

**Computer-aided storytelling: effects on emergent literacy of  
preschool-aged children in an EFL context**

**Alejandra Recio Saucedo**

**Submitted in accordance with the requirements  
for the degree of Doctor of Philosophy**

The University of Leeds  
School of Education



The candidate confirms that the work submitted is her own and that appropriate credit has been given where reference has been made to the work of others.

This copy has been supplied on the understanding that it is copyright material and that no quotation from the thesis may be published without proper acknowledgement.

**November 2008**

## *Declaration of Authorship*

The work conducted during the development of this PhD thesis has led to a number of presentations. Papers and extended abstracts from these presentations have been published in the conferences' proceedings and in a journal for teachers in Spain. A list of the papers arising from the study is:

Recio, A. (2006). Task-based instruction and storytelling with young learners: Analysis of its advantages. Proceedings of the I International Conference TESS: Teachers of English for Spanish Speakers, Universidad de Jaén, España.

Recio, A. (2005). Task-based Instruction and Storytelling with young learners: Analysis of its advantages. GRETA, 13 (1 & 2), 61-70.

Recio, A. (2007). ICT-delivered stories, English as a foreign language and four-year-old spanish speaking children: Working out the combination. Poster presented at the CAL'07: Development, Disruption & Debate: D3, Trinity College. Dublin, Ireland.

Recio, A. (2008). Emergent literacy across languages: Using stories and technology to teach English to three and four year old spanish children in a foreign language context. Proceedings of the BAAL Annual Conference 2007. London: Scitsiugnil Press.

Parts of the published work have been used in my thesis as follows:

- Material from the article published in GRETA was used in Chapter 2 to develop Section 2.5.2 (See Table 2.2).
- Material from the presentation in BAAL 2007 was used in Chapter 8 in the case of a child participant presented in Section 8.3.
- A section of the poster presented in CAL '07, where transcripts from the teachers' interviews were added, was used in Chapter 9 in Section 9.2.

## *Abstract*

This thesis presents the results of a study involving very young learners of English as a foreign language in Spain. In Phase I of the study, the feasibility of developing a series of guidelines that could be used to develop English lessons based on ICT-stories and communicative tasks was investigated. In Phase II, the lessons derived from the use of the guidelines were implemented with the purpose of exploring the development of story-related emergent literacy skills of a group of 3- and 4 year-old children receiving daily English lessons.

The study has extended previous research studies regarding emergent literacy development in first and second language contexts by studying a foreign language context. The children were asked to retell stories viewed and the transcribed retellings were analysed under the Narrative Scoring Scheme. The children participants showed signs of developmental changes throughout the duration of the course. However, there were marked individual differences in these changes. Further investigation is suggested to study the reasons that might provide insight into why the children developed understanding of story structure in such high variations.

Results showed that the ICT-stories motivated the children and as a consequence, their level of participation in the lesson improved. Additionally, teachers found the use of ICT as a positive strategy to enhance young children's learning environment, but they said that implementing ICT-based projects in the young learner classroom necessarily raises issues of school's provision for training and technical support as well as considerations of teacher:child ratios. From the children's perspective, an evaluation of the lesson tasks via a survey showed positive reactions to the inclusion of ICT in the English lesson.

Findings of the study show how the young learner English curriculum could consider children's development of emergent literacy skills as a result of learning English via ICT-enhanced stories. They also show how ICT integrated in the foreign language curriculum can motivate young children and provide meaning to the activity of learning English at a time when their mother tongue is still developing.

The study also yielded unexpected results related to how young children address a task in which a story has to be organised in sequence. These results present interesting research opportunities that could be explored further in the light of theories of cognitive development.

## *Acknowledgements*

To God.

Thank you to all the wonderful people who directly and indirectly participated in the project. Each and every one are in diverse ways my role models.

Thanks are due to my supervisors, Dr. Alice Deignan and Dr. Aisha Walker for their support, guidance, their time and wisdom, their engagement in stimulating discussions of the topics explored in my thesis. Their comments on numerous drafts led me through the path of turning an idea into academic research. They taught me that a PhD is seeing the world from different and informed perspectives supported by the knowledge of others. And also it is living, ironing and organising children's parties, farewells and arrivals, life as we write about it.

Thanks goes to my sponsor, CONACYT (National Council for Science and Technology) in Mexico which granted me a scholarship to fund my doctoral studies and the people there who followed my progress and assisted me with administrative procedures throughout the duration of my studies.

To my father, hope I made him proud. To my mother, because she is the best. To my sisters and brother for their continuous questioning about my finishing. They helped me to keep track of time. Thanks to Patricia George for her invaluable support as friend and willing reader. Her help was worth an ocean. Hendon, who shared with me time, PhD wisdom and amazing advise for the discussions. Kelly, for sharing all the tangential PhD events that take place throughout the period of study. Thank you Suseela and Yasmeen. Because of you, PhD with children is an achieved dream.

My gratitude to Dr. Simon Borg, always willing to give me advice about the hard work that research entails. Thank you to Mr. Nick Nelson who taught me that statistics are as useful as long as the participants of a study can still be "seen" after the calculations. Thank you Margaret Taylor for making Leeds feel a lot like home. Thanks to Elizabeth Lister for her continuous encouragement and kind words. Thanks Louise Greaves and Sue Haines. You are the most professional, top of the world listeners and baby sitters.

Thank you to my husband, Arturo. This research, in many ways, was possible because of him. Thank you to my Renée and my Kendrah. They will always be my Little Ones. And a very special thanks go to my participant children whose efforts and laughter provided the wonderful stories that made this work possible.

# Contents

<b>Declaration of Authorship</b>	<b>i</b>
<b>Abstract</b>	<b>ii</b>
<b>Acknowledgements</b>	<b>iii</b>
<b>List of Figures</b>	<b>viii</b>
<b>List of Tables</b>	<b>x</b>
<b>1 Introduction</b>	<b>1</b>
1.1 Motivation for the study . . . . .	1
1.2 Theoretical overview . . . . .	4
1.3 The problem . . . . .	5
1.4 Aims of the study . . . . .	5
1.5 Research questions . . . . .	6
1.6 Methods . . . . .	7
1.7 Thesis outline . . . . .	9
<b>2 Exploring the effects of using ICT-enhanced stories and tasks with young language learners</b>	<b>11</b>
2.1 Overview . . . . .	11
2.2 Information and Communication Technology (ICT) and preschool education	12
2.2.1 Young children using ICT . . . . .	14
2.2.2 The integration of ICT into the early childhood classroom . . . . .	22
2.3 Characteristics of young children as language learners. . . . .	25
2.4 Children, stories and language learning . . . . .	27
2.5 The potential of Task-based learning (TBL) . . . . .	36
2.5.1 The concept of task for very young language learners . . . . .	37
2.5.2 TBL attributes in the light of young children's characteristics as language learners . . . . .	38
2.6 The emergent literacy approach . . . . .	43
2.6.1 Studies on emergent literacy development of bilingual children . . . . .	46
2.6.2 Research into ICT-stories and development of emergent literacy . . . . .	47
2.7 Summary . . . . .	53

<b>3</b>	<b>Constructing the methodology</b>	<b>55</b>
3.1	Overview . . . . .	55
3.2	Aims and structure of the study . . . . .	55
3.3	Situating the study within the paradigm of naturalistic inquiry . . . . .	56
3.4	An exploratory study . . . . .	60
3.5	Ethical considerations when conducting research with young children: design issues . . . . .	61
3.6	Choice of methods . . . . .	62
3.7	Rationale for the instruments used in Phase I of the study . . . . .	63
3.8	Rationale for the instruments used in Phase II of the study . . . . .	66
3.9	Validity and reliability . . . . .	73
3.10	Summary . . . . .	74
<b>4</b>	<b>Methodology I: The work scheme and the lessons</b>	<b>76</b>
4.1	Overview . . . . .	76
4.2	Designing the work scheme . . . . .	77
4.2.1	Plan, design and development . . . . .	77
4.2.2	Test drives: piloting a lesson . . . . .	78
4.2.3	Conclusions from pilot session that influenced fieldwork . . . . .	81
4.3	Organization of the fieldwork . . . . .	83
4.4	Summary . . . . .	87
<b>5</b>	<b>The work scheme: Data analysis and findings</b>	<b>88</b>
5.1	Overview . . . . .	88
5.2	Theoretical underpinnings of the research diary, interviews and field notes data analysis . . . . .	88
5.3	Analysis of the research diary . . . . .	90
5.4	Charting: results directed towards answering research questions 1 and 4 . . . . .	92
5.5	Summary . . . . .	100
<b>6</b>	<b>Methodology II: Fieldwork</b>	<b>102</b>
6.1	Overview . . . . .	102
6.2	Implementation of the work scheme . . . . .	103
6.2.1	Outer context: the Andalusian region of Spain . . . . .	103
6.2.2	Inner context: the School . . . . .	104
6.2.3	The participants . . . . .	106
6.2.4	Understanding the research context: a parents' survey . . . . .	108
6.3	Structure of the work scheme lessons . . . . .	108
6.3.1	ICT-task: whole-class storytelling . . . . .	109
6.3.2	ICT-task: sequencing and retelling the stories . . . . .	109
6.3.3	ICT-task: drawing a character . . . . .	111
6.3.4	ICT-task: a puzzle game via comprehension questions . . . . .	111
6.4	Role of the researcher during the research lessons . . . . .	112
6.5	Summary . . . . .	112
<b>7</b>	<b>Analysing the work scheme lessons, tasks and story retellings</b>	<b>114</b>
7.1	Overview . . . . .	114
7.2	Field notes from classroom semi-participant and participant observations . . . . .	114

