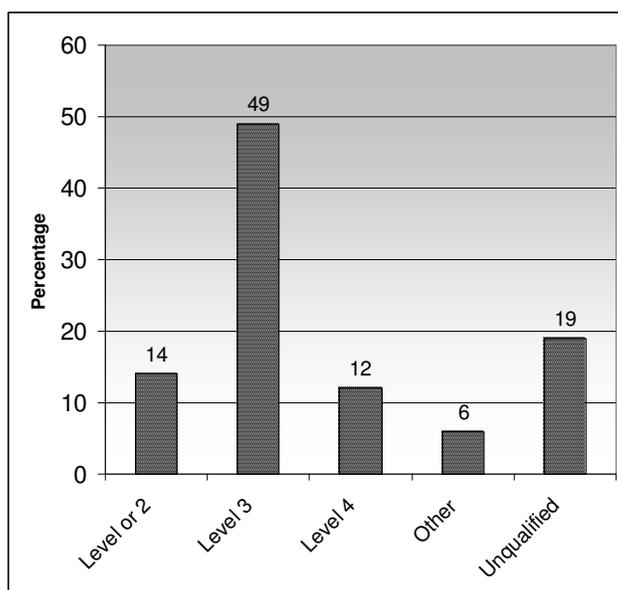
**Figure A2: Age profile of sample (n = 524)**



## Qualifications

The majority of respondents had level 2 or 3 early years qualifications (see Figure A3).

**Figure A3: Qualifications profile of sample (n=524)**



## **STAGE TWO**

### **Participants**

All of the settings recruited into Stage One were invited to volunteer to participate in Stage Two of the study, with the aim of recruiting ten settings in total, one in each LEA, and a letter was sent out explaining the stages involved in this part of the study. Fourteen settings in total volunteered, from eight LEAs. However, five of the settings withdrew before the start of Stage Two for various reasons (a change of staff team in one case; pending Ofsted inspections in two cases; a move of building in the fourth case; no reason given for fifth case), which meant that nine settings were eventually involved in Stage Two (three from one LEA, six from six different LEAs). The LEA advisors in the three LEAs which had no settings volunteering for Stage 2 were contacted and advised of the situation. They were invited to encourage settings to volunteer if they wished, but no further settings volunteered and so it was decided that the team would not actively recruit a tenth setting for the study at this stage, as all the other settings had volunteered to participate and had not been directly approached. Profiles of the settings are outlined in Table A4.

**Table A4: Profiles of settings involved in Stage 2 of the Project**

	<i>Context</i>	<i>Number of children (FTE equivalent)</i>	<i>Number of staff (FTE equivalent)</i>	<i>Number of focus children involved in project</i>
<i>Setting 1</i>	Day care centre for children under the age of five. Charity-run, with some funding from local council. Situated in an urban area of high social deprivation. Many children referred to the centre by Social Services, health visitors and educational psychologists because of their specific emotional and behavioural needs. High proportion of children are from Black and Minority Ethnic communities and speak English as an additional language.	33	7	8 (4 boys, 4 girls, all Black/ Minority Ethnic; all from social groups C2DE)
<i>Setting 2</i>	Foundation stage unit in a primary school. Situated in an urban area of social deprivation. Most children from white, working class communities.	74	5	8 (4 boys, 4 girls, all white; all from social groups C2DE)
<i>Setting 3</i>	Nursery school situated in an urban area of social deprivation, offering wrap-around care. Large percentage of children are from Black and Minority Ethnic communities and speak English as an additional language.	32	4.5	8 (4 boys, 4 girls, 4 boys; 4 Black/ Minority Ethnic, 4 white; 5 from social groups ABC1, 3 from social groups C2DE)
<i>Setting 4</i>	Nursery class of a primary school situated in an urban area. Majority of children from white, working class and lower middle class communities.	24	2.5	8 (4 boys, 4 girls, 1 Black/ Minority Ethnic; 7 white; 2 from social groups ABC2; 6 from social groups C2DE)
<i>Setting 5</i>	Foundation stage unit of a primary school situated in an urban area of social deprivation. Majority of children from white, working-class communities.	59.5	5	5 (all boys; all white; 1 from social groups ABC1, 4 from social groups C2DE)
<i>Setting 6</i>	Foundation stage class in a primary school situated in a suburban area and serves two	56	5	7 (4 boys, 3 girls; ( 3 Black/

	areas, one of social deprivation, one more affluent. Significant numbers of children from refugee and asylum seeking communities. Many children speak English as an additional language.			Minority Ethnic; 4 white; 2 from social groups ABC1, 5 from social groups C2DE)
<i>Setting 7</i>	Non-maintained pre-school for children aged 2–5, based in a church hall. Offers morning sessions. Serves catchment area of social advantage with primarily white communities.	12.5	5	7 (4 boys, 3 girls (all white; 6 from social groups ABC1, 1 from social groups C2DE)
<i>Setting 8</i>	Non-maintained pre-school in suburban area of social advantage, serving primarily white communities.	66	9.5	8 (4 boys, 4 girls, all white; all from social groups ABC1.
<i>Setting 9</i>	Nursery school in urban area. Mixed catchment area, as some parents travel to the nursery in order for their children to attend. Most children come from advantaged backgrounds. Small percentage of children from Black and Minority Ethnic communities who speak English as an additional language.	30	5.1	8 (4 boys, 4 girls (5 Black/ Minority Ethnic; 3 white; 7 from social groups ABC1, 1 from social groups C2DE)

## Methodology

All settings agreed to conduct action research projects in which they would introduce an aspect of popular culture, media and new technologies into the foundation stage communications, language and literacy curriculum. Settings were asked to randomly identify up to eight children for focused observations and data collection. Settings were asked to gain parental consent for their participation. Written consent was obtained from parents and parents were given written information about the project. Some settings identified smaller numbers of children and so the total number of children who were involved in Stage Two of the study was 67; 37 boys and 30 girls, from a range of families in terms of ethnicity and SES (see Table A4).

Parents of children were contacted to take part in structured telephone interviews before the start of the project and on its completion. Despite several calls, it was not possible to make contact with all of the parents of the focus children. Interviews took place with 60 parents at the start of the project (see Appendix 2 for interview questions) and 33 parents at the end of the project (see Appendix 3 for interview questions). All interviews were recorded and transcribed.

At the beginning of Stage Two of the project, practitioners attended a research project day at the University of Sheffield in which they were given information about the project and training on how to conduct action research. Practitioners also undertook training in the use of *The Leuven Involvement Scale for Young Children*, as this was the tool used for observations of the children. It is an internationally recognised and widely used, reliable and valid scale (Laevens, 1994). During the action research projects, practitioners undertook as much of the following data collection as possible:

- Observations of the focus children engaged in an activity in the communications, language and literacy area of learning, using *The Leuven Involvement Scale for Young Children* before and during the project (three observations at each stage, of three minutes' duration each).
- Additional open-ended, written observations where possible.
- Photographs of activities.
- Video-recording of children engaged in activities.
- Copies of children's mark-making, writing, drawing and painting, in addition to copies of any electronic texts produced (such as digital photographs or stories made using a software package).
- Comments made in a research diary.

Twelve staff took part in semi-structured interviews prior to the start of the project (see Appendix 4 for interview questions) and nine of the same staff once the project had been completed (see Appendix 5 for interview questions). Staff also attended a final research project day project at the University of Sheffield, in which they talked about their findings and took part in a semi-structured group interview, which was recorded.

An inventory was undertaken in each setting, by a member of the project team, prior to the start of the project and after the project had concluded (Appendix 6). This was undertaken in order to ascertain the level of resourcing for popular culture, media and new technologies at each stage of the project.

Settings were free to identify any aspect of children's use of and interest in popular culture, media and new technologies for their project. Table A5 outlines the nature of each setting's project:

**Table A5: Project Description for each setting involved in Stage 2**

	<b>Project description</b>
<i>Setting 1</i>	<ul style="list-style-type: none"> <li>• Role play area related to popular culture (Spider-man)</li> <li>• Barbie writing area</li> <li>• Use of comics to promote reading</li> </ul>
<i>Setting 2</i>	<ul style="list-style-type: none"> <li>• Role play area related to popular culture (Bob the Builder)</li> </ul>
<i>Setting 3</i>	<ul style="list-style-type: none"> <li>• Role play area related to popular culture (Buzz Lightyear and then Bob the Builder)</li> <li>• Outdoor area linked to theme of Bob the Builder</li> <li>• Theme week in which different popular characters were focused upon each day</li> </ul>
<i>Setting 4</i>	<ul style="list-style-type: none"> <li>• Role play area related to popular culture (Finding Nemo)</li> <li>• Children watched excerpts of films and discussed them</li> <li>• Production of media boxes for home use</li> </ul>
<i>Setting 5</i>	<ul style="list-style-type: none"> <li>• All areas of foundation stage related to popular cultural theme (Balamory)</li> <li>• Outdoor area linked to the theme</li> </ul>
<i>Setting 6</i>	<ul style="list-style-type: none"> <li>• Role play area related to popular culture (Big Cook, Little Cook)</li> </ul>
<i>Setting 7</i>	<ul style="list-style-type: none"> <li>• Role play area related to popular culture (Batman)</li> <li>• Production of media boxes for home use</li> <li>• Use of comics to promote reading</li> </ul>
<i>Setting 8</i>	<ul style="list-style-type: none"> <li>• Use of comics to promote reading</li> <li>• Discussion of Balamory videos</li> </ul>
<i>Setting 9</i>	<ul style="list-style-type: none"> <li>• Use of digital cameras and editing software</li> <li>• Use of software to create animated stories</li> <li>• Use of Powerpoint software to create presentation</li> <li>• Use of bfi material <i>Starting Stories</i> to analyse films</li> </ul>

The data collected by each setting varied, because of the individual contexts of the settings. Table A6 outlines the data collected by practitioners in each of the settings.

**Table A6: Range of data collected in each setting**

	<b>Range of data collected</b>
<i>Setting 1</i>	Observations using <i>The Leuven Involvement Scale for Young Children</i> Open observations noted in research diary Photographs Copies of children's drawings and mark-making
<i>Setting 2</i>	Open observations noted in research diary Photographs Copies of children's drawings and mark-making
<i>Setting 3</i>	Observations using <i>The Leuven Involvement Scale for Young Children</i> Open observations noted in research diary Photographs Copies of children's drawings and mark-making Letters and comments from parents
<i>Setting 4</i>	Observations using <i>The Leuven Involvement Scale for Young Children</i> Open observations noted in research diary Photographs Video-recording Copies of children's drawings and mark-making Comments from parents
<i>Setting 5</i>	Observations using <i>The Leuven Involvement Scale for Young Children</i> Open observations noted in research diary Photographs Copies of children's drawings, painting, puppets, mark-making and writing
<i>Setting 6</i>	Observations using <i>The Leuven Involvement Scale for Young Children</i> Open observations noted in research diary Photographs Copies of children's drawings and mark-making
<i>Setting 7</i>	Observations using <i>The Leuven Involvement Scale for Young Children</i> Open observations noted in research diary Photographs Copies of children's drawings and mark-making
<i>Setting 8</i>	Observations using <i>The Leuven Involvement Scale for Young Children</i>
<i>Setting 9</i>	Observations using <i>The Leuven Involvement Scale for Young Children</i> Open observations noted in research diary Photographs Video-recording Audio-recording Copies of children's digital photographs, drawings, mark-making, writing, storyboards Copies of electronic stories made by children Copies of Powerpoint presentation made by children

## **DATA ANALYSIS**

### *(a) Questionnaire data*

Pearson Chi-Square tests were undertaken, using SPSS, to identify any significant differences in relation to the following:

*Children (Questionnaire for Parents/ carers):* Age; Gender; Social class; Ethnicity.

*Practitioners (Questionnaire for Practitioners):* Age; Level of qualification; Type of setting.

### *(b) Interviews*

Interviews were tape recorded and fully transcribed. The transcripts were analysed using open, inductive coding in order to allow patterns to emerge. The coding process in this study utilised 'pattern' codes, rather than descriptive codes (Miles and Huberman, 1994); that is, the transcripts were coded for themes and patterns at the first level and not at the second level of analysis. The themes identified in each of the interviews were as follows:

**Table A7: Themes identified in inductive coding of interview data**

<i>First interviews with practitioners</i>	Attitudes towards popular culture and media Attitudes towards new technologies Previous experience of use of popular culture and media Previous experience of use of new technologies
<i>Final interviews with practitioners (individual and group interview)</i>	Attitudes and uses Motivation and engagement Impact on progress in language and communication Impact on progress in literacy Impact on planning for the Communications, Language and Literacy area of learning Gender Staff attitudes Parental responses Impact on professional development
<i>First interviews with parents</i>	Media ownership and access Media use Attitudes towards popular culture and media Attitudes towards new technologies Relationship of popular culture, media and new technologies to education
<i>Final interviews with parents</i>	Children's responses to project Parents' responses to project

*(c) Inventories*

The contents of the first inventory undertaken prior to the project commencing were systematically compared with the contents of the second inventory undertaken after the project had been completed.

*(d) Observations using The Leuven Involvement Scale for Young Children*

Across all nine settings, observations were made of 53 children using *The Leuven Involvement Scale for Young Children*. Unfortunately, the observations relating to 39 of these children could not be used, for the following reasons:

- Not all of the observations were undertaken for the period specified (3 minutes); some were undertaken for longer periods, some shorter.
- For some of the children, the observations undertaken either before or during the project were insufficient in number and therefore comparisons could not be made. (If settings had undertaken more than three observations at each stage, the first three observations at each stage were used for analysis.)
- Not all of the observations were focused on the area of communications, language and literacy.

Only the data from 84 observations of 14 children using *The Leuven Involvement Scale for Young Children* were therefore used in the analysis. The combined scores on each numerical point of the scale before the project were compared with the combined scores on each numerical point of the scale after the project.

*(e) Open observations recorded in research diaries*

The written observations made by practitioners were inductively analysed for repeated patterns/themes. These were as follows: attitudes and use; motivation and engagement; impact on language and communication; impact on literacy; gender; staff attitudes; parental responses; professional development.

*(f) Children's mark-making, drawings, writing, photographs and digital stories/presentations.*

These were analysed in terms of subject matter: television programmes and films; particular media characters; stories from own life experiences; experiences from the early years setting.

(g) *Photographs of children engaged in project activities*

A thematic analysis was undertaken of these, using the following categories: task; gender; apparent interest in task; clothing; individual/dyad or group; presence of (an) adult(s).