7.3	Semi-structured interviews . . . . .	117
7.4	Rating scales . . . . .	122
7.5	Materials from a sequencing-a-story task . . . . .	122
7.6	Retellings from participant children . . . . .	125
7.7	Summary . . . . .	130
<b>8</b>	<b>The stories of Enrique, Isolda, Ana and Angel</b>	<b>133</b>
8.1	Overview . . . . .	133
8.2	Deconstructing children's stories . . . . .	133
8.3	Enrique: <i>Y después ... el Pastelito. "And then ... the little cupcake man."</i>	136
8.3.1	A sketch of Enrique . . . . .	136
8.3.2	Development of emergent literacy skills . . . . .	137
8.3.3	Enrique's behaviour and attitude towards the work scheme lessons	139
8.4	Isolda: <i>A mi no me gusta el Inglés. "I don't like English."</i>	143
8.4.1	A sketch of Isolda . . . . .	143
8.4.2	Development of emergent literacy skills . . . . .	144
8.4.3	Isolda's behaviour and attitude towards the work scheme lessons	147
8.5	Ana: <i>Que querían llegar al castillo. "That they wanted to get to the castle."</i>	150
8.5.1	A sketch of Ana . . . . .	150
8.5.2	Development of emergent literacy skills . . . . .	151
8.5.3	Ana's behaviour and attitude towards the work scheme lessons	152
8.6	Angel: <i>Es que no me la se. "It's that I don't know it [the story]."</i>	156
8.6.1	A sketch of Angel . . . . .	156
8.6.2	Development of emergent literacy skills . . . . .	156
8.6.3	Angel's behaviour and attitude towards the work scheme lessons	158
<b>9</b>	<b>Aggregated findings</b>	<b>163</b>
9.1	Overview . . . . .	163
9.2	Assessing the effectiveness of the work scheme lessons . . . . .	163
9.3	Summary of findings from the interviews . . . . .	170
9.4	Whole-class storytelling session . . . . .	171
9.5	Children's development of storytelling skills . . . . .	183
9.6	Peripheral findings . . . . .	187
9.7	Summary of findings from the analysis of the whole-class storytelling session	190
<b>10</b>	<b>Discussion: revisiting the research questions</b>	<b>192</b>
10.1	Overview . . . . .	192
10.2	Research question 1: Creating and implementing the work scheme . . . . .	193
10.3	Research question 2: Emergent literacy development . . . . .	203
10.3.1	Effects of work scheme lessons on four child participants . . . . .	204
10.3.2	Effects of the use of stories on the group . . . . .	210
10.3.3	Complexity growth in retellings: Fledging cause-effect elements in stories of four-year-old children . . . . .	214
10.4	Research question 3: Very young English learners, ICT-stories, and TBL	216
10.5	Research question 4: Teachers' views on young learners and ICT . . . . .	219
<b>11</b>	<b>Implications, limitations and further work</b>	<b>222</b>
11.1	Overview . . . . .	222

---

11.2 Contribution of this study . . . . .	222
11.3 Implications for the English teaching practice from the use of ICT with very young foreign language learners . . . . .	224
11.4 Implications for the emergent literacy approach . . . . .	226
11.5 Limitations . . . . .	228
11.6 Further work . . . . .	230
11.7 Conclusions: revisiting the problem . . . . .	231
<b>References</b>	<b>234</b>
<b>Appendices</b>	<b>248</b>
<b>A Work scheme guidelines</b>	<b>248</b>
<b>B Work scheme lesson plan</b>	<b>254</b>
<b>C Teachers' interview</b>	<b>255</b>
<b>D School consent form and informing letter for parents</b>	<b>258</b>
<b>E Interview transcription excerpts</b>	<b>260</b>
<b>F Survey for parents</b>	<b>264</b>
<b>G Retelling transcriptions</b>	<b>268</b>
<b>H Publications</b>	<b>270</b>
<b>I Story transcriptions</b>	<b>285</b>
<b>J Matrix analysis of the stories</b>	<b>292</b>
<b>K Transcriptions of a retelling task</b>	<b>295</b>

# List of Figures

2.1	Connections between the areas of knowledge explored in the literature review . . . . .	13
2.2	StoryWorld: An ESL/EFL English language course . . . . .	32
2.3	Story tasks suitable for young learners . . . . .	38
2.4	Storytelling-based task cycle: Telling a story . . . . .	39
3.1	Phases of the study . . . . .	56
4.1	Image from the story of The Gingerbread Man . . . . .	80
4.2	Retelling of the Gingerbread Man from pilot session . . . . .	81
6.1	Children's poster previous implementation of work scheme . . . . .	105
6.2	Classroom layout for whole-class storytelling activity . . . . .	109
6.3	Graphics for the sequencing task of The Gingerbread Man . . . . .	110
6.4	Summary of data collected during fieldwork . . . . .	113
7.1	Field notes thematic framework . . . . .	118
7.2	<i>A priori</i> thematic framework for the interviews . . . . .	120
7.3	Thematic framework after the first interview coding iteration . . . . .	121
7.4	Main category added after the first coding iteration of interview data . . . . .	121
7.5	Thematic framework after the second coding iteration of interview data . . . . .	121
7.6	Children's opinions of lesson tasks . . . . .	122
7.7	Children's individual task rating and choice of stories . . . . .	123
7.8	Enrique: sequencing-on-paper of The Gingerbread Man . . . . .	124
7.9	Isolda: sequencing-on-paper of The Gingerbread Man . . . . .	124
7.10	Ana: sequencing-on-paper of The Gingerbread Man . . . . .	125
7.11	Summarising reviewers scores . . . . .	128
8.1	Enrique: Story grammar pattern of change . . . . .	138
8.2	Enrique: Choice of stories . . . . .	142
8.3	Enrique: Evaluation of lesson tasks . . . . .	143
8.4	Isolda: Story grammar pattern of change . . . . .	145
8.5	Isolda: Choice of stories . . . . .	149
8.6	Isolda: Evaluation of lesson tasks . . . . .	149
8.7	Ana: Story grammar pattern of change . . . . .	151
8.8	Ana: Choice of stories . . . . .	154
8.9	Ana: Evaluation of lesson tasks . . . . .	155
8.10	Angel: Story grammar pattern of change . . . . .	157
8.11	Angel: Choice of stories . . . . .	160

---

8.12	Angel: Evaluation of lesson tasks . . . . .	161
9.1	Whole-class storytelling session . . . . .	172
9.2	The teachers during the whole-class storytelling session . . . . .	176
9.3	The children during the whole-class storytelling session . . . . .	178
9.4	Summary of children's story preferences . . . . .	183
9.5	Changes in NSS scores for participant children . . . . .	186
9.6	Comparison of changes in NSS scores of children's retellings between weeks . . . . .	186
9.7	Diego: sequencing-on-paper of The Gingerbread Man . . . . .	187
9.8	Expected sequencing of story . . . . .	189
9.9	Children's sequencing of story . . . . .	189
B.1	Extracts of implementation lesson plan . . . . .	254
D.1	Consent form . . . . .	258
D.2	Research information letter for parents . . . . .	259
F.1	Survey for parents . . . . .	264
G.1	Retelling transcriptions in Spanish . . . . .	268
H.1	GRETA Journal: Article on TBL and young learners . . . . .	271
H.2	Poster presented at CAL07 . . . . .	281
H.3	Changes for the component of Introduction in Enrique's narratives . . . . .	283
H.4	Changes for the component of Cohesion in Enrique's narratives . . . . .	283
I.1	Goldilocks and the Three Bears . . . . .	285
I.2	The Gingerbread Man . . . . .	288
I.3	The Three Billy Goats Gruff . . . . .	290
J.1	Matrix analysis of Goldilocks and the Three Bears . . . . .	292
K.1	Elena: TGM retelling task . . . . .	295

# List of Tables

2.1	Characteristics of ICT-enhanced stories . . . . .	34
2.2	TBL and young language learners . . . . .	42
3.1	Phases of study and research questions . . . . .	57
3.2	Research stages: Phase I . . . . .	66
3.3	Research stages: Phase II . . . . .	68
5.1	Analytic strategies of three qualitative approaches . . . . .	89
5.2	Chart 1: Research Diary. Concepts explored during work scheme development . . . . .	94
5.3	Research Diary: planning the work scheme lessons . . . . .	95
5.4	Research Diary: language methods in practice through the work scheme lessons . . . . .	96
5.5	Research Diary: reflections on procedures followed during lesson design . . . . .	97
6.1	Participant children . . . . .	107
7.1	Interviews with participant teachers . . . . .	119
7.2	Rating Scale: Global Counting . . . . .	123
7.3	Choice of favourite story: Global Counting . . . . .	123
7.4	Choice of favourite story: Girls and Boys . . . . .	123
7.5	NSS Scoring Criteria . . . . .	126
7.6	Summary of scores per retelling under the NSS . . . . .	128
7.7	Story grammar elements in Goldilocks . . . . .	129
7.8	Story grammar elements in The Gingerbread Man . . . . .	131
7.9	Story grammar elements in Three Billy Goats Gruff . . . . .	131
8.1	Qualitative analysis of story grammar in Enrique's retellings . . . . .	140
8.2	Qualitative analysis of story grammar in Isolda's retellings . . . . .	146
8.3	Qualitative analysis of story grammar in Ana's retellings . . . . .	153
8.4	Qualitative analysis of story grammar in Angel's retellings . . . . .	159
9.1	ICT linked to learning and development . . . . .	164
9.2	ICT and professional development . . . . .	166
9.3	Current use of ICT in the classroom . . . . .	168
9.4	The work scheme within the school . . . . .	169

*“We shall not cease from exploration  
and the end of all our exploring  
will be to arrive where we started  
and know the place for the first time”*

*T. S. Eliot  
Little Gidding  
(Eliot, 1969)*

# Chapter 1

## Introduction

### 1.1 Motivation for the study

English programs are being integrated at the preschool level in private and public schools in many countries around the world (Cameron, 2003). In some Spanish-speaking countries, this integration is accompanied by a steadily growing interest in the use of information and communication technologies to support the delivery of education across all school levels, including preschool. These two trends constituted the drives of this study.

I developed an interest in these issues during the time my daughter was two years old and, due to my work schedule, needed to attend a day-care facility. All the schools we visited which worked with children the age of my daughter offered English and Computer classes, starting with the group of two years old and onwards. I could not help but wonder about the methods that were being followed to teach children that young English and computer skills. The kindergarten that my daughter finally attended offered a nursery program which included general activities, such as motor-skills development and drama, and also specific subjects like English and Computer lessons. During the school year, the children used two textbooks where they worked in different ways, colouring, cutting, pasting, and tracing. The books were organized into themes such as Health or Good Manners and each theme had activity sheets with common phrases related to the theme. Each phrase written in Spanish was translated into English in a phrase in brackets written underneath the original. This material constituted a form of written support for the English lessons. I had the opportunity to attend an Open Day for the English class and to observe that the emphasis of the teacher during the lesson was on the development of the children's oral skills. She taught them nursery rhymes and songs by having them listen to tapes or she and the children would repeat the words they heard following the teacher's lead. During the Computer lessons, the children were able to play on the

computer twice a week. However, the integration of the computer activities within the overall nursery program was always unclear to me. The use of the computer was limited to games which were mostly in English. Computer time was however dispensable and could be left for the after-school care which was not attended by all the children.

At the end of the school year I had a number of questions regarding the nursery and preschool programs being used at the time, such as how the English and ICT curricula were addressing the needs of the very young children. I started to think of questions regarding the preschool level using the experience of finding a school for my daughter. I wondered about the materials being used for English lessons, the approach taken in the teaching of English and the integration of technology in the preschool program.

Some of the questions I had were:

- Was the material written in English motivating the children to speak phrases in English?
- Was the oral-oriented approach from the English teacher more useful than the written material provided in the textbooks? If so, how?
- Were the nursery rhymes and songs that the children were learning too difficult considering their fledging first language oral skills? and
- Was it possible to integrate the use of the computer in the lessons so as not to see it as a dispensable activity, and if this were possible, would it be beneficial for the children?

Of particular interest for me was the notion of language and literacy development of the children in the nursery. Was it possible for the children to use developing notions of literacy in Spanish to understand the songs and rhymes that they were working with in the English lesson? This interest became one major interest and turned into the core issue of this current research study.

*Literacy development of young children learning a foreign language.* For decades, literacy has been an area which has raised great interest. After WWII, when theories of social interactionism gained strength, literacy development started to be studied from multiple perspectives. Social aspects of literacy development were taken into consideration and it was recognised that learning to read and write is a multilayered process and not necessarily a cognition-bound skill (Sulzby & Teale, 1991). Literacy development in two or more languages has also raised the interest of bilingual educators and researchers (Bialystok, Luk & Kwan, 2005). With the present status of English as “lingua franca”

and the foreign or second language to be learned “par excellence” all over the world (Piquer-Píriz, 2004), the interest of developing literacy in English is high.

In a review about literacy development in multicultural contexts, Durgunoğlu and Verhoeven (1998) write: “A multiplicity of literacy practices can be distinguished which are related to specific cultural contexts and associated with relations of power and ideology” (Durgunoğlu & Verhoeven, 1998, p. ix). This is true as can be observed in three of the contexts which are relevant to my study.

In certain areas of Mexico, my country of origin, it is expected that children show competencies in English from as young as two years of age. In the USA, one of Mexico’s neighbour countries, learning English is related to the progress of children in mainstream schooling. This becomes relevant due to the large migrant population who feel the pressure to learn English rapidly. A great proportion of this population travels back and forth from the USA to Mexico, a phenomenon that increases the pressure to learn English, which ultimately influences Mexican culture. In the UK, children with different language backgrounds are encouraged to learn English so that they become part of the multicultural society in which they are growing up. In the south of Spain, learning English is important for purposes of, for instance, career advancement. However, children’s learning of the foreign language is spread throughout the schooling years and as opposed to the situation in the north of Mexico, there is a feeling of no-urgency to learn English. It must be learned but in due course and not at the expense of the learning of Spanish.

While recognising the contextual differences in how English is learned, one common factor remains: children are learning English ever younger. If children start learning a second or foreign language when their first language is still developing, how can development of literacy in two languages be supported? How are young learners being supported to develop English as second or foreign language literacy while simultaneously developing L1 literacy? One theoretical concept that allows exploration of this is emergent literacy, which studies how and in what circumstances young children learn the behaviours and skills that might lead them to becoming literate. Such behaviours include understanding of story structure and comprehension of stories. In a context where children start to learn English as a foreign language from an early age, could the children be encouraged to develop literacy behaviours that are in some sense universal and not dependent on specific languages, that is, behaviours that are useful to comprehend and develop understanding of story structure of stories heard in a foreign language?

All the above questions constituted the first attempts to sketch the structure of the research project that I was able to materialize and which is discussed throughout this report.

The following sections present general aspects from a broad literature review conducted before starting this research. A more detailed examination of these general topics is covered in Chapter 2, which develops in detail the theoretical foundation of the thesis.

## 1.2 Theoretical overview

Regarding the expansion of the English curriculum, Cameron (2003) writes about two influencing factors for this development taking place around the world: the lowering in the age at which children start school and parents' conviction that younger children need to learn English because it is advantageous to start young. She also posits some of the challenges to the language teaching practice brought about by the expansion of the curriculum. These include:

- the aspects that curriculum design must take into consideration for long term language learning;
- the need for teachers to understand young learners' thinking and learning mechanisms; and
- the importance of understanding that very young children cannot learn English literacy in the same way that they develop oral skills. Language curricula should address this characteristic of young children as language learners.