Data from each of these areas were triangulated in order to identify overarching themes. These were:

- Impact on practitioners' attitudes towards and approaches to the use of popular culture, media and new technologies in the foundation stage
- Impact on motivation and engagement
- Impact on progress in language and communications
- Impact on progress in literacy
- Gender
- Parental responses
- Impact on professional development
- Successful factors.

## References

Atkin, C., Rose, A. and Shier, R. (2005) *Provision of, and learner engagement with, adult literacy, numeracy and ESOL support in rural England: A comparative case study*. London: NRDC.

Laevers, F (1994), *The Leuven Involvement Scale for Young Children*, LISYC Manual and video tape, Experimental Educational Series No. 1. Leuven, Belgium: Centre of Experimental Studies.

Livingstone, S. and Bober, M. (2005) *UK Children Go Online: Final report of key project findings*. London: London School of Economics and Political Science.

Livingstone, S. and Bovill, M. (1999) *Young People, New Media: Report of the Research Project: Children, Young People and the Changing Media Environment*. London: London School of Economics and Political Science.

Marsh, J. (2003) 'The techno-literacy practices of young children. *Journal of Early Childhood Research*, Vol. 2, 1: 51-66.

Miles, M.B. and Huberman, A.M. (1994) *Qualitative Data Analysis: An Expanded Sourcebook* (2<sup>nd</sup> ed.), Thousand Oaks, CA: Sage.

Rideout, V.J., Vandewater, E.A. and Wartella, E.A. (2003) *Zero to Six: Electronic Media in the Lives of Infants, Toddlers and Preschoolers*. Washington: Kaiser.

Roszkowski, M.J. and Bean, A.G. (1990) Believe it or not! Longer questionnaires have lower response rates. *Journal of Business Psychology*, Vol. 4:495-509.

## **APPENDIX 2**

### **INTERVIEW QUESTIONS FOR PARENTS [INTERVIEW 1]**

In the interviews with parent(s), the focus is on understanding the child's use of media/popular culture/new technologies and exploring the parental attitudes to this use.

#### **TV/ Video**

- How much TV does he/she watch each day?
- How many videos does he/she own?
- Which TV programmes does your child like watching? Why do you think those are his/her favourites?
- What about his/her favourite films? Why do you think those are his/her favourites?
- Does he/she talk about TV programmes to you? [Probe – when (during or after)? What kinds of things do they talk about.]
- What adult programmes does your child watch, if any? Why those?
- What programmes do you watch together? Why these?
- What kinds of things does [child's name] do when watching TV? [Prompt if necessary – sings/dances/plays etc] What are the most prevalent activities?
- What kinds of things do you think he/she learns from TV, if anything? [Probe for examples.]
- Does any of [child's name]'s play relate to TV or film? If so, what do they play? [Probe how, e.g. dressing up, asking other family members to also be characters etc].

#### **Books**

- Which are your child's favourite books and why?
- How many books does he/she own?
- Do you buy your child TV/film-related books? Give me some examples. Does he/she ask for these?
- How often are TV/film related books read in comparison to other books?
- Do TV/film related books motivate your child to read, or not? How do you know?
- How often do you read with your child? When do you read with them?
- Does he/she read books with anyone else? If so who/ how?
- Does your child like to read anything else – comics etc?

## **Computers**

If the child uses a computer, please ask:

- How often does your child use a computer over a period of one week?
- Which computer programs does your child like using? Why do you think those are his/her favourites?
- How independent is he/she in using the computer?
- Who showed him/her how to use it?
- Does he/she ever use it with someone else? How/ when?
- What kinds of things do you think he/she learns from computers, if anything?
- Does he/she go on websites (if so, ask which, who chooses them and how long they use them for).

If the child does not use a computer, please ask why not – is it lack of access or lack of interest?

## **Console games [PlayStation/ Nintendo/ X-box]**

If the child plays on the console, ask:

- How often does your child use a console game over a period of one week?
- Talk about your child's console game history i.e. when he/she first started using it, which games he/she liked to use when.
- Which games does your child like using? Why do you think those are his/her favourites?
- How independent is he/she in using the console?
- Who showed him/her how to use it?
- Does he/she ever use it with someone else? How/when?
- What kinds of things do you think he/she learns from console games, if anything?

## **Mobile phones**

If the parent has a mobile phone, ask:

- Does your child ever watch you using it?
- Does he/she try to use it themselves? If so, what does he/she do with it?
- Is he/she aware of text-messaging? If so, how?
- Does he/she ever try to pretend to send a text message?

Ask all parents:

- Does he/she have a toy mobile phone? At what age did he/she get this?
- How does she/he use this toy mobile phone (e.g. for pretend voice or text messages, and who to, etc).

## **Toys**

- Which are your child's favourite toys and why?
- Tell me about [child's name]'s toys that are related to TV and film.
- Can you tell me about any electronic toys your child has (what they are and what they do).
- What do you think children learn from electronic toys?
- Any disadvantages to electronic toys?
- What makes you decide if you should buy a particular toy for your child?

## **General**

- How important is popular culture to your child? Why? [May need to define popular culture – TV/ film, popular characters, interests e.g. football.]
- What role do media, TV and technology have in childhood today? What are your thoughts on this?
- Should media literacy be taught in schools? (Media literacy involves a range of activities, including learning about how television works, the kinds of messages it gives to the audience, how it conveys meaning through the use of lighting, music and so on.) Why/why not?
- How do you think your child will react to this work being introduced into the early years setting?
- Do you have any other comments about your child and media/ popular culture/technology?

### **APPENDIX 3**

#### **INTERVIEW QUESTIONS FOR PARENTS [INTERVIEW 2]**

1. As you know, your child was involved in a project at nursery that used media to promote learning. How did your child react to this project? Did he or she talk about what happened at nursery at all? Did you notice anything at all during the period the project happened? If so, what? Was anything different in the way your child behaved at home during the project?
2. What do you feel about this kind of work [on media and popular culture] happening in nurseries and schools?
3. Do you have any other comments at all about the project?

## APPENDIX 4

### INTERVIEW QUESTIONS FOR PRACTITIONERS [INTERVIEW 1]

#### Questions for head/ manager of setting OR the contact person in setting

1. Can you tell me why you wanted your setting to be involved in Stage 2 of this project?
2. What do you hope to gain from your involvement in the project?
3. How far are all staff interested in the project?
4. What were the reactions of the staff to Stage 1 of the study?
5. What were the reactions of parents/carers to Stage 1 of the study?
6. What sorts of literacy experiences do the children you work with have at home and in their communities?
7. How prominent is popular culture (i.e. popular TV programmes/films/toys) in the children's home and community experiences?
8. Which particular popular cultural titles/names (in relation to television programmes, movies, videos, magazines, music, computer software and websites) have you noticed that the children are interested in?
9. Have you observed children's play, talk, writing or drawing being influenced in any way by popular culture characters or narratives? If so, can you provide some examples?
10. Do you ever plan activities which draw on children's interests in popular culture?
  - (a) If the answer is 'yes':
    - could you give me some examples?
    - how did the children react to these activities?
    - were you surprised in any way by these responses?
    - why did you decide to use children's popular culture in this way?
    - how often do you plan these kinds of activities?
    - what were the parents' reactions to this work?
  - (b) If the answer is 'no':

Why not?
11. Do you have any books in the setting which reflect children's popular cultural interests?
  - (c) If the answer is 'yes':
    - what titles do you have?
    - why did you decide to include those?
    - where did you get the books from?
    - what are the children's reactions to these texts (eg do they choose them/ look at them more often than other books?)
  - (b) If the answer is 'no':

Why not?
12. Do you think that children's popular culture can promote interest in reading and writing, or not? Why do you say that?
13. Do you ever use children's comics in the setting?
  - a. If the answer is 'yes':
    - what do you use?
    - why did you decide to use these?

- where did you get them from?
  - what kinds of activities do you do with them?
  - what are the children's reactions to the toys?
  - b. If the answer is 'no':  
Why not?
14. Are there any aspects of children's popular culture which concern you?  
If so, what are these?
  15. Are there any aspects of popular culture you would never use on the curriculum? Why?
  16. What would you like to know about children's use of popular culture, if anything?
  17. Do you ever draw on aspects of media in the curriculum e.g. radio, newspapers, TV?
    - a. If the answer is 'yes':
      - could you give me some examples?
      - how did the children react to these activities?
      - why did you decide to use media in this way?
      - how often do you plan these kinds of activities?
    - b. If the answer is 'no':  
Why not?
  18. What does the term 'media literacy' mean to you?
  19. How far should children in the foundation stage be introduced to aspects of media education e.g. the way films are made, the use of lighting/props etc., the way adverts are constructed and the messages they give, and so on?
  20. What prior knowledge do you think children bring to the setting in relation to media?
  21. Do you feel sufficiently knowledgeable about media education in order to teach it? (If 'yes', how did you develop this knowledge?)
  22. Was media education a feature of your early years training at all? (If so, give details.)
  23. What do you feel are the general attitudes in society towards young children's use of media?
  24. Have you ever used digital video cameras with the children? (If so, please give details.)
  25. What training needs do you feel you have in relation to media education?
  26. Do you have any concerns about using children's media in the curriculum? If so, what is the nature of these concerns?
  27. How do you use computers in the setting?
  28. What programmes do you use most often, and why?
  29. How do you approach the teaching of computer skills to children?
  30. What prior knowledge and skills do children bring to the setting in relation to computers?
  31. Do you ever use computers in role play areas? If so, how?
  32. Do the computers the children use have internet access? If not, why not? If yes, how do you use it?
  33. Do you ever use computers at group time? If so, how?
  34. Do you ever draw on children's interests in popular computer games e.g. PlayStation? If yes, how? If not – why not?

35. Do you use digital still cameras in the curriculum? If yes, how? If not – why not?
36. Do you have an interactive whiteboard in the setting? If so, how do you use it?
37. Do you use any form of new technologies in role play areas? If yes, how? If not – why not?
38. Is there any other type of technological equipment you use in the setting that we haven't talked about?
39. Is there any other type of technological equipment that you would like to use that you haven't got?
40. How confident are you using a range of hardware and software?
41. What training have you had in relation to the use of ICT? What further training would you like?
42. What are parents' reactions to new technologies in the setting? Do they take any interest?
43. Can I ask about your own use of new technologies at home? For example, do you use a mobile phone, do you text etc.? Do you use the WWW at home/digital camera etc.?
44. How far do you feel society is changing because of new technologies?
45. How far do you feel education has kept up with the changes?
46. How well do you think the curriculum in this setting meets the needs of the 21<sup>st</sup> century?
47. Do you have any other comments/questions about the use of popular culture/media and new technologies in the early years?

### **Questions for any other staff in the setting that you interview**

1. What sorts of literacy experiences do the children you work with have at home and in their communities?
2. How prominent is popular culture (i.e. popular TV programmes/films/toys) in the children's home and community experiences?
3. Which particular popular cultural titles/names (in relation to television programmes, movies, videos, magazines, music, computer software and websites) have you noticed that the children are interested in?
4. Have you observed children's play, talk, writing or drawing being influenced in any way by popular culture characters or narratives? If so, can you provide some examples?
5. Do you think that children's popular culture can promote interest in reading and writing, or not? Why do you say that?
6. Are there any aspects of children's popular culture which concern you? If so, what are these?
7. Are there any aspects of popular culture you would never use on the curriculum? Why?
8. What does the term 'media literacy' mean to you?
9. What prior knowledge do you think children bring to the setting in relation to media?
10. Do you feel sufficiently knowledgeable about media education in order to teach it? (If 'yes', how did you develop this knowledge?)

11. Was media education a feature of your early years training at all? (If so, give details.)
12. What do you feel are the general attitudes in society towards young children's use of media?
13. What training needs do you feel you have in relation to media education?
14. Do you have any concerns about using children's media in the curriculum? If so, what is the nature of these concerns?
15. What prior knowledge and skills do children bring to the setting in relation to computers?
16. How confident are you using a range of hardware and software?
17. What training have you had in relation to the use of ICT? What further training would you like?
18. Can I ask about your own use of new technologies at home? For example, do you use a mobile phone, do you text etc.? Do you use the WWW at home/digital camera etc.?
19. How far do you feel society is changing because of new technologies?
20. How far do you feel education has kept up with the changes?
21. How well do you think the curriculum in this setting meets the needs of the 21<sup>st</sup> century?
22. Do you have any other comments/questions about the use of popular culture/media and new technologies in the early years?

## **APPENDIX 5**

### **INTERVIEW QUESTIONS FOR PRACTITIONERS [INTERVIEW 2]**

#### **Questionnaire for practitioners**

1. Before you started the project, what did you know of the children's use of popular culture, media and new technologies at home?
2. Did you build on this knowledge in any way in the setting? Why/why not?
3. Has anything changed in relation to this since the project? Why/why not?
4. Can you give an outline of what you did?
5. How did the target children respond?
6. Can you choose one of the target children whose responses interested/surprised you the most and talk about his/her reaction to the project? Why do you think the child reacted in that way?
7. How did the children overall (including non-target) generally respond to the project?
8. How did staff in the setting respond to the project?
9. Have other staff in the setting changed their views about using popular culture and media as a result of the project?
10. How did parents react to the project?
11. How far will your involvement in the project affect future planning?
12. Do you have any other comments which will inform the research?

## APPENDIX 6

### **INVENTORY FOR EARLY YEARS SETTINGS**

Date:

Setting:

1. How many of the following can you see in the setting? (Indicate if the resources are in the setting, but not switched on, by writing NSO.)

Television		Laptop	
Video/ DVD player		Digital still camera	
Music CD player or audiocassette		Digital video camera	
Desktop computer		Interactive whiteboard	

2. How many of the following are being used?

Television		Laptop	
Video/ DVD player		Digital still camera	
Music CD player or audiocassette		Digital video camera	
Desktop computer		Interactive whiteboard	

3. Make some observational notes about how they are being used e.g. who is using the equipment, what they are doing on it, etc. (continue on an additional sheet if necessary).

	<i>Time of observation</i>	<i>Who is using the equipment</i>	<i>What is happening</i>
Television			
Video/DVD player			
Music CD player or audiocassette			
Desktop computer			

Laptop			
Digital still camera			
Digital video camera			
Interactive whiteboard			

4. Make a list of programmes available on the computer.

5. Is any other technological equipment being used within the setting? If so, outline what it is and how it is being used.