In connection to the use of technology for the support of language teaching, some authors believe that the inclusion of technology in the language classroom encourages pupils' creativity and sets up learning environments that are appropriate for collaborative learning (Dresang & McClelland, 1999; Tsou, Wang & Tzeng, 2006; Unsworth, 2003). Could this apply to children who start preschool education at the age of three and are offered English and Computer lessons?

Given these points, I considered this to be an optimum time to conduct empirical work to investigate issues that for some time have been discussed, such as the benefits for children to learn a second language (Curtain & Pesola, 1994; Rodríguez, Díaz & Durán, 1995); the advantages of starting to learn it at a very young age (Finocchiaro, 1964; Lightbown & Spada, 2006; Curtain & Pesola, 1994); and issues connected to using technology to support its teaching (Plowman & Stephen, 2003; Andrews, 2004; Condie & Munros, 2007). The theoretical foundation of this study presented in Chapter 2 expands further on these issues.

### 1.3 The problem

One of the problems recognized in the domain of teaching English to very young children is the difficulty of finding specific methods developed for learners in the age range of 3 to 5 years old. The problem of finding a method to teach English specifically designed for young learners that also integrated technology proved to be a further challenge. Piquer-Píriz (2004) and Molina-Navarrete (2006) looking at the Spanish context in particular, contend that the materials used with children around 8 years old have been essentially transposed to teach 3 and 4 year-old children, without recognising the developmental and cognitive requirements of the younger language learner. The second problem found is related to the benefits associated to the teaching of English to very young children, an issue that has been debated for years (Finocchiaro, 1964; Lightbown & Spada, 2006) and that still presents unresolved problems that require further research. The third concern of this project is whether technology can support the practice of language teaching to young learners.

### 1.4 Aims of the study

This project was set up to explore whether a work scheme based on the storytelling approach -a teaching method that has been studied and already proven as being effective with young learners, enhanced by technological tools- can lead to the development of emergent literacy skills of young children in a foreign language context. I hypothesized that technology would be able to provide the support required by young learners to develop such skills. The study had four main aims, planned to be reached in two phases:

#### Phase I

- Aim 1: Design and implementation of a work scheme based on ICT-enhanced stories to teach English to preschool-aged children

#### Phase II

- Aim 2: Exploration of the effects of the work scheme on the development of emergent literacy skills in a group of preschool-aged children
- Aim 3: Identification and analysis of children's attitudes towards learning English and ICT-enhanced stories via the work scheme

- Aim 4: Identification and analysis of teacher's attitudes towards the work scheme, the use of ICT and ICT-enhanced stories in the teaching of English to preschool-aged children.

## 1.5 Research questions

The project aims were guided by four research questions which looked into the three aspects explored in the study: the work scheme, the children and the teachers. Question 1 involved the development of the work scheme; questions 2 and 3 focused on the participant children and question 4 regarded the participant teachers.

### Aim 1

- Q1. What pedagogical and technical aspects are involved in the design and implementation of a work scheme based on ICT-enhanced stories to teach English to young children?

### Aim 2 and Aim 3

- Q2. Can some form of change in children's skills associated with emergent literacy development, specifically in story grammar elements incorporated into children's story retellings, be observed throughout the lessons prepared with the work scheme?

Q2a. If yes, what type of development?

Q2b. What were the indicators of the observed development?

- Q3. What is the attitude of the children towards learning English using ICT-enhanced stories integrated in the work scheme? About the English course at all?

### Aim 4

- Q4. What are the opinions of the teachers involved in the study about the integration of ICT in the preschool curriculum?

## 1.6 Methods

Different methods were used to generate and collect the data that could answer the research questions. The first research question was informed by data that stemmed from a research diary and a participant teacher.

Q1. What pedagogical and technical aspects are involved in the design and implementation of a work scheme based on ICT-enhanced stories to teach English to young children?

I kept a research diary where I recorded an account of the procedures followed in the development of a work scheme, which would later be used to design the language lessons for the second phase of the study. The diary included reflection notes, results of conversations with one of the participant teachers, relevant literature and notes from a literacy course aimed at children enrolled in a nursery in a state school of the UK. In parallel, a review of the literature related to methodologies for teaching English was conducted. Data from the research diary was complemented with data from interviews conducted with the teachers involved in the development and teaching of the lessons based on the work scheme. The purpose of interviewing the teachers was to explore their opinions on issues related to the use of technology with young children to support the teaching of English.

After a version of the work scheme had been completed (in the form of a document containing the guidelines to plan a lesson according to the work scheme which has been included in Appendix A), it was sent to an English teacher with previous experience in teaching children of the age range required by the project. In collaboration with this teacher, a course comprised of three stories and 12 lessons was designed. The lessons were implemented in July 2006, during a summer course run by a private organization approved by the Junta de Andalucía in Spain. The characteristics of the course, which provided daily English lessons for the children, in conjunction with the previous work experience of the participating teacher in this school, provided a highly suitable location for the development of my project's fieldwork.

With the course in place, the second stage of the project was started. This stage was aimed at addressing Aims 2 and 3 of the project. The questions that guided this phase were:

Q2. Can some form of change in children's skills associated with emergent literacy development, specifically in story grammar elements incorporated into children's story retellings, be observed throughout the lessons prepared with the work scheme?

Q2a. If yes, what type of development?

Q2b. What were the indicators of the observed development?

Q3. What is the attitude of the children towards learning English using ICT-enhanced stories integrated in the work scheme? About the English course at all?

Seeking to provide answers to the second and third questions, different methods had to be used. The main data to answer question 2 came from transcriptions of retelling tasks conducted with the children during the English sessions. Children were asked to participate in two or three retelling tasks for the stories used in class. These tasks were part of the lesson in the sense that I did not ask the children to leave the classroom when we worked on them. Each lesson had three main stages: a whole class storytelling session, group work with the teacher and individual work on the computer with me. The children worked with their teacher on story-related tasks while I worked with one child on the computer. Retelling tasks occurred after at least two viewings of the story on the computer and in some cases pictures from the story were used as stimuli to foster children's narratives. Recordings of the retold stories were transcribed for analysis. Data was interpreted from both quantitative and qualitative perspectives. The purpose of this approach was to validate the interpretation of the performance of the children in their retold stories. Whereas quantitative analysis allowed for a relatively objective and comparable understanding of the data, qualitative analysis proved to be illuminating with regards to the children who told the stories, how they felt, their personalities, how they behaved in other moments of the lesson or in the playground and how these might have influenced the construction of their stories. In my view, understanding those aspects is vital to evaluate a three or four-year-old child's story when this is set within the boundaries of a research study and the story is to become research data (Fraser, Lewis, Ding, Kellett & Robinson, 2004). Field observation notes were taken during and after the retelling tasks. These notes and the analysis of teachers' interviews (conducted at the beginning and at the end of the course) were used to complement the qualitative analysis of the data by providing a picture of the events that took place during the retelling tasks from the perspective of the researcher and by providing a picture of the children from the perspective of their teacher and myself.

I consider question 3 of great importance given that the way children felt during the course constituted a measure for the effectiveness of the work scheme. In order to answer it, data from teachers' interviews, field notes and a survey completed by the children were combined. Children's perceptions of the course were valuable because they provided an evaluation of the tasks given directly by the children. Data from the children's survey were also complemented by the interviews with the teachers and my field notes. The

comparison of these data yielded a perception of the work scheme lessons and a rate of success was given based on participants' perception and task outcomes.

Aim 4 of the study was guided by one question:

Q4. What are the opinions of the teachers involved in the study about the integration of ICT in the preschool curriculum?

Data to provide an answer to this question originated from the interviews conducted with the participant teachers previous to the implementation of the work scheme at the beginning of the course and at the end of it. The teacher who participated in planning the lessons based on the work scheme and the teacher who was in charge of teaching those lessons were interviewed.

## 1.7 Thesis outline

Chapter 2 of this thesis lays out the theoretical grounds for this work. Issues that arise from the use of ICT with young learners are presented. It also provides an account of the challenges that the expansion of the English curriculum to younger learners presents to teachers and the English curriculum itself. It proposes a relationship between the traditional practice of storytelling and what lately has been labelled as enhanced storytelling (Farmer, 2004) and the teaching of English in foreign language classrooms. Finally, the area of development of new forms of literacy that can be supported by ICT is explored.

Chapter 3 presents the research questions addressed in the study. Chapter 4 provides an account of the design of a work scheme based on ICT-enhanced stories and its implementation during a summer course in Spain. Chapter 5 presents the findings reached during the design of the work scheme and the work scheme lessons. Chapter 6 outlines and describes the methodological approach chosen to implement the work scheme and explains the reasons underlying the choice of methods and chapter 7 presents the strategies followed during the analysis of the data generated during Phases I and II of the study.

Chapter 8 describes the results of this project focusing on four of the participant children. The reasons for the selection of the children are given at the beginning of the chapter. Chapter 9 presents the findings of the study from an overall perspective with the purpose of offering a comprehensive picture of what was accomplished with the study. Chapter 10 provides a discussion of the findings in an inclusive manner, attending to individual cases as well as whole-class results. Lastly, Chapter 11 elaborates

on the implications and future work that could be developed in connection to the areas investigated throughout the study.

## Chapter 2

# Exploring the effects of using ICT-enhanced stories and tasks with young language learners

### 2.1 Overview

In the previous chapter, I presented the motivations for this study along with the research questions that the project seeks to answer. This chapter looks at the areas of knowledge that informed the project. The decision to look at the areas presented here resulted from an analysis of the assumptions, also delineated earlier, that gave origin to the study, namely:

- English lessons based on ICT-delivered stories and communicative tasks can be used to teach very young children.
- ICT can provide the support that children might need to understand stories presented to them in English without offering a translation into L1.
- Using ICT-delivered stories in English lessons could be a strategy to integrate ICT seamlessly in a preschool classroom and as a result, increase the likelihood that teachers exploit features of technology appropriately to support the early years curriculum and young children's learning environments.
- Young children can make use of L1 skills to construct the meaning of stories heard/viewed in L2.
- The use of ICT-stories by children learning English as a foreign language might support the development of emergent literacy skills related to story construction.

In order to explore these assumptions and find previous work that supports or opposes them, I conducted a review of three academic areas:

- ICT in early childhood education
- English language teaching methodologies and
- Emergent literacy.

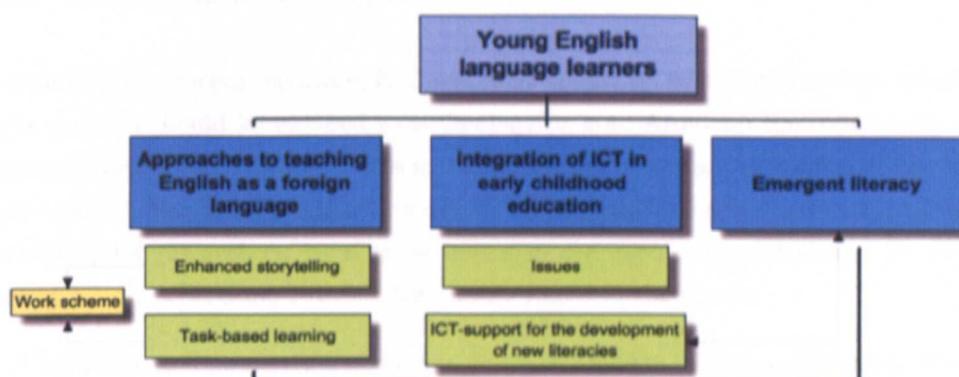
Figure 2.1 presents the topics within the above areas that were examined throughout this literature review. The green boxes represent sub topics in each of the reviewed areas. The connection between ICT-support for the development of new literacies and emergent literacy (represented with a dotted line) indicates the link that I created between these areas through the study's aim of exploring the participant children's development of emergent literacy skills. The link between enhanced storytelling (stories based on ICT) and task-based learning is created through the work scheme that took both approaches to design trial English lessons for young children (explained in detail in Chapter 4).

The chapter starts with a discussion of issues associated with the use of ICT with and by very young children and the integration of ICT in the early learner curriculum. I then detail the role played by ICT in the foreign language scenario and the potential of ICT to foster a positive attitude in children towards learning. The review continues with an examination of the approaches to language teaching of storytelling and task-based learning (TBL) and the contribution of ICT to the enhancement of story-delivery for language education. The section following these looks at the construct of emergent literacy and the role played by stories in the development of young children's early literacy skills under this approach. The chapter ends with a review of research that has studied the use of ICT-delivered stories as support for literacy development in monolingual and bilingual preschool-aged children. This last topic concludes the chapter as it represents the merger of all the areas that informed the study and that were explored throughout the review.

## **2.2 Information and Communication Technology (ICT) and preschool education**

Technology in its many forms has changed our lives in important ways. We no longer conduct business, shop or perceive education as we used to (Chapelle, 2003). Particularly in the field of education, the use of technological devices has gained strength through the years and several forms of technology including computers, digital cameras, educational

FIGURE 2.1: Connections between the areas of knowledge explored in literature review



software, television and electronic toys, classified under the broad concept of Information and Communication Technology (ICT), are becoming common within the contexts of school classrooms (Bolstad, 2004; Felix, 2005).

Researchers interested in the role that technology plays in educational contexts have gradually parted from the prevailing trend in the 80s which was characterised by an interest in demonstrating that the inclusion of technology in the delivery of education improved students' achievement (Kozma, 1991). The research focus shifted from comparing students' learning outcomes when technology was included or excluded from the teaching-learning process to finding ways in which technology already present in our lives (such as background technology (Bruce & Hogan, 1998) like tape recorders or television) could be used effectively to enhance the learning opportunities that the students experience in the classroom (Wang & Hoot, 2006; Joy II & Garcia, 2000; Clark, 1983). Research has shown that enhancement of learning opportunities can be achieved through the effective integration of technology in the early childhood curriculum (Tsantis, Bewick & Thouvenelle, 2003; Cuban, 2001). Integration allows children to see technology as a support tool to learning, while allowing the teachers to use it as a way to provide meaning to learning experiences. On the other hand, integrating ICT into the early childhood classroom raises concerns regarding appropriateness and questions about the benefits of using technology at all. Because of these issues, in the following sections I review four aspects related to the use of technology in early childhood education: the use of ICT by young children, the integration of ICT in the young learner classroom, how ICT can change the attitude of young learners towards learning and how ICT has been used in the teaching of foreign languages.

### 2.2.1 Young children using ICT

For years, a key concern regarding ICT and early childhood education has been whether young children should be exposed to technology or not. Although the controversy has weakened, the need to be aware of this matter is not less important (Plowman & Stephen, 2003). As (Bolstad, 2004, p. 21) points out “[...] *most authors agree that early childhood educators [and researchers] need to be aware of the debate about ICT use by young children [...]*”. Therefore, I review here issues raised in the debate.

A highly quoted publication about the use of technology by young children is “Fool’s Gold” (Cordes & Miller, 2000). The report raised concerns regarding the potentially harmful effects that the use of technology could have on young children. Issues like the effects of working with a mouse at an age in which hand-eye coordination is developing were argued vehemently, provoking as a result a great number of mixed positive and negative reactions (Clements & Sarama, 2003). Among the most important claims of the report were found those related to the need for young children to develop through creative play, which could not be provided by any type of software. The report argues, quoting work from Healy (2000) and Cuban (2001), that young children’s development can be hindered by the decreasing time spent in outdoor activities in favour of time spent on the computer. The report “Tech Tonic” (Cordes & Miller, 2004) followed up with a new proposal for the nascent concept of technology literacy and was less critical of the use of technology by young children; however, perhaps due to the reactions that the original report caused, discussions about the negative effects of technology on young children do not focus in the second report. Some of the problems raised in the “Fool’s Gold” were that children can develop health problems such as sight conditions as a consequence of prolonged exposure to the computer screen or wrist strain caused by repetitively placing the hand in an unnatural position with respect to the traditional computer keyboard (Cordes & Miller, 2000; Levin & Rosenquest, 2001). Other problems are related to social and emotional development due to the type of content that children could be exposed to when for instance browsing the Internet or playing video games of a violent nature (Healy, 2000) and very recently, to a possible relationship between a delay in language development and television viewing of commercial baby videos that claim to support vocabulary learning of children under 2 years of age (Zimmerman, Christakis & Meltzoff, 2007) <sup>1</sup>

---

<sup>1</sup>It must be noted that the study did not explore the reasons why early viewing of baby DVD/videos was found to be related to decreased measures of language development. Reasons might include quality of parents’ interactions with children -which would need to account for viewing time and nature of verbal input of parent with a child. In addition, other types of media exposure, such as educational TV, were not found to be related to poor language development. Zimmerman et al. (2007) suggest the need to conduct further research on the components of baby DVDs that could be responsible for the association of viewing baby DVDs’ time with decreased language development.