6. Look at the books on display. Are any of these related to children's media/popular cultural interests? If so, note the titles and note observations on any use being made of these.

7. Are there any comics or magazines in the setting? If so, how are they being used?
8. Are there any videos/DVDs in the setting? What titles are there? Where are they stored (i.e. accessible to children)?
9. Are there any tapes/CD-Roms in the setting? What titles are there? Where are they stored?
10. Look at the dressing up clothes and props for imaginative play – are any of these related to children’s popular cultural interests, e.g. princesses/superheroes? If so, note these.
11. What is the theme of any role play area(s) in the setting?
12. Do the role play area(s) contain any toys, clothes, artefacts etc. related to popular culture or children’s cultural interests? If so, note these.
13. Look at the provision for small world play e.g. table top areas, toys and animals in trays, dolls houses etc. Are there items here related to popular culture e.g. small toys from popular cultural narratives? If so, note these.
14. Look at the displays around the setting. Do any of the displays feature anything related to children’s popular cultural interests e.g. posters/ photographs of superheroes/television characters, children’s drawings on popular themes and narratives etc.? If so, note these.
15. Is there any environmental print around that is related to popular culture/media e.g. logos, catchphrases, print on packaging etc.? If so, note this.
16. Please make any additional notes on anything else you observe which you think might be of interest to the focus of the inventory (i.e. related to popular culture, media and new technologies).

## APPENDIX 7: DATA FROM QUESTIONNAIRES

### SECTION ONE: DATA FROM PARENTS' AND CARERS' QUESTIONNAIRE

Notes on the presentation of data in this report:

1. All figures presented are percentages, unless stated otherwise.
2. Due to rounding, and the omission of figures for missing data, the tables may not always add up to 100%.
3. Data in all the tables has been tested using a Chi-square test to determine the statistical significance. Where the data are significantly different at the <0.001 confidence level, data are headed with \*\*; where the data are significantly different at the <0.01 confidence level, data are headed with \*. Because of the large number of statistical tests undertaken, only differences at these two levels of significance are reported, not differences at the <0.05 confidence level.
4. Responses to open questions are not reported here, but in the main body of the report.

**Q1** *At what age did you leave formal education?*

Under 16	35	18-21	17
16-18	30	21 and over	16

Analysed by social class

	AB	C1	C2	DE
Under 16	14	34	57	53
16-18	25	34	27	26
18-21	24	18	13	11
21 and over	36	13	2	4

**Q2** *Details of employment.* [Responses analysed and placed into NS-SEC and Market Research Social Class categories. For the purposes of this study, only the Market Research Social Class categories are used for analysis.]

ABC1	66	C2	30
------	----	----	----

**Q3** *Are you in receipt of any benefits?*

No	68	Yes	29
----	----	-----	----

**Q4** *What is your child's age?*

0-24 months	8
25-48 months	64
49-72 months	26

Mean age of children in study: 41 months

**Q5** *Gender of child*

Male	52	Female	47
------	----	--------	----

**Q6** What is your relationship to the child?

Mother	91
Father	6
Carer	.4

**Q7** How many other children do you have? Mean number of other siblings in the family: 1.12

**Q8** How many cars do your household own?

None	9	Two cars	46
One car	41	More than two cars	3

**Q9** What is your child's ethnic group?

Black and Minority Ethnic	21	White	78
---------------------------	----	-------	----

**Q10** How much time, on average, does your child spend on these activities in a typical day?

*Watching TV*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Less than 1 hour	<b>29</b>	29	29	58**	28**	23**	33**	21**	25*	31*
1-2 hours	<b>50</b>	51	50	29*	51**	56**	49**	51**	48*	50*
3 or more hours	<b>18</b>	18	18	4**	19**	18**	14**	26**	24*	16*
Never	<b>2</b>	2	3	10**	1**	1**	3**	2**	2*	2*

\*\*statistically significant difference  $p < 0.001$

\*statistically significant difference  $p < 0.01$

*Watching a video or DVD*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Less than 1 hour	<b>49</b>	47*	53*	44**	50**	50**	33**	21**	41**	52**
1-2 hours	<b>34</b>	36*	32*	12**	36**	35**	49**	51**	31**	35**
3 or more hours	<b>2</b>	2*	2*	1**	2**	2**	14**	26**	3**	2**
Never	<b>8</b>	8*	8*	37**	6**	5**	3**	2**	17**	6**

\*\*statistically significant difference  $p < .001$

\*statistically significant difference  $p < 0.01$

*Listening to music*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Less than 1 hour	<b>64</b>	66	62	61	63	67	68**	57**	60**	65**
1-2 hours	<b>25</b>	22	28	32	27	18	25**	27**	21**	26**
3 or more hours	<b>4</b>	4	3	5	3	4	3**	6**	5**	3**
Never	<b>3</b>	4	3	0	3	5	2**	7**	9**	2**

\*\*statistically significant difference  $p < 0.001$

*Playing outside*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Less than 1 hour	<b>34</b>	33	36	46**	33**	33**	35**	33**	43**	32**
1-2 hours	<b>52</b>	52	50	34**	54**	51**	53**	48**	38**	55**
3 or more hours	<b>8</b>	9	7	5**	8**	9**	6**	13**	9**	8**
Never	<b>2</b>	2	2	10**	1**	2**	2**	3**	6**	1**

\*\*statistically significant difference  $p < .001$

*Reading/ 'pretending' to read*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Less than 1 hour	<b>64</b>	69**	60**	60**	64**	66**	67	58	60	65
1 or more hours	<b>32</b>	26**	37**	29**	33**	31**	30	37	34	31
Never	<b>2</b>	3**	1**	8**	1**	2**	2	3	2	2

\*\*statistically significant difference  $p < 0.001$

*Being read to by someone else*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Less than 1 hour	<b>70</b>	70	70	62	70	73	71	68	64*	72*
1 or more hours	<b>27</b>	26	27	31	27	24	26	26	28*	26*
Never	<b>2</b>	2	1	3	1	1	1	2	3*	1*

\*statistically significant difference  $p < 0.01$

*Using a desktop computer or laptop*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Less than 1 hour	<b>45</b>	46	45	18**	45**	54**	48*	38*	37**	48**
1 or more hours	<b>8</b>	9	7	1**	7**	14**	8*	8*	14**	7**
Never	<b>42</b>	41	43	76**	43**	27**	40*	47*	41**	42**

\*\*statistically significant difference  $p < 0.001$

\* statistically significant difference  $p < 0.01$

*Playing video games using consoles such as PlayStation or Xbox*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	<i>All</i>	<i>Boy</i>	<i>Girl</i>	<i>0 - 24m</i>	<i>24 - 48m</i>	<i>49 - 72m</i>	<i>ABC1</i>	<i>C2DE</i>	<i>Black and Minority Ethnic</i>	<i>White</i>
Less than 1 hour	<b>13</b>	15**	11**	5**	11**	20**	10**	18**	18**	12**
1 or more hours	<b>4</b>	6**	1**	1**	3**	8**	2**	8**	7**	3**
Never	<b>78</b>	74**	82**	90**	82**	65**	83**	67**	66**	81**

\*\*statistically significant difference  $p < 0.001$

*Playing handheld video games e.g. Gameboy*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	<i>All</i>	<i>Boy</i>	<i>Girl</i>	<i>0 - 24m</i>	<i>24 - 48m</i>	<i>49 - 72m</i>	<i>ABC1</i>	<i>C2DE</i>	<i>Black and Minority Ethnic</i>	<i>White</i>
Less than 1 hour	<b>10</b>	11	8	4**	8**	15**	8**	14**	16**	8**
1 or more hours	<b>2</b>	2	1	2**	1**	2**	1**	3**	5**	1**
Never	<b>82</b>	81	84	88**	85**	74**	86**	75**	70**	85**

\*\*statistically significant difference  $p < 0.001$

*Playing inside with toys*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	<i>All</i>	<i>Boy</i>	<i>Girl</i>	<i>0 - 24m</i>	<i>24 - 48m</i>	<i>49 - 72m</i>	<i>ABC1</i>	<i>C2DE</i>	<i>Black and Minority Ethnic</i>	<i>White</i>
Less than 1 hour	<b>8</b>	8	8	6**	6**	13**	7	9	15**	6**
1 – 2 hours	<b>43</b>	40	45	31**	41**	50**	43	41	46**	42**
3 or more hours	<b>48</b>	50	45	61**	52**	35**	49	47	36**	51**
Never	<b>0</b>	1	0	1**	0**	0**	0	1	0**	1**

\*\*Statistically significant difference  $p < 0.001$

*Writing /drawing*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	<i>All</i>	<i>Boy</i>	<i>Girl</i>	<i>0 - 24m</i>	<i>24 - 48m</i>	<i>49 - 72m</i>	<i>ABC1</i>	<i>C2DE</i>	<i>Black and Minority Ethnic</i>	<i>White</i>
Less than 1 hour	<b>42</b>	51**	33**	53**	42**	39**	45*	39*	43*	42*
1 – 2 hours	<b>46</b>	40**	53**	23**	48**	49**	46*	46*	42*	47*
3 or more hours	<b>8</b>	5**	12**	3**	8**	11**	7*	12*	9*	8*
Never	<b>0</b>	3**	1**	19**	0**	0**	2*	2*	4*	2*

\*\*statistically significant difference  $p < 0.001$

\* statistically significant difference  $p < 0.01$

**Q11** Which of the following does your child have in his/ her bedroom?

	<b>Gender</b>			<b>Age (in months)</b>			<b>Social Class</b>		<b>Ethnicity</b>	
	<i>All</i>	<i>Boy</i>	<i>Girl</i>	<i>0 - 24m</i>	<i>24 - 48m</i>	<i>49 - 72m</i>	<i>ABC1</i>	<i>C2DE</i>	<i>Black and Minority Ethnic</i>	<i>White</i>
TV	<b>29</b>	30	28	8**	26**	58**	21**	47**	32	28
Video recorder/ DVD	<b>27</b>	23	22	5**	21**	33**	17**	37**	21	23
Video game player e.g. PlayStation, X-Box	<b>7</b>	9**	4**	1**	4**	14**	4**	12**	10**	6**
Radio	<b>17</b>	15*	20*	12**	15*	23**	14**	23**	25**	15**
Dance mat	<b>9</b>	6**	12**	3**	8**	12*	7**	12**	9	8
Desktop computer or laptop	<b>6</b>	7	6	1**	6**	9**	5**	8**	15**	4**
Robot toy	<b>27</b>	27	26	16**	25**	33**	20**	41**	43**	22**
CD/ audiocassette player	<b>39</b>	37	41	22**	38**	47**	39	39	35	40

\*\*statistically significant difference  $p < 0.001$

\* statistically significant difference  $p < 0.01$

**Q12** How often do you (or another parent/carer, if applicable) watch TV with your child?

	<b>Gender</b>			<b>Age (in months)</b>			<b>Social Class</b>		<b>Ethnicity</b>	
	<i>All</i>	<i>Boy</i>	<i>Girl</i>	<i>0 - 24m</i>	<i>24 - 48m</i>	<i>49 - 72m</i>	<i>ABC1</i>	<i>C2DE</i>	<i>Black and Minority Ethnic</i>	<i>White</i>
All of the time	<b>6</b>	6	6	23**	5**	3**	6**	6**	6	6
Most of the time	<b>33</b>	34	33	34**	34**	31**	30**	40**	34	33
About half the time	<b>34</b>	36	33	18**	34**	41**	34**	35**	30	35
Less than half the time	<b>23</b>	22	25	14**	25**	23**	26**	18**	27	23
Never	<b>2</b>	2	2	10**	1**	2**	2**	1**	2	2

\*\*statistically significant difference  $p < 0.001$

**Q13** Children's favourite TV programmes (top ten only named here)

- |                                 |                           |
|---------------------------------|---------------------------|
| 1. <i>The Tweenies</i>          | 6. <i>Bob the Builder</i> |
| 2. <i>Balamory</i>              | 7. <i>The Fimbles</i>     |
| 3. <i>Big Cook, Little Cook</i> | 8. <i>Noddy</i>           |
| 4. <i>Dora the Explorer</i>     | 9. <i>Come Outside</i>    |
| 5. <i>Scooby Doo</i>            | 10. <i>Teletubbies</i>    |

Children's favourite TV programmes, by gender (top ten only named here)

<b>Boys' favourite TV programmes</b>	<b>Girls' favourite TV programmes</b>
1. <i>Big Cook, Little Cook</i>	1. <i>The Tweenies</i>
2. <i>Bob the Builder</i>	2. <i>Balamory</i>
3. <i>Balamory</i>	3. <i>Dora the Explorer</i>
4. <i>Scooby Doo</i>	4. <i>Big Cook, Little Cook</i>
5. <i>Thomas the Tank Engine</i>	5. <i>Fimbles</i>
6. <i>The Tweenies</i>	6. <i>High Five</i>
7. <i>Dora the Explorer</i>	7. <i>Come Outside</i>
8. <i>Noddy</i>	8. <i>Noddy</i>
9. <i>Teletubbies</i>	9. <i>Teletubbies</i>
10. <i>Power Rangers</i>	10. <i>Scooby Doo</i>

**Q14** *Children's favourite TV channels* (top ten only named here)

- |                                    |                     |
|------------------------------------|---------------------|
| 1. CBeebies                        | 2. Disney Playhouse |
| 3. CBBC                            | 4. CITV             |
| 5. Nickelodeon/ Nickelodeon Junior | 6. Cartoon Network  |
| 7. Milkshake (Channel 5)           | 8. Fox              |
| 9. Boomerang                       | 10. Tiny Pop        |

**Q15** *Children's favourite films* (top ten only named here)

- |                                  |                      |
|----------------------------------|----------------------|
| 1. <i>Shrek</i>                  | 6. <i>Spiderman</i>  |
| 2. <i>Finding Nemo</i>           | 7. <i>Barney</i>     |
| 3. <i>Thomas the Tank Engine</i> | 8. <i>Tweenies</i>   |
| 4. <i>Toy Story</i>              | 9. <i>Lion King</i>  |
| 5. <i>Scooby Doo</i>             | 10. <i>Peter Pan</i> |

*Children's favourite films, by gender* (top ten only named here)