The notion that the concerns issued in the “Fool’s Gold” report were based on rather narrow interpretations of research regarding young children and ICT (Cuban, 2001; Clements & Sarama, 2003; Cook, 2003), coupled with the shift in the focus of research in the area of technology and its influence on learning, have shaped the state of affairs regarding technology in early childhood education. Authors and researchers who support the use of ICT with young children regard the use of technology as potentially capable of supporting children’s learning (Papert, 1993). Language and literacy development, mathematical thinking and social development are areas that have been widely researched and where technology has provided enhancement of learning opportunities for the young (Amante, 2007). Research that has looked at the potential educational benefits brought through the use of ICT by very young children suggests that:

- Children’s interaction with technology, whether represented as a traditional PC interface or “smart” digital toys, evidences the ability of children to exploit technology for leisure or as a tool to solve a problem (Luckin, 2002);
- Children can learn while interacting with computer games (Gee, 2007; Prensky, 2001a);
- Technology has the potential of motivating children’s attitudes towards learning (Condie & Munros, 2007) and turning learning experiences into more meaningful, entertaining, and motivational practices (Purushotma, 2005). ICT integrated into computer centres promotes as much interaction as dramatic play, additionally “[technologies] can enhance, extend, and augment [children’s] learning experiences” (Tsantis et al., 2003, p. 7);
- When developmentally appropriate, ICT empowers children to become active participants in their own learning while enabling them to control the learning process. It also allows children to construct knowledge by means of exploration (Haugland & Ruíz, 2002);
- ICT presents opportunities for the development of fine motor skills (Davis & Shade, 1994).
- The learning of abstract concepts which take place in subjects like early childhood Mathematics (Clements, 2002; Papert, 1993) can be supported through technology. Other knowledge areas like literacy or language can also benefit from the use of technologies such as TV and video (Irlen, 2003; Uchikoshi, 2005; Linebarger, Kosanic, Greenwood & Doku, 2004) or computers and software to support literacy development (Caplovitz, 2005; Lankshear & Knobel, 2003; Labbo, Sprague,

Montero & Font, 2000; Blok, van Daalen-Kapteijn, Otter & Overmaat, 2001) and language learning (Domínguez, Rico & Cumbreño, 2005; Zhao, 2003).

The following studies elaborate on the above statements.

Research on the use of “smart” toys (digital devices with interactivity features) provides insights into the learning benefits for children interacting with technology in formal and informal learning contexts (school, home and after school clubs). Through the CACHET (Computers and Children’s Electronic Toys) project, Luckin and colleagues (2002) investigated the use of soft toys with kindergarten-age children. The toys provided the children with help through spoken phrases constructed from a vocabulary database. In addition, a computer interface offered educational games. Children’s interactions with the toy and computer while performing different tasks were videotaped. Analysis of the videotaped sessions allowed researchers to develop an understanding of children’s interactions with toys and PC in order to find whether the children made use of hints delivered by the toy and/or the software interface in those instances when help was required. Findings from their research indicate the potential for this technology, especially the toy, to provide the “effective and affective dimensions” (Luckin, Connolly, Plowman & Airey, 2003, p. 175) which are considered to be essential elements in very young children’s learning experiences.

The educational value of children approaching technology for the purpose of entertainment has been studied by several authors (Gee, 2007; Mulholland & Robertson, 2001; Prensky, 2001a; Robertson & Good, 2004). One of these authors is Prensky (2001b), who, taking a radical perspective with which some may be in disagreement (Bennett, Maton & Kervin, 2008), coined the term “digital natives” to refer to the generation that was born surrounded by technology and as a result learns in ways that the education system as it currently stands cannot understand and much less cater for. Based more on opinion than research, Prensky’s claims suggest that there is an impending need for “digital immigrant” educators (the generation that created the technology but which is not its heavy user) to radically change the way they perceive and consequently how they deliver education to the digital natives: “[...] if Digital Immigrant educators really want to reach Digital Natives i.e. all their students they will have to change. It’s high time for them to stop their grousing, and as the Nike motto of the Digital Native generation says, ‘Just do it!’ ” (Prensky, 2001b, p. 6). Without engaging in the debate sparked by Prensky’s sense of “outdatedness” and “urgency” of the educators and the education system, it should be recognised that young children’s disposition to use technology can stem from the fact that they perceive technology as part of their lives. They are as much inclined to learn how to use technology as they are to learn how to play with any other toy. The capability of digital technology to deliver different content engages children

because it is like having a new toy every time they “play.” For example, in the case of computers, children can experience many different games within the same “toy”. One key aspect of Prensky’s work is how through digital games, children approach learning with a sense of “play” and through the engagement that playing generates, children learn a range of literacies and “competences that may transfer to other social and work-related uses of digital technologies” (Kirriemuir & McFarlane, 2004, p. 3).

The notion of the educational value of games has also raised questions of how game designers motivate young people to learn and how the same concepts could be used in formal education scenarios (Condie & Munros, 2007). A model brought forward by Gee (2005), suggests an explanation based on learning principles categorised in three groups, which he has found to be common of good video games. Video game designers create complex plots in which they ask people to solve problems (problem solving principles) choosing from a selection of devices (empowered learner principles) and see the results of their actions from the overall system of the game (understanding principles). In this way, video games engage people in learning tasks without explicitly teaching any concept. Features of on-demand help found in video games also allow people to learn at their own pace without having to process large amounts of information at once, but when actually needed. An important point of the analysis conducted in the learning principles underlying video game design is that technology makes this material possible. As Gee (2005) points out “[...] the power of video games resides not just in their present instantiations, but in the promises the technologies by which they are made hold out for the future. Game designers can make worlds where people can have meaningful new experiences, experiences that their places in life would never allow them to have [...]” (p. 6). Other research studies that have investigated children’s use of games for educational purposes include Adventure Author (Robertson & Good, 2004), which involved the development and trial of a software tool that allows twelve- and fifteen-year-old children to create non-linear stories in a 3-D digital world. According to the researchers, the experience for children of producing stories helps them to develop narrative structures and literacy because they engage in the creative process of producing a story through an enjoyable and rewarding experience. Similarly, a storytelling creation project was conducted by Mulholland and Robertson (2001) using e-mail technology. During a period of six weeks, four story tellers and nine children developed a story via e-mail about saving Planet Eerf from a horde of machines. The researchers report that “[t]he pupils enjoyed the project and are eager to take part in another one. Although this was a short pilot project, we feel it has exciting possibilities. One main strength of this model is that the pupils got individual attention from a storyteller who helped them to develop their characters and stories. The storyteller was able to adjust her responses to the pupil’s ability level [...] give the more able children extra missions. The storytellers

spent about an hour a week emailing the pupils, which makes this a cost effective way of providing regular storyteller input to projects” (Mulholland & Robertson, 2001, p. 37-38).

When technology is used in formal learning scenarios, as for example in the teaching of Mathematics, Papert (1993) believes that computers can help children to develop skills or love for subjects for which they were believed to have no intellectual capacity. Based on these assumptions, the LOGO language was created to assist in the teaching of geometry. Children can for instance, practice their understanding of concepts such as length, width and angles by means of basic programming instructions which produce a drawing on a computer screen. Results of their computer programme reflected on the drawing can provide feedback on the children’s understanding of the concepts. Clements (2002), in his review of the supporting role that technology can play in the teaching of Mathematics also suggests that technology offers unique opportunities for learning, afforded by the features of software programmes. For example, “computer manipulatives” (p. 167) help children to understand concepts related to shapes (symmetry and spatial order) because they are able to create, copy and colour shapes by manipulating objects or manipulate primary colours to create secondary ones. In the software called Building Blocks which Clements developed in collaboration with Julie Sarama, children encounter everyday activities which have been embedded with Mathematics concepts (counting, sorting). As a result, they created activities in the software where for example, children had to decorate cookies according to a given number of chocolate chips or adding the number of chips required to match a cookie model provided. The software also includes “free-explore” activities in which children design tasks for other children to solve. In this type of computer program, children have opportunities to engage in tasks which require the use of arithmetic skills in purposeful problem-solving contexts which can have the effect of raising interest for children.

Research into the effects of technology on young children’s motivation to learn have explored, in addition to computers, other types of technology (Irlen, 2003; Uchikoshi, 2005). For instance, the effect that media technology such as television has on academic achievement has been widely studied through the program Sesame Street. Since the 1970s, Sesame Street has been the object of several studies that have looked at the effects that viewing this type of program has on children’s attention span, imagination, behaviour and social development among other aspects. After such a long period of research on this TV show, conclusions point towards the positive effects of using this programme. As pointed out by Seels, Fullerton, Berry and Horn (1996): “[Sesame Street] is reaching and helping low-income children who have a narrower range of educational opportunities in the critical preschool years and that therefore it should be an important

element in a national strategy for reaching our educational goals by the year 2000" (p. 46).

An important finding from the reviews of research was that educational television is different from commercial programmes and that content is as important as format. Research into television looking at two different programmes and the different effects that they have on children's development of early literacy skills is exemplified by the study conducted by Uchikoshi (2005) where she looked at the effects of television on learning, specifically early literacy development. In the year-long longitudinal study with 150 Spanish-speaking English language learners (kindergarteners) Uchikoshi assessed the effect of two television programs, "Arthur" and "Between the Lions", on the development of early literacy skills of the participant children. Narrative development, phonological awareness and letter-word identification growth rates were examined. The results of her study indicate that educational television served as a facilitator of young children's emergent literacy acquisition. Children in the intervention group watched "Arthur" and "Between the Lions" three times a week during school hours. Whereas "Arthur" is a program which does not emphasise direct teaching of reading (based on stories where the characters learn to make decisions and solve problems), "Between the Lions" has a format that directly instructs text structure, individual words and decoding. Perhaps not surprisingly, Uchikoshi's findings indicate that children who watched the latter showed greater gains in subtasks of phonological awareness and children who watched "Arthur" had steeper growth curves on narrative measures. Since the study took place in the United States, where the population of English learners is growing rapidly, studies of this type are highly relevant considering that children who start school at a literacy disadvantage are likely to fall behind other academic areas. Watching the programs helped the children to develop the skills that are considered to be vital in the path to literacy.

The program "Between the Lions" was also used in a separate study (Linebarger et al., 2004) to investigate its effects on the development of emergent literacy skills of 79 kindergarten and 85 first grade children. Linebarger et al. (2004) designed an intervention in which randomly selected children watched 17 half-hour episodes of the program (one episode per day). The children were pre- and post-tested on skills such as phonemic awareness and letter-sound correspondence before and after viewing the programme. Linebarger et al. found children who viewed the program got higher improvement measures than those in the control group who did not view the show. Their conclusions suggest that TV programmes specifically designed to teach reading skills can be effective.

One more study regarding the effects of television on emergent readers was conducted by Irlen (2003). She studied 64 four- to five-year-old children from three kindergartens who were part of one of three condition groups: storybook-repeat (children heard a story two times), video-repeat (children watched the story two times) and control group. For 10 days, children interacted with printed text or video material. Children in both storybook-repeat and video-repeat groups showed gains in measures of narrative comprehension. Based on her findings, Irlen suggests that video narratives (just like listening to stories read from printed books) may influence children's knowledge of story grammar.

These studies have been included in this review because the purpose of this section is to highlight the benefits that technology can offer to young children. Since this thesis is concerned with a specific type of technology, ICT-stories, the relationship of the above studies is tangential. However, the point that I want to address is the one of children's motivation to use technology. Since technology has the potential to raise children's interest and spark their curiosity, they feel motivated and encouraged by it and motivation may then be a strong drive for an improved attitude towards learning.

The influence that technology has had on foreign language education specifically, may be exemplified by a project initiated by the International Society for Technology in Education (ISTE) in the U. S. This project had the purpose of developing national standards for the integration of technology in the PreK-12 curriculum. ISTE suggests that the competencies expected of students engaged in foreign language learning can be attained through the integration of technology. These competencies include interaction with speakers of the foreign language and the gain of knowledge and understanding of other cultures via active communication in other languages through an involvement in multilingual communities at home and around the world<sup>2</sup>. Thinking of the capabilities of computer-mediated technologies such as chats or peer-to-peer applications, it is not hard to imagine language learners communicating instantly with native speakers of the foreign language being learned, who are located geographically in other parts of the world, without leaving their classroom. Chappelle (2003) also notes that technologies such as CD-ROMs, DVDs, interactive whiteboards, the Internet and sophisticated software applications available to teachers and learners (Condie & Munros, 2007; Felix, 2005; Bolstad, 2004; Verkler, 2004) are reshaping the English language teaching practice. Other examples of the role played by technology in teaching of languages can also be seen in a review by Zhao (2003), which suggests the need to investigate learners of all ages as there is a predominance of research conducted with teenage and adult learners in the field. Because of this, the following study is relevant as it explores how technology can support young learners of foreign languages.

---

<sup>2</sup>The Standards for foreign language learning are available online on the ISTE web site at <http://www.iste.org/AM/Template.cfm?Section=NETS>

Spanish researchers Domínguez et al. (2005) are developing a tutoring system aimed at teaching foreign languages to young learners (3-6 years old), and studying the ways in which technology supports the process. The system is adaptive in the sense that the tasks presented to the learners match their abilities. The system presents new tasks based on successful completion, so the tasks that have to be solved are not too difficult or too easy for the language skill level of the learner. This has the purpose of maintaining interest while increasing the difficulty level of the task, presenting challenges that are solvable and thus supporting learning, resembling the principles of video games where gamers advance to a higher level only after completing all the tasks in one level, and with completion, skills required to solve more complex tasks are acquired. According to the authors, this type of technology has the objective of integrating ICT into the teaching of languages and exploiting children's exploratory nature in ways that suit their needs and according to their language abilities. This type of system looks promising; however, a point to note regarding the software design is the lack of information about the children's input during development. The contents of the system are based on the curriculum for the second level of infant education in Spain (children between 3-6) and teachers' input (Agudo, Sánchez & Rico, 2006), however, I have not found information on children's involvement in the design. As in the Adventure Author project described above, in system design, feedback from the user is not only an experience useful for the programmer, but essential if computer systems are to suit the user needs. Children's reactions towards graphics and feedback hints (which have been seen as being annoying to the children and eventually ignored if the help they provide is not useful, as was observed by researchers in the CACHET project) could inform the design and increase the support that it can provide to the learner.

The multiple shapes of technology no longer restrict children to passively sitting in front of a computer screen handling a mouse. The concerns about letting children handle technological devices because of the harmful potential of exposing them to screen light or mouse handling are limited to one type of technology, the more traditional PC. Changes in technologies have broadened the spectrum of tools and software, spawning the development of new devices which create new interaction dynamics and free the hands from performing a repetitive task. The use of technology does not limit interaction of children with peers and adults either. Children can actively interact with other children and adults while using technology in informal play and formal school settings. Furthermore, the debate initiated by "Fool's Gold" resulted in an awareness of health issues related to young children working with ICT. This awareness has turned into recommendations like these of Siraj-Blatchford and Siraj-Blatchford (2003) who suggest that 3-year-old children should interact with a computer in time slots of up to 20 minutes, extending to a maximum period of 40 minutes for 8 year old children and interactions

should ideally be under adults' supervision to ensure that children work with mice and keyboards of appropriate size and shape, try alternative interfaces such as touch-screens and wireless devices and keep a correct posture when working at the computer.

In sum, the variety of interfaces, (from screen to cuddly toys) and purposes (from educational to recreational) broadens the scope of uses of technology, allowing researchers to focus on finding ways to tap on the potential of ICT to add value to the learning experiences of children. Assuming that the potential benefits that the use of ICT offers to young children surpass the concerns found in the literature (especially since the problems associated to the use of technology can be avoided by following the recommendations from authors and researchers), the following sections move on to present findings from the literature regarding not whether technology should be used but the ways in which technology can be used to enhance young children's learning environments.

### **2.2.2 The integration of ICT into the early childhood classroom**

ICT has the potential to "enrich the learning environment[s]" (Patterson, 2004, p. 25) and enhance the learning opportunities of students in classroom settings. According to Cuban (2001) and Turbill (2001), this potential can be attained by integrating ICT into the curriculum. Technology, however, sometimes fails to be integrated due to being seen as a random, game-related, self-contained type of activity and not as an element of the daily curriculum-related routine of the classroom (Cuban, 2001; Labbo et al., 2000; Davis & Shade, 1994). As a result of these practices, technology often fails to offer the children the support for learning that it is intended and has the potential to provide (Turbill, 2001).