<b>Boys' favourite films</b>	<b>Girls' favourite films</b>
1. <i>Thomas the Tank Engine</i>	1. <i>Shrek</i>
2. <i>Shrek</i>	2. <i>Finding Nemo</i>
3. <i>Toy Story</i>	3. <i>Barbie</i>
4. <i>Finding Nemo</i>	4. <i>Barney</i>
5. <i>Scooby Doo</i>	5. <i>Tweenies</i>
6. <i>Spiderman</i>	6. <i>Cinderella</i>
7. <i>Bob the Builder</i>	7. <i>Scooby Doo</i>
8. <i>Harry Potter</i>	8. <i>Lion King</i>
9. <i>Peter Pan</i>	9. <i>Toy Story</i>
10. <i>Lion King</i>	10. <i>Snow White</i>

**Q16** Approximately how many of the following does your child own?

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
<b>Books</b>										
0	<b>0</b>	0	0	0**	0**	0**	0**	0**	0**	0**
1-10	<b>11</b>	11	10	18**	10**	10**	6**	19**	31**	5**
11-20	<b>14</b>	15	13	27**	13**	14**	12**	20**	23**	12**
21-30	<b>18</b>	19	16	24**	18**	16**	18**	18**	16**	18**
31-40	<b>13</b>	11	16	8**	14**	16**	14**	12**	8**	14**
More than 40	<b>44</b>	44	45	22**	46**	46**	50**	30**	21**	50**
<b>Videos/ DVDs</b>										
0	<b>39</b>	5	4	22**	3**	4**	5	4	11**	3**
1-10	<b>34</b>	33	35	53**	36**	23**	36	31	45**	31**
11-20	<b>28</b>	29	28	12**	30**	30**	30	25	20**	30**
More than 20	<b>31</b>	31	31	8**	30**	42**	29	35	18**	34**
<b>Computer games</b>										
0	<b>57</b>	54	60	83	61	41	60**	53**	46**	60**
1-10	<b>28</b>	30	26	4	26	42	29**	26**	28**	28**
11-20	<b>4</b>	5	3	0	4	5	4**	4**	5**	4**
More than 20	<b>4</b>	4	3	1	2	6	2**	6**	6**	3**
<b>Music CDs</b>										
0	<b>21</b>	23	18	33**	19**	22**	20	24	26**	20**
1-10	<b>61</b>	60	64	54**	64**	59**	65	54	47**	65**
11-20	<b>9</b>	9	10	5**	9**	11**	9	9	8**	9**
More than 20	<b>4</b>	4	4	2**	4**	4**	4	6	6**	4**

\*\*statistically significant difference  $p < 0.001$

Q17 How many of the following (in working order) do you have in your household?

	Gender			Age (in months)			Social Class		Ethnicity	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
<b>TVs</b>										
0	2	1	3	0	2	2	2	2	5**	1**
1	28	29	28	33	28	27	28	29	50**	23**
2	32	34	31	36	32	32	34	30	25**	34**
3 or more	37	36	38	31	38	38	36	40	20**	42**
<b>Video recorder/ DVDs</b>										
0	2	2	2	2	2	2	1**	4**	6**	1**
1	43	43	43	54	43	40	45**	39**	60**	39**
2	28	29	28	25	29	28	29**	27**	20**	31**
3 or more	26	26	26	19	26	30	25**	30**	15**	29**
<b>Video game player e.g. PlayStation, X-Box</b>										
0	52	51	53	58*	54*	45*	56**	42**	60**	50**
1	38	39	37	34*	37*	42*	36**	44**	33**	40**
2	7	7	6	6*	6*	8*	6**	9**	5**	7**
3 or more	3	3	3	1*	3*	4*	2**	4**	1**	3**
<b>Desktop computer or laptop</b>										
0	18	18	18	11	19	19	11**	35**	27*	16*
1	62	63	62	65	62	63	64**	57**	60*	63*
2	14	14	14	20	14	12	17**	7**	9*	16*
3 or more	5	5	5	4	5	6	7**	1**	3*	5*
<b>Radios</b>										
0	10	9	10	7	9	12	8**	14**	18**	7**
1	39	41	36	43	39	37	36**	42**	48**	36**
2	25	25	26	27	27	22	27**	23**	19**	27**
3 or more	26	25	28	23	25	30	29**	20**	14**	29**
<b>Digital cameras</b>										
0	41	42	41	27	42	45	34**	58**	48*	40*
1	53	51	54	66	52	49	60**	38**	48*	54*
2	5	5	5	7	5	5	6**	3**	2*	6*
3 or more	1	1	1	0	1	1	1**	1**	1*	1*
<b>Mobile phones</b>										
0	2	2	2	2	2	2	1**	2**	3**	1**
1	27	27	27	27	27	27	22**	38**	49**	22**
2	57	57	58	58	59	54	65**	42**	33**	64**
3 or more	14	14	13	13	12	17	12**	18**	16**	13**
<b>Video Cameras</b>										
0	39	40	38	38	38	42	34**	52**	44	38
1	59	57	60	60	60	56	64**	46**	54	60
2	3	2	2	3	2	1	2**	3**	2	2
<b>CD/ audiocassette player</b>										
0	5	5	5	4	5	5	3**	7**	12**	3**
1	40	41	40	44	41	38	38**	46**	56**	36**
2	30	29	31	29	30	30	32**	26**	21**	32**
3 or more	25	25	25	23	25	27	27**	21**	11**	29**

\*\*statistically significant difference p < 0.001

\* statistically significant difference p < 0.01

**Q18** Do you have: satellite/ cable or digital TV; internet access; broadband?

	<i>Social Class</i>			<i>Ethnicity</i>	
	All	ABC1	C2DE	Black and Minority Ethnic	White
Satellite/ Cable/ Digital TV	73	73	71	73	73
Internet Access	70	80**	45**	60**	72**
Broadband	33	39**	21**	36	33

\*\*statistically significant difference  $p < 0.001$

**Q19** Children's favourite websites (top ten only named here)

- |                      |                                       |
|----------------------|---------------------------------------|
| 1.CBeebies           | 6.Tweenies                            |
| 2.CBBC               | 7.Thomas the Tank Engine              |
| 3.Nickolodeon Junior | Joint 8 and 9. Disney and Teletubbies |
| 4. Bob the Builder   | 10. Balamory                          |
| 5.Barbie             |                                       |

Children's favourite websites by gender (top five only named here)

Boys' favourite websites	Girls' favourite websites
1.CBeebies	1.CBeebies
2.CBBC	2.CBBC
3.Nickolodeon Junior	3.Nickolodeon Junior
4. Bob the Builder	4. Barbie
5. Thomas the Tank Engine	5. Tweenies

**Q20** Children's favourite TV characters (top ten only named here)

- |                        |                           |
|------------------------|---------------------------|
| 1. Tweenies characters | 6. Thomas the Tank Engine |
| 2. Bob the Builder     | 7. Fimbles                |
| 3. Dora the Explorer   | 8. Postman Pat            |
| 4. Scooby Doo          | 9. Barney                 |
| 5. Noddy               | 10. Spider-man            |

Children's favourite TV characters by gender (top ten only named here)

Boys' favourite TV characters	Girls' favourite TV characters
1.Bob the Builder	1. Tweenies characters
2. Thomas the Tank Engine	2. Dora the Explorer
3. Scooby Doo	3. Scooby Doo
4. Tweenies	4. Fimbles
5. Noddy	5. Teletubbies
6.Spider-man	6. Barney
7. Dora the Explorer	7. Winnie the Pooh
8. Postman Pat	8. Balamory
9. Barney	9. Barbie
10. Power Rangers	10. Angelina Ballerina

**Q21** Which of the following does your child own that are related to his/ her favourite characters?

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Dolls	54	42**	68**	44	55	55	52*	59*	54	53
Furniture	9	8	10	5	9	10	6**	16**	8	12
Bedding	34	40**	28**	10**	34**	42**	29**	45**	28*	36*
Dressing-up clothes	30	30	31	5**	29**	43**	29	32	27	31
Books	81	84**	78**	55**	84**	83**	81	81	74**	83**
Food	25	26	24	16	26	25	23**	30**	24	25
Comics/ magazines	50	51	49	10**	53**	56**	49	52	33**	54**
Computer games	15	19**	11**	1**	14**	23**	15	15	15	15
Games	31	34	27	9**	32**	34**	30	31	24**	33**
Clothes	48	57**	38**	24**	50**	49**	45*	54*	51	47
Shoes	23	24	21	11**	24**	22**	19**	31**	30**	21**
Sweets	19	19	20	7**	21**	19**	15**	29**	27**	17**

\*\*statistically significant difference  $p < 0.001$

\*statistically significant difference  $p < 0.01$

**Q22** Children's favourite comics/ magazines (top ten only named here)

- |                                  |                           |
|----------------------------------|---------------------------|
| 1. <i>Thomas the Tank Engine</i> | 6. <i>Bob the Builder</i> |
| 2. <i>Toybox</i>                 | 7. Disney magazines       |
| 3. <i>The Tweenies</i>           | 8. <i>Disney Princess</i> |
| 4. CBeebies/ BBC magazines       | 9. <i>Teletubbies</i>     |
| 5. <i>Barbie</i>                 | 10. <i>Scooby Doo</i>     |

Children's favourite comics/ magazines by gender (top five only named here)

<b>Boys' favourite comics/ magazines</b>	<b>Girls' favourite comics/ magazines</b>
1. <i>Thomas the Tank Engine</i>	1. <i>Toybox</i>
2. <i>Toybox</i>	2. <i>Barbie</i>
3. <i>Bob the Builder</i>	3. <i>The Tweenies</i>
4. Disney magazines	4. <i>Disney Princess</i>
5. CBeebies/BBC magazines.	4. Disney magazines

**Q23** How much time did your child spend yesterday doing the following? Please provide an approximate estimate in hours and minutes for each activity.

*Watching TV*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
1-60 minutes	40	39	40	53**	39**	37**	43**	30**	38	40
61 – 120 minutes	27	26	27	15**	27**	30**	25**	30**	26	27
121 minutes or over	17	18	16	5**	18**	18**	13**	25**	18	16
None	13	12	14	24**	12**	11**	16**	8**	12	13

\*\*statistically significant difference  $p < 0.001$

*Watching a video or DVD*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
1-60 minutes	<b>28</b>	29	27	19**	30**	25**	30*	25*	23**	29**
61 – 120 minutes	<b>14</b>	15	14	5**	14**	16**	14**	15*	9**	15**
121 minutes or over	<b>3</b>	3	3	1**	3**	3**	2*	4*	3**	3**
None	<b>52</b>	50	55	71**	49**	54**	52*	52*	60**	50**

\*\*statistically significant difference p < 0.001

\* statistically significant difference p < 0.01

*Listening to music, including whilst riding in car*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
1-60 minutes	<b>60</b>	58*	64*	73**	62**	54**	66**	50**	48**	64**
61 – 120 minutes	<b>6</b>	5*	6*	8**	6**	4**	6**	5**	4**	6**
121 minutes or over	<b>2</b>	2*	2*	3**	2**	2**	2**	2**	3**	2**
None	<b>29</b>	32	25	13*	27*	38*	24**	39**	39**	26**

\*\*statistically significant difference p < 0.001

\* statistically significant difference p < 0.01

*Playing outside*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
1-60 minutes	<b>41</b>	40**	42**	36	42	40	40*	45*	32**	43**
61 – 120 minutes	<b>10</b>	13**	7**	6	10	10	44*	35*	7**	11**
121 minutes or over	<b>4</b>	4**	4**	2	3	5	9*	10*	3**	4**
None	<b>42</b>	39**	44**	53	40	42	4*	4*	49**	40**

Figures reported are percentages.

\*\*statistically significant difference p < 0.001

\* statistically significant difference p < 0.01

*Reading/ pretending to read*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
1-60 minutes	<b>71</b>	68**	73**	63	70	75	72	68	68	71
61 minutes or over	<b>4</b>	2**	6**	4	4	4	4	4	5	3
None	<b>22</b>	26**	18**	29	23	18	21	23	19	23

\*\*statistically significant difference p < 0.001

*Being read to by someone else*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
1-60 minutes	<b>78</b>	78	78	75	77	80	81**	70**	64**	82**
61 minutes or over	<b>4</b>	4	5	4	5	3	5**	3**	4**	4**
None	<b>16</b>	15	14	16	14	14	11**	22**	25**	11**

\*\*statistically significant difference  $p < 0.001$

*Using a desktop computer or laptop*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
1-60 minutes	<b>13</b>	14	11	3	13	16	13	12	17**	12**
61 minutes or over	<b>1</b>	1	1	0	1	2	1	2	3**	1**
None	<b>83</b>	81	85	93	83	80	84	82	75**	85**

\*\*statistically significant difference  $p < 0.001$

*Playing video games e.g. PlayStation or Xbox*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
1-60 minutes	<b>4</b>	6**	2**	1	3	8	3**	7**	6	4
61 minutes or over	<b>1</b>	2**	0**	1	0	2	0**	2**	1	1
None	<b>92</b>	89**	95**	95	94	87	95**	87**	88	93

\*\*statistically significant difference  $p < 0.001$

*Playing handheld video games e.g. Gameboy*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
1-60 minutes	<b>2</b>	3	2	0	2	4	2	3	4	2
61 minutes or over	<b>1</b>	1	1	2	1	1	1	2	1	1
None	<b>93</b>	92	95	94	94	92	95	91	90	95

\*\*statistically significant difference  $p < 0.001$

*Playing inside with toys*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
1-60 minutes	<b>27</b>	28	26	14**	24**	37**	26*	28*	37**	24**
61 – 120 minutes	<b>28</b>	27	29	30**	29**	26**	29*	36*	24**	29**
121 minutes or over	<b>36</b>	38	35	47**	39**	28**	38*	33*	21**	41**
None	<b>4</b>	3	5	6**	3**	7**	3*	7*	9**	3**

\*\*statistically significant difference p < 0.001

\* statistically significant difference p < 0.01

*Writing/ drawing*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
1-60 minutes	<b>64</b>	63**	65**	42**	68**	63**	66	62	63	65
61 – 120 minutes	<b>12</b>	8**	16**	5**	12**	15**	12	12	10	13
121 minutes or over	<b>3</b>	2**	4**	1**	3**	4**	2	4	3	3
None	<b>17</b>	23**	11**	47**	14**	15**	17	17	18	17

\*\*statistically significant difference p < 0.001

**Total screen time** including TV, video/ DVD, computer, video games, handheld games

Mean total number of minutes = 126 (2 hours 6 minutes)

*Total screen time*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
1-60 minutes	<b>24</b>	21	28	47**	23**	19**	27**	17**	22	25
61 – 120 minutes	<b>28</b>	28	27	15**	28**	31**	30**	23**	26	28
121 -180 minutes	<b>19</b>	20	18	8**	20**	19**	18**	22**	14	20
181 minutes or over	<b>17</b>	19	15	5**	18**	19**	13**	24**	21	16
None	<b>5</b>	5	6	16**	5**	4**	6**	3**	6	5

\*\*statistically significant difference p < 0.001

*How much time did your child spend yesterday doing the following? Mean number of total minutes by age.*

	<i>All</i>	<i>0-24m</i>	<i>25-48m</i>	<i>49-72m</i>
<i>Watching television</i>	82	48	85	86
<i>Watching a video or DVD</i>	33	14	36	35
<i>Listening to music</i>	31	43	31	26
<i>Playing outside</i>	35	25	36	37
<i>Reading/ 'pretending' to read</i>	30	24	31	28
<i>Being read to by someone else</i>	32	32	34	29
<i>Using a desktop computer or laptop</i>	6	1	6	9
<i>Playing video games e.g. PlayStation, Xbox</i>	3	1	1	6
<i>Playing handheld games e.g. Gameboy</i>	2	3	2	3
<i>Playing inside with toys</i>	126	157	139	108
<i>Writing and drawing</i>	44	22	45	48

**Q24** Where does your child do the following, most of the time?

*Watching TV*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	<b>All</b>	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
In his/her bedroom	<b>2</b>	2	1	0	2	1	1**	3**	3	1
In the living room	<b>87</b>	88	86	79	87	90	86**	88**	85	87
In the kitchen	<b>2</b>	1	2	3	1	1	2**	1**	1	2
In another room in the house	<b>4</b>	4	4	3	5	3	6**	2**	3	5
Rarely or never does this	<b>3</b>	2	3	13	2	2	3**	2**	2	3

\*\*statistically significant difference p < 0.001

*Watching a video or DVD*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	<b>All</b>	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
In his/her bedroom	<b>12</b>	12	12	3	11	18	9**	21**	9**	13**
In the living room	<b>69</b>	69	68	52	71	68	71**	61**	63**	70**
In the kitchen	<b>1</b>	1	1	0	1	1	1**	0**	1**	1**
In another room in the house	<b>6</b>	6	6	3	7	6	7**	3**	6**	6**
Rarely or never does this	<b>8</b>	7	8	35	6	4	8**	8**	14**	7**

\*\*statistically significant difference p < 0.001

*Listening to music, including whilst riding in car*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	<b>All</b>	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
In his/her bedroom	<b>13</b>	12	14	8*	13*	16*	13	13	13**	13**
In the living room	<b>40</b>	40	40	41*	42*	34*	39	42	35**	41**
In the kitchen	<b>12</b>	12	12	12*	12*	13*	13	10	6**	14**
In another room in the house	<b>11</b>	10	11	14*	10*	10*	12	7	10**	11**
Rarely or never does this	<b>13</b>	13	11	12*	11*	16*	12	15	19**	11**

\*\*statistically significant difference p < 0.001

*Reading/ pretending to read*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
In his/her bedroom	<b>24</b>	25	23	10**	26**	23**	25*	21*	24	24
In the living room	<b>52</b>	52	53	60**	51**	54**	51*	56*	46	54
In the kitchen	<b>2</b>	3	2	1**	2**	4**	2*	2*	2	2
In another room in the house	<b>6</b>	6	6	8**	6**	5**	7*	3*	6	6
Rarely or never does this	<b>3</b>	4	3	13**	3**	2**	4*	3*	3	3

\*\*statistically significant difference p < 0.001

\* statistically significant difference p < 0.005

*Being read to by someone else*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
In his/her bedroom	<b>45</b>	43	46	24**	46**	47**	49**	36**	39	46
In the living room	<b>38</b>	39	38	53**	37**	37**	34**	46**	39	38
In the kitchen	<b>1</b>	1	1	1*	1**	1**	1**	1**	1	1
In another room in the house	<b>4</b>	4	3	7**	4**	3**	5**	2**	4	4
Rarely or never does this	<b>2</b>	2	1	5**	1**	1**	1**	2**	3	1

\*\*statistically significant difference p < 0.001

*Using a desktop computer or laptop*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
In his/her bedroom	<b>4</b>	5	3	1	3	6	3**	5**	3	9
In the living room	<b>12</b>	13	12	3	12	18	12**	14**	12	14
In the kitchen	<b>1</b>	2	1	0	1	2	2**	2**	2	0
In another room in the house	<b>26</b>	26	27	5	27	32	30**	17**	27	24
Rarely or never does this	<b>50</b>	47	52	81	51	35	49**	53**	51	42

\*\*statistically significant difference p < 0.001

*Playing video games e.g. PlayStation or XBox*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	<b>All</b>	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
In his/her bedroom	<b>4</b>	6	2	0	3	9	3**	6**	7	3
In the living room	<b>6</b>	9	4	2	5	12	5**	10**	9	6
In the kitchen	<b>0</b>	0	0	0	0	0	0**	1**	0	0
In another room in the house	<b>4</b>	4	4	1	4	6	3**	6**	5	4
Rarely or never does this	<b>77</b>	71	83	88	81	66	83**	66**	64	81

\*\*statistically significant difference p < 0.001

*Playing inside with toys*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	<b>All</b>	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
In his/her bedroom	<b>15</b>	13	18	3**	14**	23**	14**	20**	20**	14**
In the living room	<b>51</b>	54	49	66**	53**	44**	53**	47**	45**	53**
In the kitchen	<b>1</b>	1	1	1**	1**	1**	1**	1**	1**	1**
In another room in the house	<b>12</b>	12	12	9**	13**	12**	15**	7**	7**	14**
Rarely or never does this	<b>2</b>	2	2	6**	2**	2**	2**	3**	2**	3**

\*\*statistically significant difference p < 0.001

*Writing/ drawing*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	<b>All</b>	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
In his/her bedroom	<b>4</b>	3	4	1**	4**	4**	3**	5**	7**	3**
In the living room	<b>47</b>	46	48	42**	47**	50**	44**	55**	55**	45**
In the kitchen	<b>22</b>	23	21	10**	24**	20**	25**	15**	8**	26**
In another room in the house	<b>13</b>	14	13	14**	13**	13**	16**	8**	6**	15**
Rarely or never does this	<b>3</b>	4	2	26**	1**	1**	4**	2**	4**	3**

\*\*statistically significant difference p < 0.001

**Q25 Attitudinal statements**

*Popular culture motivates my child to read/ write*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	<b>All</b>	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Strongly agree	<b>8</b>	8	8	9**	8**	9**	7**	9**	16**	6**
Tend to agree	<b>52</b>	53	50	44**	53**	51**	50**	56**	45**	53**
Tend to disagree	<b>24</b>	23	24	18**	24**	25**	28**	15**	16**	26**
Strongly disagree	<b>5</b>	5	6	13**	5**	5**	6**	3**	6**	5**

\*\*statistically significant difference p < 0.001

*Media is harmful to my child's education*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Strongly agree	2	2	2	2	2	3	2**	3**	5**	2**
Tend to agree	16	16	15	10	16	16	13**	20**	27**	13**
Tend to disagree	63	62	65	61	64	62	66**	56**	47**	67**
Strongly disagree	12	13	11	18	11	12	13**	10**	11**	13**

\*statistically significant difference p < 0.001

*Television helps my child's language development*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Strongly agree	20	19	21	19	20	21	16**	27**	33**	16**
Tend to agree	59	60	58	53	60	59	61**	55**	48**	62**
Tend to disagree	14	15	14	15	13	16	17**	10**	12**	15**
Strongly disagree	3	2	4	5	3	2	3**	2**	2**	3**

\*statistically significant difference p < 0.001

*I know less than my child about computers*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Strongly agree	4	5	4	0	4	7	2**	9**	8**	3**
Tend to agree	5	5	5	2	5	7	3**	11**	7**	5**
Tend to disagree	22	24	21	12	21	30	22**	25**	23**	21**
Strongly disagree	63	60	65	77	65	53	69**	46**	65**	54**

\*statistically significant difference p < 0.001

*I would like to know more about media and learning*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Strongly agree	19	18	19	24	19	18	17**	24**	31**	16**
Tend to agree	50	50	51	46	51	51	52**	49**	44**	52**
Tend to disagree	17	17	17	12	16	20	19**	12**	10**	19**
Strongly disagree	7	7	6	8	7	6	7**	5**	6**	7**

\*statistically significant difference p < 0.001

**Q26** Who does your child do the following with, most of the time?

*Watch TV*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	<i>All</i>	<i>Boy</i>	<i>Girl</i>	<i>0 - 24m</i>	<i>24 - 48m</i>	<i>49 - 72m</i>	<i>ABC1</i>	<i>C2DE</i>	<i>Black and Minority Ethnic</i>	<i>White</i>
Usually on own	<b>6</b>	7	5	3**	6**	7**	6**	6**	10**	5**
Usually on own, but has help occasionally	<b>8</b>	8	8	3**	9**	6**	9**	6**	9**	8**
Usually with another child e.g. brother, sister, friend	<b>40</b>	40	40	14**	39**	50**	39**	42**	37**	40**
Usually with an adult	<b>37</b>	37	37	64**	37**	29**	38**	35**	30**	39**
Rarely or never does this	<b>3</b>	2	3	12**	2**	1**	3**	2**	2**	3**

\*\*statistically significant difference  $p < 0.001$

*Watch a video or DVD*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	<i>All</i>	<i>Boy</i>	<i>Girl</i>	<i>0 - 24m</i>	<i>24 - 48m</i>	<i>49 - 72m</i>	<i>ABC1</i>	<i>C2DE</i>	<i>Black and Minority Ethnic</i>	<i>White</i>
Usually on own	<b>9</b>	11	8	3**	9**	13**	8	12	11*	9*
Usually on own, but has help occasionally	<b>10</b>	10	11	4**	11**	10**	12	7	9*	11*
Usually with another child e.g. brother, sister, friend	<b>38</b>	36	39	10**	38**	45**	37	38	34*	39*
Usually with an adult	<b>37</b>	29	29	40**	30**	23**	30	28	27*	30*
Rarely or never does this	<b>3</b>	7	7	36**	5**	4**	7	6	11*	6*

\*\*statistically significant difference  $p < 0.001$

*Listen to music*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	<i>All</i>	<i>Boy</i>	<i>Girl</i>	<i>0 - 24m</i>	<i>24 - 48m</i>	<i>49 - 72m</i>	<i>ABC1</i>	<i>C2DE</i>	<i>Black and Minority Ethnic</i>	<i>White</i>
Usually on own	<b>5</b>	5	5	3**	5**	7**	5**	5**	5**	5**
Usually on own, but has help occasionally	<b>5</b>	5	6	3**	6**	5**	5**	5**	6**	5**
Usually with another child e.g. brother, sister, friend	<b>22</b>	21	23	8**	22**	27**	21**	24**	22**	21**
Usually with an adult	<b>50</b>	51	51	73**	52**	41**	54**	43**	38**	54**
Rarely or never does this	<b>11</b>	11	9	8**	9**	15**	9**	14**	18**	9**

\*\*statistically significant difference  $p < 0.001$

*Play outside*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Usually on own	<b>3</b>	4	2	1**	3**	2**	2**	4**	3**	2**
Usually on own, but has help occasionally	<b>5</b>	4	5	3**	4**	5**	5**	5**	5**	4**
Usually with another child e.g. brother, sister, friend	<b>48</b>	46	50	20**	46**	61**	47**	49**	43**	49**
Usually with an adult	<b>35</b>	35	34	58**	37**	22**	38**	27**	33**	35**
Rarely or never does this	<b>2</b>	2	2	10**	1**	2**	2*	3*	5**	2**

\*\*statistically significant difference p < 0.001

\* statistically significant difference p < 0.01

*Read/ 'pretend' to read*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Usually on own	<b>19</b>	18*	21*	14**	20**	19**	20	17	17*	20*
Usually on own, but has help occasionally	<b>17</b>	15*	20*	9**	19**	14**	17	18	15*	18*
Usually with another child e.g. brother, sister, friend	<b>9</b>	10*	9*	3**	10**	10**	8	12	8*	13*
Usually with an adult	<b>44</b>	48*	41*	56**	41**	49**	45	42	41*	45*
Rarely or never does this	<b>3</b>	4*	3*	12**	3**	2**	4	2	4*	2*

\*\*statistically significant difference p < 0.001

\* statistically significant difference p < 0.01

*Read to by someone else*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Usually on own	<b>1</b>	1	1	1	1	1	1**	1**	2**	1**
Usually on own, but has help occasionally	<b>2</b>	2	2	1	2	1	2**	2**	4**	1**
Usually with another child e.g. brother, sister, friend	<b>6</b>	5	5	4	5	6	4**	9**	10**	4**
Usually with an adult	<b>84</b>	84	85	87	85	85	89**	75**	72**	88**
Rarely or never does this	<b>1</b>	2	1	2	1	1	1**	2**	1**	3**

\*\*statistically significant difference p < 0.001

Write/ draw

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Usually on own	<b>14</b>	10**	17**	3**	13**	19**	13	16	22**	11**
Usually on own, but has help occasionally	<b>20</b>	17**	24**	10**	21**	20**	20	20	18**	21**
Usually with another child e.g. brother, sister, friend	<b>17</b>	18**	15**	7**	17**	19**	17	17	16**	17**
Usually with an adult	<b>37</b>	41**	33**	51**	38**	32**	40	30	26**	40**
Rarely or never does this	<b>3</b>	4**	2**	23**	2**	1**	3	3	5*	3*

\*\*statistically significant difference  $p < 0.001$

Use a desktop computer or laptop to play 'fun' games

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Usually on own	<b>3</b>	3	3	0	2	6	3	3	5**	3**
Usually on own, but has help occasionally	<b>6</b>	7	6	0	5	11	7	4	7**	6**
Usually with another child e.g. brother, sister, friend	<b>7</b>	8	7	0	7	10	6	9	13**	6**
Usually with an adult	<b>29</b>	30	27	10	30	33	31	23	24**	30**
Rarely or never does this	<b>49</b>	47	52	82	52	34	48	54	51**	43**

\*\*statistically significant difference  $p < 0.001$

Use a desktop computer or laptop to play 'educational' (e.g. language/ spelling/ maths) games

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Usually on own	<b>2</b>	2	2	0	1	4	2	2	3**	2**
Usually on own, but has help occasionally	<b>5</b>	5	4	1	3	9	5	4	6**	4**
Usually with another child e.g. brother, sister, friend	<b>5</b>	5	5	0	4	8	5	6	8**	4**
Usually with an adult	<b>31</b>	32	29	4	31	39	33	25	27**	32**
Rarely or never does this	<b>53</b>	51	54	88	56	35	52	55	46**	54**

\*\*statistically significant difference  $p < 0.001$

Use a desktop computer or laptop to write/ draw

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Usually on own	2	2	2	1	1	4	2	2	4**	1**
Usually on own, but has help occasionally	3	3	3	0	3	5	3	4	4**	3**
Usually with another child e.g. brother, sister, friend	4	4	4	0	4	6	4	5	3**	9**
Usually with an adult	20	20	20	3	19	28	20	18	17**	21**
Rarely or never does this	65	66	65	90	68	51	67	63	68**	57**

\*statistically significant difference p < 0.001

Use a desktop computer or laptop to look at/ read talking books

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Usually on own	2	2	2	1	2	4	2	2	3**	2**
Usually on own, but has help occasionally	4	4	4	1	4	5	4	4	6**	3**
Usually with another child e.g. brother, sister, friend	3	4	3	0	3	5	3	5	7**	2**
Usually with an adult	19	18	20	8	19	24	20	16	18**	20**
Rarely or never does this	66	67	65	83	68	57	67	65	69**	55**

Figures reported are percentages.

\*\*statistically significant difference p < 0.001

Visit websites

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Usually on own	1	1	1	0	0	1	1**	0**	1**	1**
Usually on own, but has help occasionally	1	1	1	0	1	1	2**	0**	2**	1**
Usually with another child e.g. brother, sister, friend	2	2	2	0	2	4	2**	3**	4**	1**
Usually with an adult	23	23	23	9	23	30	26**	16**	20**	24**
Rarely or never does this	68	67	69	84	70	60	66**	74**	64**	69**

\*\*statistically significant difference p < 0.001

*Send and receive email messages*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	<b>All</b>	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Usually on own	<b>0</b>	0	0	0	0	0	0	0	0	0
Usually on own, but has help occasionally	<b>0</b>	0	0	0	0	0	0	0	0	0
Usually with another child e.g. brother, sister, friend	<b>0</b>	0	0	0	0	0	0	0	1	0
Usually with an adult	<b>3</b>	2	0	1	2	5	3	3	3	3
Rarely or never does this	<b>91</b>	90	93	91	93	90	92	90	85	93

*Use a mobile phone to make calls*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	<b>All</b>	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Usually on own	<b>0</b>	1	0	0	1	0	0	1	2	0
Usually on own, but has help occasionally	<b>1</b>	0	1	0	1	0	0	1	1	0
Usually with another child e.g. brother, sister, friend	<b>1</b>	1	1	0	1	0	0	1	1	0
Usually with an adult	<b>9</b>	10	9	5	9	11	8	13	15	8
Rarely or never does this	<b>84</b>	83	85	88	84	83	87	77	71	87

*Play video games like PlayStation/ X-box*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	<b>All</b>	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Usually on own	<b>2</b>	3**	1**	0	1	5	1**	3**	4**	1**
Usually on own, but has help occasionally	<b>1</b>	2**	1**	0	1	2	1**	2**	1**	1**
Usually with another child e.g. brother, sister, friend	<b>7</b>	8**	6**	1	6	12	6**	11**	12**	1**
Usually with an adult	<b>4</b>	5**	3**	1	4	7	3**	7**	5**	4**
Rarely or never does this	<b>80</b>	75**	84**	90	83	68	84**	67**	66**	82**

\*\*statistically significant difference  $p < 0.001$

*Play inside with toys*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Usually on own	<b>17</b>	3	1	8**	15**	22**	15**	20**	28**	14**
Usually on own, but has help occasionally	<b>21</b>	2	1	21**	23**	15**	23**	16**	18**	22**
Usually with another child e.g. brother, sister, friend	<b>37</b>	8	6	14**	37**	46**	38**	37**	28**	40**
Usually with an adult	<b>13</b>	5	3	43**	11**	6**	14**	9**	14**	8**
Rarely or never does this	<b>2</b>	75	84	5**	2**	2**	2**	4**	3**	2**

\*\*statistically significant difference p < 0.001

*Use a digital camera*

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Usually on own	<b>1</b>	1	1	1	1	2	1	2	2	1
Usually on own, but has help occasionally	<b>1</b>	1	1	0	1	1	1	2	2	1
Usually with another child e.g. brother, sister, friend	<b>0</b>	0	1	0	1	0	1	0	1	0
Usually with an adult	<b>11</b>	11	12	3	11	13	12	9	10	11
Rarely or never does this	<b>82</b>	83	82	90	83	80	83	82	84	78

**Q27** Which of the following does your child do as he/ she watches TV?

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Sings	77	72**	83**	57**	80**	77**	77	79	70**	79**
Dances	73	68**	80**	64**	77**	69**	48	56	63**	76**
Reads	17	15**	19**	13	16	19	13**	24**	19	16
Writes/ draws	27	22**	33**	14**	26**	34**	24**	33**	28	27
Talks about programme/ film	69	68	71	19**	73**	75**	69	68	58**	72**
Talks about other things	36	36	37	10**	36**	46**	34*	40*	36	37
Talks to the characters on screen	48	46	50	36**	52**	42**	46	50	43	49
Acts out the story	34	33	36	6**	36**	41**	33	37	32	35
Role-plays a character	44	44	43	8**	45**	51**	42	47	38	45
Sits quietly and concentrates on the TV some of the time	60	59	61	66	60	57	58	64	58	60
Sits quietly and concentrates on the TV a lot of the time	30	31	31	8**	32**	35**	33	26	24*	32*
Sits quietly and concentrates on the TV all of the time	5	4	5	3	5	6	4	5	6	4
Plays with toys related to the TV programme/ film	38	45**	31**	26*	38*	42*	36**	43**	33	39
Plays with toys not related to the TV programme/ film	45	46	45	47	47	43	47	41	36**	48**

\*\*statistically significant difference  $p < 0.001$

\* statistically significant difference  $p < 0.01$

**Q28** How often do you take part in your child's TV-related play?

	<i>Gender</i>			<i>Age (in months)</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	0 - 24m	24 - 48m	49 - 72m	ABC1	C2DE	Black and Minority Ethnic	White
Often	16	15	16	21**	17**	11**	15	16	12*	17*
Sometimes	39	41	36	25**	40**	40**	38	43	39*	39*
Occasionally	28	27	29	21**	27**	31**	28	25	25*	28*
Never	13	13	14	18**	12**	15**	13	14	12*	18*

\*\*statistically significant difference  $p < 0.001$

\* statistically significant difference  $p < 0.01$

**Q29** What do you think your child can learn from watching TV? (Open responses required.)

**Q30** Can you give some examples of things he/she has learned from TV? (Open responses required.)

**Q31** At what age did your child first do each of the following?

*Watch TV*

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
Less than 6 months	<b>19</b>						
6-11 months	<b>40</b>						
0-11m	<b>60</b>	60	59	59	62	59	60
1 year	<b>27</b>	29	24	27	22	29	26
2 years	<b>10</b>	9	10	9	11	12	9
3 years and over	<b>1</b>	2	1	1	2	3	1
Has never done this	<b>1</b>	1	1	1	1	1	1
Don't know	<b>1</b>	1	1	1	1	1	1

*Turned on TV by her/ himself*

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
Less than 6 months	<b>1</b>						
6-11 months	<b>10</b>						
0-11m	<b>11</b>	13*	8*	10**	11**	16**	9**
1 year	<b>27</b>	29*	24*	25**	30**	29**	26**
2 years	<b>34</b>	33*	35*	34**	33**	27**	35**
3 -6 years	<b>15</b>	13*	17*	14**	17**	13**	15**
Has never done this	<b>12</b>	10*	13*	15**	7**	8**	13**
Don't know	<b>1</b>	1*	1*	1**	1**	1**	1**

\*\*statistically significant difference p < 0.001

\*\*statistically significant difference p < 0.01

*Changed channels with a remote control*

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
Less than 6 months	<b>0</b>						
6-11 months	<b>5</b>						
0-11m	<b>5</b>	7*	4*			8**	4**
1 year	<b>13</b>	14*	11*	18**	18**	16**	12**
2 years	<b>24</b>	25*	23*	22**	30**	28**	23**
3 – 6 years	<b>25</b>	23	27*	24**	27**	25**	25**
Has never done this	<b>30</b>	28*	32*	34**	21**	18**	33**
Don't know	<b>1</b>	1	2*	2**	1**	1**	1**

\*\*statistically significant difference p < 0.001

\*\*statistically significant difference p < 0.01

Asked to watch a particular TV show or channel

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
0-11m	1	1	2	1	1	2	1
1 year	12	12	12	14	13	11	12
2 years	46	45	46	45	47	42	47
3 -6 years	26	28	26	26	29	28	26
Has never done this	12	11	13	14	8	13	12
Don't know	1	0	1	1	1	1	1

Asked to watch a particular video or DVD

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
0-11m	1	1	1	1	1	1**	1**
1 year	11	12	10	13*	10*	9**	12**
2 years	48	47	50	40*	45*	36**	52**
3 -6 years	27	27	27	25*	31*	31**	26**
Has never done this	10	10	11	11*	9*	16**	9**
Don't know	1	1	1	0*	1*	1**	0**

\*\*statistically significant difference  $p < 0.001$

\*statistically significant difference  $p < 0.01$

Put a video/ DVD in on own

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
0-11m	1	1**	1**	1	1	0	1
1 year	6	8**	3**	6	6	6	5
2 years	29	29**	29**	29	30	27	30
3 -6 years	33	33**	34**	32	36	33	34
Has never done this	29	26**	32**	0	1	29	29
Don't know	1	1**	0**	31	24	1	1

\*\*statistically significant difference  $p < 0.001$

Put a CD/ audiocassette in on own

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
0-11 m	0	1	0	0	1	1	0
1 year	4	4	3	4	4	4	3
2 years	24	24	24	24	22	24	23
3 -6 years	30	28	32	28	33	29	30
Has never done this	38	40	37	40	35	3	40
Don't know	2	1	2	1	3	33	1

\*statistically significant difference  $p < .01$

*Used a computer on own*

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
0-1y 11m	<b>2</b>	2*	0*	1	1	2	1
2 years	<b>7</b>	8*	6*	6	6	8	6
3 years	<b>18</b>	18*	19*	19	17	18	18
4 -6 years	<b>7</b>	6*	8*	6	6	8	6
Has never done this	<b>62</b>	62*	63*	64	61	55	64
Don't know	<b>2</b>	2*	2*	1	3	2	1

\*statistically significant difference p < 0.005

*Used a mouse to point and click*

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
0- 1y11m	<b>2</b>	2	2	2	2	2	2
2 years	<b>13</b>	14	13	14	12	15	13
3 years	<b>30</b>	30	30	32	26	25	31
4 years	<b>7</b>	6	7	6	8	6	7
5 years	<b>1</b>	1	1	1	1	1	1
Has never done this	<b>41</b>	41	42	42	42	40	42
Don't know	<b>3</b>	3	3	2	4	4	3

*Put CD-Rom into a computer*

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
0- 1y11m	<b>1</b>	1	0	0	1	2**	0**
2 years	<b>6</b>	7	5	5	6	9**	4**
3 years	<b>13</b>	14	12	13	12	14**	13**
4 years	<b>4</b>	4	4	4	3	3**	4**
5 years	<b>1</b>	1	1	0	1	1**	0**
Has never done this	<b>71</b>	69	73	72	69	60**	74**
Don't know	<b>3</b>	2	3	2	4	3**	2**

\*statistically significant difference p < 0.001

*Looked at websites for children*

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
0- 1y11m	<b>2</b>	3	3	3**	2**	3**	3**
2 years	<b>12</b>	12	12	14**	8**	7**	14**
3 years	<b>15</b>	15	15	16**	12**	11**	15**
4 years	<b>4</b>	4	4	5**	4**	2**	5**
5 years	<b>1</b>	1	1	1**	1**	2**	0**
Has never done this	<b>60</b>	60	60	57**	65**	64**	59**
Don't know	<b>2</b>	3	2	2**	4**	3**	2**

\*\*statistically significant difference p < 0.001

*Asked to go to a particular website*

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
0- 1y11m	<b>1</b>	1	1	1**	1**	1**	1**
2 years	<b>7</b>	7	7	8**	4**	6**	7**
3 years	<b>14</b>	14	13	16**	9**	12**	14**
4 years	<b>4</b>	4	4	4**	4**	3**	5**
5 years	<b>1</b>	1	1	1**	1**	3**	0**
Has never done this	<b>68</b>	67	69	67**	72**	65**	69**
Don't know	<b>2</b>	2	2	1**	3**	2**	2**

\*\*statistically significant difference p < 0.001

*Gone to a particular website on own*

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
0- 1y11m	<b>0</b>	0	0	0	0	1	0
2 years	<b>1</b>	1	0	1	0	1	1
3 years	<b>2</b>	2	2	2	2	3	2
4 years	<b>1</b>	1	1	1	1	0	1
5 years	<b>1</b>	0	1	1	1	2	0
Has never done this	<b>90</b>	90	91	92	87	83	92
Don't know	<b>1</b>	1	2	1	1	2	1

*Sent an email with someone's help*

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
0- 1y11m	0	0	0	0	0	0	0
2 years	1	1	1	1	1	1	1
3 years	2	3	2	3	2	3	2
4 years	1	1	1	1	1	1	1
5 years	0	1	1	0	0	1	0
Has never done this	90	90	91	91	88	85	92
Don't know	1	1	1	1	2	2	3

*Sent an email on his/ her own*

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
0 -6 years	1	1	1	1	1	1	0
Has never done this	94	94	95	92	92	88	96
Don't know	1	1	1	1	2	2	1

*Used a mobile phone to make a call*

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
0-11 months	0						
1 year	2						
0- 1y11m	2	2	2	2	2	4**	1**
2 years	4	3	4	4	4	6**	3**
3 years	8	8	8	8	10	7**	6**
Has never done this	82	82	82	85	77	71**	85**
Don't know	1	1	1	1	2	2**	2**

\*\*statistically significant difference p < 0.001

*Told someone else when a text-message has arrived for them*

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
0- 1y11m	1	2	1	1**	2**	3*	1*
2 years	9	9	8	6**	13**	8*	9*
3 years	13	13	12	11**	17**	13*	11*
4 -6 years	5	5	6	5**	9**	6*	5*
Has never done this	67	66	68	74**	53**	63*	68*
Don't know	1	1	1	0**	2**	2*	1*

\*\*statistically significant difference p < 0.001

\*statistically significant difference p < 0.01

*Played with ringtones on a mobile*

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
0- 1y 11m	<b>4</b>	5	4	3**	6**	8**	3**
2 years	<b>7</b>	7	7	5**	12**	12**	6**
3 years	<b>9</b>	10	9	7**	14**	8**	13**
4 -5 years	<b>4</b>	3	4	2**	6**	3**	6**
Has never done this	<b>72</b>	71	73	80**	57**	53**	77**
Don't know	<b>0</b>	0	0	0**	1**	1**	1**

\*\*statistically significant difference p < 0.001

*Pretended to send a text-message on a mobile phone*

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
0- 1y 11m	<b>1</b>	2	1	1**	2**	3**	1**
2 years	<b>6</b>	6	7	5**	9**	7**	6**
3 years	<b>9</b>	7	10	8**	11**	10**	8**
4 -5 years	<b>2</b>	3	3	2**	4**	4**	3**
Has never done this	<b>76</b>	78	75	80**	68**	2**	0**
Don't know	<b>1</b>	1	0	0**	1**	66**	79**

\*\*statistically significant difference p < 0.001

*Used a digital camera to take a photograph*

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
0- 1y11m	<b>1</b>	1	1	1	1	3*	1*
2 years	<b>7</b>	7	7	7	6	7*	7*
3 years	<b>13</b>	14	13	14	12	10*	14*
4-6 years	<b>5</b>	5	6	6	5	4*	6*
Has never done this	<b>69</b>	70	70	69	70	66*	70*
Don't know	<b>1</b>	1	1	1	1	1*	2*

\*statistically significant difference p < 0.01

*Used a video camera*

	<i>Gender</i>			<i>Social Class</i>		<i>Ethnicity</i>	
	All	Boy	Girl	ABC1	C2DE	Black and Minority Ethnic	White
0- 1y11m	<b>1</b>	1	0	0	0	1*	0*
2 years	<b>4</b>	4	4	4	4	3*	4*
3 years	<b>7</b>	8	7	8	6	7*	7*
4 – 6 years	<b>3</b>	2	3	3	3	3*	3*
Has never done this	<b>81</b>	81	82	81	82	75*	83*
Don't know	<b>1</b>	1	1	0	1	1*	1*

\*statistically significant difference p < 0.01

## SECTION TWO: DATA FROM QUESTIONNAIRE WITH PRACTITIONERS

**Q1** What early years qualification do you have?

	<i>Age</i>					<i>Type of setting</i>	
	All	18-21	21-35	36-45	46-65	Maintained	Non-maintained
Level 1 or 2	12	24	11	13	9	4**	15**
Level 3	41	41	50	38	35	40**	41**
Level 4	10	3	11	9	13	23**	5**
Other	5	2	4	4	10	8**	3**
Unqualified	16	22	11	20	17	8**	19**

\*\*statistically significant difference  $p < 0.001$

**Q2** How long have you been working in the field of early childhood education?

<i>Length of time worked in early childhood field</i>	<i>%</i>
1-5 years	45
6-10 years	22
11 – 15 years	11
Over 15 years	15

**Q3** How long have you been working at this particular setting?

Mean length (in months) = 59

**Q4** Do you currently work full time/ part time or as a volunteer?

	<i>Qualification</i>					
	All	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified
Full-time	13	30**	63**	77**	71**	33**
Part-time	21	62**	36**	24**	29**	63**
Volunteer	38	3**	3**	0**	0**	2**

\*\*statistically significant difference  $p < 0.001$

**Q5** What is your gender?

Male	2%	Female	95%
------	----	--------	-----

**Q6** What is your age?

<i>Age</i>	<i>%</i>
18-21	12
22-35	36
36-45	27
46-55	18
56-65	4

**Q7** What is your ethnic group?

Black and Minority Ethnic	10%	White	88%
---------------------------	-----	-------	-----

**Q8** Do you have a position of responsibility within this early years setting? If so, please state what it is. (Open responses required.)

**Q9** How often are the following activities planned for in your setting (approximately)?

*Children using computers individually*

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	21-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very often (at least weekly) or often (e.g. 2 or 3 times a week)	52	37	54	55	58	41**	53**	78**	67**	39**	83**	41**
Occasionally (e.g. 2 or 3 times a half-term)	11	18	9	12	11	19**	13**	4**	4**	11**	5**	13**
Rarely (e.g. 2 or 3 times a year) or very rarely (e.g. once a year)	7	5	9	5	10	6**	12**	4**	8**	4**	2**	10**
Never	25	41	25	24	17	29**	22**	14**	13**	42**	9**	31**

\*\*statistically significant difference  $p < 0.001$

*Children using computers as a group*

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	21-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very often (at least weekly) or often (e.g. 2 or 3 times a week)	41	42	47	41	32	33**	45**	49**	50**	25**	66**	31**
Occasionally (e.g. 2 or 3 times a half-term)	16	14	15	19	17	21**	15**	24**	17**	14**	12**	18**
Rarely (e.g. 2 or 3 times a year) or very rarely (e.g. once a year)	10	3	8	10	16	8**	14**	8**	4**	8**	9**	10**
Never	27*	40	25	26	27	29**	23**	20**	21**	46**	11**	33**

\*\*statistically significant difference  $p < 0.001$

Children using video cameras to film

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	21-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very often (at least weekly) or often (e.g. 2 or 3 times a week)	1	0	1	1	0	0	1	0	4	0	1	1
Occasionally (e.g. 2 or 3 times a half-term)	3	3	3	3	3	3	2	2	13	2	4	2
Rarely (e.g. 2 or 3 times a year) or very rarely (e.g. once a year)	7	8	12	4	5	2	9	10	8	6	8	7
Never	81	86	81	85	83	83	85	84	67	87	83	81

Children using digital cameras

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	21-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very often (at least weekly) or often (e.g. 2 or 3 times a week)	5	3	7	4	5	3	5	12	17	0	8**	4**
Occasionally (e.g. 2 or 3 times a half-term)	6	2	10	6	2	3	7	18	0	4	13**	3**
Rarely (e.g. 2 or 3 times a year) or very rarely (e.g. once a year)	14	13	13	14	16	73	72	43	63	81	17**	12**
Never	74	81	68	67	71	73	72	43	63	81	58**	73**

\*\*statistically significant difference  $p < 0.001$

*Children using photo-editing software*

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	21-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very often (at least weekly) or often (e.g. 2 or 3 times a week)	2	2	1	1	2	2	1	2	0	0	1	1
Occasionally (e.g. 2 or 3 times a half-term)	1	0	1	1	0	0	1	0	4	0	1	1
Rarely (e.g. 2 or 3 times a year) or very rarely (e.g. once a year)	7	6	10	5	4	0	7	6	13	6	8	6
Never	91	91	84	88	87	84	88	90	75	91	88	84

*Children using film-editing software*

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	21-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very often (at least weekly) or often (e.g. 2 or 3 times a week)	0	2	0	2	0	2	1	0	0	0	1	0
Occasionally (e.g. 2 or 3 times a half-term)	0	0	0	0	0	0	0	0	0	0	6	5
Rarely (e.g. 2 or 3 times a year) or very rarely (e.g. once a year)	5	5	9	1	4	0	1	4	13	2	6	5
Never	88	92	87	92	89	86	91	94	80	94	91	86

*Children using disposable cameras*

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	21-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very often (at least weekly) or often (e.g. 2 or 3 times a week)	3	5	3	1	3	3	3	0	0	0	1*	3*
Occasionally (e.g. 2 or 3 times a half-term)	6	5	8	5	4	2	9	4	13	4	8*	6*
Rarely (e.g. 2 or 3 times a year) or very rarely (e.g. once a year)	17	16	22	16	12	10	22	24	21	10	27*	13*
Never	68	73	64	71	75	83	75	64	69	58	62*	71*

\*\*statistically significant difference  $p < 0.001$

\*statistically significant difference  $p < 0.01$

*Children watching TV/ films to discuss media effects e.g. lighting/ soundtrack*

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	21-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very often (at least weekly) or often (e.g. 2 or 3 times a week)	12	18**	15**	10**	7**	6	14	10	13	11	12	12
Occasionally (e.g. 2 or 3 times a half-term)	6	14**	8**	2**	3**	10	7	8	4	2	4	7
Rarely (e.g. 2 or 3 times a year) or very rarely (e.g. once a year)	13	21**	14**	12**	9**	11	13	16	21	10	19	10
Never	62	44**	57**	70**	73**	64	62	63	58	73	57	63

\*\*statistically significant difference  $p < 0.001$

*Children using the internet*

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	21-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very often (at least weekly) or often (e.g. 2 or 3 times a week)	6	2	5	6	9	2	3	16	8	2	13**	3**
Occasionally (e.g. 2 or 3 times a half-term)	6	2	6	4	8	0	4	16	17	4	12**	3**
Rarely (e.g. 2 or 3 times a year) or very rarely (e.g. once a year)	5	6	5	4	6	0	6	12	8	5	6**	5**
Never	78	89	78	81	73	91	83	55	58	85	67**	82**

\*\*statistically significant difference  $p < 0.001$

*Children sending emails*

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	21-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very often (at least weekly) or often (e.g. 2 or 3 times a week)	1	2	1	1	1	2	1	0	0	0	1	1
Occasionally (e.g. 2 or 3 times a half-term)	1	0	2	0	2	0	1	0	8	0	3	1
Rarely (e.g. 2 or 3 times a year) or very rarely (e.g. once a year)	4	3	4	7	2	0	4	12	4	4	5	4
Never	94	94	89	88	91	8	91	86	83	92	89	88

*Settings using popular TV or popular culture characters in role-play areas*

	Age					Qualification					Type of setting	
	All	18-21	21-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very often (at least weekly) or often (e.g. 2 or 3 times a week)	36	51**	44**	29**	28**	41	39	29	33	30	37	36
Occasionally (e.g. 2 or 3 times a half-term)	25	11**	22**	30**	35**	22	24	41	25	24	30	24
Rarely (e.g. 2 or 3 times a year) or very rarely (e.g. once a year)	17	11**	16**	22**	19**	11	19	22	25	20	21	16
Never	15	21**	15**	14**	12**	18	15	8	13	18	9	17

\*statistically significant difference  $p < 0.001$

*Settings using popular TV or popular culture characters in small-world play*

	Age					Qualification					Type of setting	
	All	18-21	21-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very often (at least weekly) or often (e.g. 2 or 3 times a week)	39	46**	50**	31**	32**	44	42	45	33	30	36	41
Occasionally (e.g. 2 or 3 times a half-term)	20	13**	14**	29**	23**	18	20	20	17	21	24	18
Rarely (e.g. 2 or 3 times a year) or very rarely (e.g. once a year)	15	6**	14**	18**	20**	8	15	24	29	17	22	13
Never	18	33**	15*	16**	19**	19	20	10	13	23	14	20

\*\*statistically significant difference  $p < 0.001$

*Settings using popular TV or popular culture characters to promote reading/ writing/ speaking and listening*

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	21-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very often (at least weekly) or often (e.g. 2 or 3 times a week)	41	41*	49*	43*	30*	46*	46*	37*	42*	33*	35*	44*
Occasionally (e.g. 2 or 3 times a half-term)	26	18*	21*	24*	35*	26*	21*	33*	21*	27*	32*	21*
Rarely (e.g. 2 or 3 times a year) or very rarely (e.g. once a year)	13	10*	11*	11*	16*	5*	14*	22*	17*	6*	17*	10*
Never	17	30*	13*	15*	14*	14*	5*	0*	8*	24*	13*	16*

\*statistically significant difference  $p < 0.01$

*Settings use comics to promote engagement in reading*

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	21-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very often (at least weekly) or often (e.g. 2 or 3 times a week)	13	19	15	14	6	11	13	20	17	7	14	13
Occasionally (e.g. 2 or 3 times a half-term)	14	13	15	12	16	10	18	12	25	10	18	13
Rarely (e.g. 2 or 3 times a year) or very rarely (e.g. once a year)	17	27	17	16	16	14	18	20	21	17	21	16
Never	48	40	46	51	54	52	47	49	33	60	43	49

*Settings using popular TV or popular culture characters in board games*

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	21-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very often (at least weekly) or often (e.g. 2 or 3 times a week)	21	25	22	21	16	22	21	20	17	16	19	21
Occasionally (e.g. 2 or 3 times a half-term)	17	11	17	19	18	22	17	24	13	16	17	17
Rarely (e.g. 2 or 3 times a year) or very rarely (e.g. once a year)	22	22	1	26	23	11	22	33	21	24	26	20
Never	33	25	25	26	38	35	35	24	46	36	31	33

*Settings having group discussion of items in newspapers*

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	21-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very often (at least weekly) or often (e.g. 2 or 3 times a week)	4	2	5	2	4	2	5	0	8	0	4	3
Occasionally (e.g. 2 or 3 times a half-term)	6	10	6	4	7	5	6	10	4	4	9	5
Rarely (e.g. 2 or 3 times a year) or very rarely (e.g. once a year)	23	29	27	23	16	25	25	29	21	18	26	22
Never	60	57	55	64	67	59	60	61	63	71	56	61

Settings have group discussion of children's popular culture/ media interests

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	21-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very often (at least weekly) or often (e.g. 2 or 3 times a week)	27	21*	35*	21*	25*	32	26	31	42	12	33	24
Occasionally (e.g. 2 or 3 times a half-term)	19	11*	15*	21*	28*	13	17	28	13	20	24	17
Rarely (e.g. 2 or 3 times a year) or very rarely (e.g. once a year)	18	24*	16*	21*	18*	14	22	25	21	17	17	19
Never	28	43*	26*	29*	24*	29	30	16	17	43	22	31

\*statistically significant difference p < 0.01

**Q10** If you have ever used popular culture to promote children's learning in the foundation stage, please describe the activity below. (Open responses required.)

**Q11** What was the children's response? Please describe below. (Open responses required.)

**Q12** How many of the following do you have in your setting?

	TV	0	1	2	More than 2	Video/ DVD player	0	1	2	More than 2	CD/ audiocassette player	0	1	2	More than 2	Interactive whiteboard	0	1 or more
All		33	47	13	6		34	49	12	5		6	49	13	30		80	18
Maintained		21**	59**	15**	5**		22**	63**	13**	3**		3	58	8	30		67**	31**
Non-maintained		37**	42**	12**	6**		39**	42**	11**	6**		7	46	15	30		85**	13**

\*\*statistically significant difference p < 0.001

	Desktop computer	0	1	2	More than 2	Laptops	0	1 or more	Digital still camera	0	1 or more	2	More than 2	Video cameras	0	1 or more
All		29	38	18	13		77	21		49	43	4	2		87	11
Maintained		6**	51**	18**	24**		71	29		28**	60**	4**	6**		77**	22**
Non-maintained		37**	33**	18**	9**		79	18		57**	36**	5**	1**		91**	7**

Figures reported are percentages.  
 \*\*statistically significant difference p < 0.001  
 \*statistically significant difference p < 0.05

**Q13** How many of the following have you used with children in the setting in the last week?

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	22-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
TV	43	54**	56**	34**	31**	38**	50**	37**	58**	27**	52	40
Video/DVDplayer	42	48*	51*	34*	36*	35**	48**	67**	42**	27**	49	39
CD/audio-Cassette player	80	87*	86*	76*	76*	68**	87**	90**	83**	69**	85	78
Desktop computer	46	30	51	47	50	32**	49**	75**	63**	26**	79**	34**
Laptop	6	2	4	7	10	13	7	2	4	5	5	6
Digital still camera	21	8	22	21	27	10*	21*	37*	33*	16*	31**	17**
Digital video camera	1	0*	1*	2*	1*	2	1	4	0	0	3	1
Interactive whiteboard	7	8	10	4	7	3	8	6	8	5	10	6

\*\*statistically significant difference  $p < 0.001$

\*statistically significant difference  $p < 0.01$

**Q14** Do you have broadband access in the setting?

	<i>All</i>	<i>Maintained</i>	<i>Non-maintained</i>
<i>Yes</i>	15	24**	11**
<i>No</i>	76	67**	80**

Figures reported are percentages.  
\*\*statistically significant difference  $p < 0.001$

**Q15** Which websites do you encourage children to visit, if any? (Top five only named here)

- 1.CBeebies
- 2.Bob the Builder
- 3.BBC
- Joint 4 and 5. Noddy and The Tweenies

*Named websites that practitioners encourage children to visit – by broadband*

	Have broadband access in the setting	Do not have broadband access in the setting
Encourage children to visit specific websites	40%	5%
Do not encourage children to visit specific websites	61%	95%

**Q16** How confident are you with the following?

*A computer*

	<i>Age</i>					<i>Qualification</i>				<i>Type of setting</i>		
	All	18-21	22-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very confident	30	35**	38**	31**	15**	18	30	45	33	32	33	28
Quite confident	45	57**	46**	44**	40**	56	46	47	33	38	46	44
Not very confident	20	6**	13**	18**	32**	19	18	8	25	20	19	18
Not at all confident	5	2**	2**	2**	10**	5	5	0	4	8	2	6

\*\*statistically significant difference  $p < 0.001$

*A digital still camera*

	<i>Age</i>					<i>Qualification</i>				<i>Type of setting</i>		
	All	18-21	21-35	36-45	45-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very confident	24	19**	35**	25**	13**	18	23	37	25	25	32	22
Quite confident	41	51**	43**	38**	40**	38	42	35	33	44	40	42
Not very confident	21	24**	14**	24**	28**	29	23	28	25	18	22	21
Not at all confident	7	5**	5**	9**	12**	8	9	0	8	11	4	9

\*\*statistically significant difference  $p < 0.001$

*A digital video camera*

	<i>Age</i>					<i>Qualification</i>				<i>Type of setting</i>		
	All	18-21	22-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very confident	12	13**	19**	11**	3**	8	13	12	21	14	14	12
Quite confident	32	38**	41**	29**	22**	35	34	31	25	26	33	32
Not very confident	28	40**	25**	34**	20**	38	27	37	33	26	31	27
Not at all confident	20	5**	6**	4**	10**	14	21	18	13	29	19	20

\*\*statistically significant difference  $p < 0.001$

*Photo editing software*

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	22-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very confident	5	2**	8**	6**	1**	2	6	8	13		8	4
Quite confident	16	19**	21**	14**	10**	14	12	31	21	13	22	13
Not very confident	29	51**	34**	22**	20**	37	32	24	29	23	31	29
Not at all confident	42	25**	31**	54**	58**	37	46	35	29	52	37	29

\*\*statistically significant difference  $p < 0.001$

*Film editing software*

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	22-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very confident	1	2	2	0	0	2	1	0	0	2	0	2
Quite confident	4	10	5	4	1	6	3	2	8	6	4	4
Not very confident	29	49	37	21	16	38	28	29	42	21	29	30
Not at all confident	57	37	48	71	72	41	64	64	42	63	63	55

*Analysing film and TV*

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	22-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very confident	7	6**	10**	5**	8**	10	7	10	13	8	11	6
Quite confident	25	21**	28**	31**	18**	22	26	28	29	26	23	26
Not very confident	29	49**	30**	24**	25**	32	32	29	38	19	31	28
Not at all confident	28	19**	22**	34**	39**	29	28	28	17	36	28	28

\*\*statistically significant difference  $p < 0.001$

*Knowing about children's popular cultural interests*

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	22-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very confident	17	14	24	16	8	16	16	26	21	12	19	16
Quite confident	57	59	58	55	58	54	60	53	58	56	61	55
Not very confident	18	16	13	21	27	20	18	22	17	23	17	19
Not at all confident	2	5	1	3	1	0	3	0	0	4	17	19

*Knowing about children's media and popular culture activities at home*

	Age					Qualification					Type of setting	
	All	18-21	22-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very confident	15	14	18	17	7	13	14	22	13	12	19	13
Quite confident	55	44	49	49	54	49	56	53	67	46	56	50
Not very confident	26	29	27	27	26	25	23	22	17	29	20	25
Not at all confident	4	6	2	3	7	3	4	2	0	6	3	4

*Knowing how to use these interests in the foundation stage curriculum*

	Age					Qualification					Type of setting	
	All	18-21	22-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very confident	10	8	14	9	6	3**	11**	18**	8**	5**	12	9
Quite confident	45	40	46	38	53	41**	52**	47**	58**	25**	50	42
Not very confident	31	33	30	38	29	37**	28**	31**	29**	42**	31	32
Not at all confident	7	13	5	9	5	10**	5**	2**	0**	19**	6	7

\*\*statistically significant difference  $p < 0.001$

*Using media as a basis for group time activities/ discussions*

	Age					Qualification					Type of setting	
	All	18-21	22-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very confident	15	22	17	12	11	13*	13*	20*	13*	10*	17	13
Quite confident	47	46	50	45	47	46*	56*	35*	58*	41*	44	48
Not very confident	23	19	22	28	24	24*	21*	37*	25*	25*	31	21
Not at all confident	7	6	4	10	9	8*	6*	4*	0*	18*	3	8

\*statistically significant difference  $p < 0.01$

**Q17** *Have you ever used media to promote learning in the foundation stage?*

	<i>Maintained</i>	<i>Non-maintained</i>
<i>Yes</i>	22%	14%
<i>No</i>	79%	86%

**Q18** Attitudinal statements

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	21-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
<i>Children generally watch too much TV</i>												
<i>Strongly agree or agree</i>	83	67**	86**	90**	85**	71*	82*	96*	75*	92*	90	80
<i>Disagree or strongly agree</i>	11	29**	10**	6**	9**	19*	13*	2*	13*	6*	7	12
<i>Children learn from TV</i>												
<i>Strongly agree or agree</i>	92	94	95	91	93	92	94	96	88	96	96	91
<i>Disagree or strongly agree</i>	3	3	3	5	2	0	3	2	8	1	2	4
<i>Children in the foundation stage should be taught about the media</i>												
<i>Strongly agree or agree</i>	57	54	66	56	49	57	60	71	54	44	63	55
<i>Disagree or strongly agree</i>	34	35	28	38	41	35	33	28	33	45	33	35
<i>TV is harmful for children's language development</i>												
<i>Strongly agree or agree</i>	25	25	21	34	26	21	23	28	42	26	22	27
<i>Disagree or strongly disagree</i>	67	70	75	62	66	68	73	73	73	20	72	66
<i>I would like more training on how to develop young children's understanding of the media</i>												
<i>Strongly agree or agree</i>	63	62	70	62	58	60	67	71	54	54	70	60
<i>Disagree or strongly disagree</i>	28	27	26	30	33	30	28	29	38	35	26	29
<i>Playing video games is harmful</i>												
<i>Strongly agree or agree</i>	33	48*	37*	26*	27*	38	27	28	33	39	22*	37*
<i>Disagree or strongly disagree</i>	63	41*	57*	65*	56*	54	63	59	50	52	65*	53*
<i>Nurseries and schools should include more activities based on children's interests in popular culture and media</i>												
<i>Strongly agree or agree</i>	63	76	70	59	55	73	67	57	54	55	58	65
<i>Disagree or strongly disagree</i>	26	18	23	31	33	18	25	39	21	35	29	25

	Age					Qualification				Type of setting		
	All	18-21	21-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
I would like more training on how to develop young children's media production skills												
<i>Strongly agree or agree</i>	58	56	64	58	51	54	61	73	46	46	63	55
<i>Disagree or strongly disagree</i>	32	32	28	36	36	32	32	28	42	42	31	33
Children can learn skills from playing video games												
<i>Strongly agree or agree</i>	66	62	63	74	74	68	65	75	63	74	76	64
<i>Disagree or strongly disagree</i>	24	30	30	21	15	24	27	22	17	19	17	27
Children spend enough time watching TV without wasting more time on it in nursery												
<i>Strongly agree or agree</i>	40	29	41	43	42	48	36	37	38	46	40	40
<i>Disagree or strongly disagree</i>	50	65	51	49	43	43	54	57	38	45	55	47
I would like more training on using ICT in the foundation stage curriculum												
<i>Strongly agree or agree</i>	70	64	74	71	70	68	77	67	54	61	74	68
<i>Disagree or strongly disagree</i>	21	29	19	22	22	21	17	33	33	26	22	21
Many children come to nursery with well-developed skills in relation to new technologies												
<i>Strongly agree or agree</i>	51	48	60	46	50	48	53	53	53	49	58	49
<i>Disagree or strongly disagree</i>	41	48	33	48	40	44	41	41	42	42	38	41
I would like more information on how to use popular culture productively in the foundation stage curriculum												
<i>Strongly agree or agree</i>	68	64	74	71	64	62	74	75	63	57	74	66
<i>Disagree or strongly disagree</i>	21	25	19	21	25	24	19	25	17	30	19	22
I have other, more important priorities for training than the use of popular culture/ media												
<i>Strongly agree or agree</i>	49	27	35	39	39	35	33	39	38	41	31	38
<i>Disagree or strongly disagree</i>	36	59	52	50	43	49	54	53	33	42	57	46

\*\*statistically significant difference p < 0.001  
\*statistically significant difference p < 0.01

**Q19** I think, for most of the children in this nursery/ early years setting, home educational experiences are:

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	22-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very different or different to nursery	34	29	38	33	31	21	38	49	29	35	54**	27**
Some similarities, but more differences	38	41	38	43	34	48	39	33	38	36	29**	41**
Similar or very similar to nursery	20	24	19	19	22	14	18	18	21	26	13**	22**

\*\*statistically significant difference  $p < 0.001$

**Q20** I think, for most of the children in this nursery/ early years setting, parental involvement in their learning is:

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	22-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very extensive or extensive	60	73	62	61	54	65	62	49	54	67	48**	65**
Not very extensive or non-existent	33	21	30	34	37	19	33	51	33	24	47**	25**

\*\*statistically significant difference  $p < 0.001$

**Q21** What would be your definition of 'media literacy'? (Open responses required.)

**Q22** How important is 'media literacy' for children's future development?

	<i>Age</i>					<i>Qualification</i>					<i>Type of setting</i>	
	All	18-21	22-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very important	17	10	17	17	22	16	17	22	38	6	23	15
Important	51	52	51	58	43	49	52	55	33	56	50	51
Not very important or not at all important	13	13	12	10	20	13	14	16	17	13	10	14

**Q23** Please give reasons for your answer. (Open responses required.)

**Q24** How important are skills and knowledge in relation to new technologies for children's future development?

	Age					Qualification					Type of setting	
	All	18-21	22-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Very important	38	16*	37*	44*	43*	30	39	53	38	30	54*	31*
Important	50	59*	45*	41*	34*	41	44	37	46	50	35*	45*
Not very important or not at all important	5	8*	3*	3*	7*	6	4	6	4	5	4*	5*

\*statistically significant difference  $p < 0.01$

**Q25** Please give reasons for your answer. (Open responses required.)

**Q26** How many hours of television do you watch, on average, a day at home?

	Age					Qualification					Type of setting	
	All	18-21	22-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Less than 1 hour	8	6	6	9	14	3	7	16	8	8	9	8
1-2 hours	48	52	50	53	41	51	49	53	38	56	49	47
3 or more hours	38	38	42	34	38	40	43	28	42	30	39	38

**Q27** Do you ever talk with the children in the setting about your TV viewing?

	Age					Qualification					Type of setting	
	All	18-21	22-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Never	24	38	24	19	23	18	25	18	13	36	19	26
Very rarely	35	27	35	39	37	43	33	45	29	33	37	34
Sometimes, often or very often	36	32	39	38	38	25	33	40	37	25	43	33

**Q28** Do you ever talk with the children in the setting about their TV viewing?

	Age					Qualification					Type of setting	
	All	18-21	22-35	36-45	46-65	Levels 1 and 2	Level 3	Level 4	Other	Un-qualified	Maintained	Non-maintained
Never	8	19*	11*	3*	3*	5	8	2	0	13	9	7
Very rarely	15	19*	16*	12*	12*	21	14	14	13	23	10	17
Sometimes	51	40*	50*	56*	56*	51	49	73	54	46	56	49
Often or very often	21	19*	22*	22*	20*	16	26	12	21	12	25	19

\*statistically significant difference  $p < 0.01$

**Q29** Do you have any other comments about children's use of popular culture, media and technology? (Open responses required.)