Research studies have looked at ways of integrating ICT into meaningful classroom activities to enhance students' learning opportunities. One of these was a study conducted by Labbo et al. (2000) which looked at the role played by computers to support the literacy needs of a group of kindergarten children. Their observations showed few gains from children's use of computers due to a series of problems that children were having with turn-taking and mouse-sharing. After interviewing the children, the researchers found that the problems were mainly due to (1) the children's lack of a learning objective when working with the software that was available and (2) the children not sharing a common goal when engaged in computer work. As opposed to other centres in the classroom which were built into thematic units around which the curriculum was structured, the computer-centre did not have a connection to any theme. In order to solve the problem, the researchers designed computer activities that fit into the three types of activities that were assigned to the children's routine, namely brief targeted moments,

spur-of-the-minute ideas, and thematic connections. After the implementation of this strategy, children began to show improvement in areas of literacy skills development initially identified as problem areas. Labbo and colleagues (2000) concluded that:

*Over the course of the school year, we discovered that a classroom computer center can fit beautifully into the ebb and flow of kindergarten life when the teacher finds ways to use the technology to support children's literacy needs and to enhance the thematic units and literature-based activities occurring in the classroom (Labbo et al., 2000, p. 10).*

With the purpose of increasing children's access to technology, J. Siraj-Blatchford and Siraj-Blatchford (2001, 2004) conducted a project known as the KidSmart Early Learning Programme. This project took place initially in six European countries and was extended to the Asia-Pacific region as a national project in Australia. It involved the provision of computer learning centres in a number of economically disadvantaged schools. The final report of the project (J. Siraj-Blatchford & Siraj-Blatchford, 2004) evaluated KidSmart to be effective in relation to the development of innovative learning systems, curriculum development and effective teaching and learning with the use of ICT. One of the reasons found to be relevant for the success of KidSmart was the integration of ICT into the curriculum. Additionally, they found that the participation of educators, children, and families as active elements that enrich the learning environments of the children through ICT also played a role in the project's success. The study of KidSmart that took place in Australia and that was reported by O'Rourke and Harrison (2004) also emphasized the importance of the integration of ICT in the classroom with the children's playtime activities, home activities and curriculum targets. Again O'Rourke and Harrison (2004) found that the successful integration of ICT in preschool education settings would not depend solely on the children's reactions towards the technology being used or the materials delivered via ICT tools. The attitude of others involved in such studies, including teachers and parents, influences the success or failure of such projects. The report of the KidSmart project emphasizes this notion:

*The possibilities conceived by teachers, parents, and children in relation to the use of the Young Explorer [KidSmart Language Centres] in the early childhood setting resulted in high enthusiasm, willingness to persevere in the face of technical difficulties, and willingness to share and experiment. Parents were often aspirational, seeing the computer as providing their children with opportunities to 'get ahead' (O'Rourke & Harrison, 2004, p. 10).*

After exploring the use of ICT to support the teaching of literacy and teachers' resistance to technology in kindergarten classrooms in Australia, Turbill (2001) concluded

that teachers need increased support to prepare projects related to technology, more time to familiarise themselves with available software and a low computer:child ratio. Other studies that have looked at the factors that influence teachers' willingness to use ICT in the classroom (Clements, Nastasi & Swaminathan, 1993; Bolstad, 2004; Han, 2003; Miles & Sweetland, 2001; Plowman & Stephen, 2003; O'Rourke & Harrison, 2004; J. Siraj-Blatchford & Siraj-Blatchford, 2001) have reached similar conclusions.

One of the aspects which all the above projects agree upon is the role played by practitioners in the successful use of ICT in the classroom. Teachers need to become confident users of the technology in order to use it to design meaningful learning opportunities for the students in a classroom. Hence, it is not surprising to learn that lack of integration of ICT in classrooms has been associated with teachers' level of confidence in the use of technology, their perception of the support available to plan learning activities that involve the use of ICT and the support available to solve the potential problems that could arise because of the use of ICT.

In a discussion of the role played by practitioners in the creation of rewarding learning experiences for children by means of ICT, Davis and Shade (1994) suggest that despite the potential of any software tool to foster learning, one key aspect to its successful use is how teachers implement it. Bolstad (2004) takes this notion further and while she emphasises the role of practitioners in the enrichment of early childhood learning environments (*ibid.* p. 25), she also stresses the importance of providing teachers with appropriate training to guide them through these tasks. In a study of Australian kindergarten teachers' use of ICT, Turbill (2001) reports that teachers of early literacy found it challenging to integrate ICT into their curriculum because of a need for professional development. In her findings, she emphasises that:

*[...] implementation of technology was hindered by lack of time and expertise to explore and understand available software, teachers' narrow definition of literacy as including only paper-based texts, and lack of understanding of and confidence in the potential of the use of technology in the early years (Turbill, 2001, p. 255).*

Results like those of Turbill indicate that the success or failure of ICT use in the classroom can be related to teachers' opinions and attitudes towards the use of ICT to support the learning experiences of students and their opinions of their own capabilities regarding the use of ICT (Cuban, 2001). Therefore, it is important to explore teachers' views on these matters, as the successful implementation of ICT in classroom settings will depend to some extent on how teachers make use of the technology available in the classroom. In my research I explored these matters with the participant teachers in

order to understand in more depth teachers' perceptions of using ICT during their English lessons and to view the outcome of the thesis from the perspective of the teachers' practice.

Having considered the use of technology by young children and strategies for the integration of ICT into the classroom, the second area of this thesis is reviewed: language learning.

### 2.3 Characteristics of young children as language learners.

In order to provide young learners with opportunities to learn a foreign language, it is important to identify first their characteristics and educational needs as language learners. The review starts by exploring these matters.

Considering individual differences in children's language development and the theories that explain the processes involved in its acquisition and growth (first or second languages; developmental or socially constructed), it can be said that children learn languages relatively easily. For instance, linguistic theories maintain that children have a natural ability to learn languages (Kies, 2006) and studies conducted on bilingualism show that children are able language learners (Bialystok, 2001). One condition for learning is however related to the opportunities that children have to use the language, which in foreign language contexts are limited to the language classroom. This means that making classroom language learning opportunities meaningful and appropriate to children's learning needs is vital to support the language learning process (Nunan, 1991, 1995; J. Willis, 1996; Edwards & Willis, 2005; Hinkelman, 2004). In order to create language opportunities conducive to learning it is important to understand the needs of the learners. Taking into consideration that such needs arise from their characteristics as language learners, the following section reviews the ways in which very young children learn and use language.

Drawing from examples of young learners' language lessons taking place in several places in the world, Moon (2005) identifies some of the abilities that children show when they are engaged in learning a language, including, using language creatively, going for meaning, using "chunks" of language, having fun and joining in the action. Other authors agree with her and suggest that each one of these skills should ideally shape the language curriculum of the young language learner. For instance, when children use language creatively they are able to "make up" words by generalising rules and applying them to their linguistic repertoire, as would be the case of a Spanish-speaking child

saying “planching” to refer to the action of “ironing”<sup>3</sup>, constructing the term from the familiar verb in Spanish “planchar” (to iron) and the particle -ing for the gerund in English. Halliwell (1992) and Cameron (2003) describe this characteristic of children as being uninhibited in language production and having great skill in using language in creative ways.

Children are less inhibited than older learners to talk in the foreign language (Cameron, 2003) because they are more interested in finding the meaning in situations. For example, when they are listening to stories, they are able to understand language at a holistic level, without necessarily understanding individual words (Halliwell, 1992), making sense of stories by means of background knowledge, known vocabulary, illustrations, gestures, repetition and every means available to them.

Conteh (2003) points out that children take great delight in talking, and McIlvain (2004) suggests that they generally show a lack of self consciousness when they speak a new language. These skills may be observed when children have fun with language like for instance on those occasions when a child notices that “mat” rhymes with “cat” and make a game of finding more words to rhyme with them or when children try to speak English by imitating the sounds they hear and applying them to words in Spanish, saying “carro” (car) in the “English way” and pronouncing the word as /ka-roh/.

Children make use of language to understand their worlds. They learn actively by continuously asking questions, wondering (Tizard & Hughes, 1984). They are always searching for meaning (Cameron, 2003) causing them to be actively involved in a process of formulating the rules that leads to the understanding of the world (Wells, 1987). They like to process new experiences, ask questions, experiment (Donaldson, 1987; Tizard & Hughes, 1984). For example, a child who needs to change the flavour of the sweet that she got as a reward for a job well done understands that if she speaks English she will get the sweet that she wants and so she learns to ask the whole “chunk” of language: “Miss, may I have a lolly of a different flavour?” This child understands that in the “world” of the classroom she will get her favourite sweet only if she uses language in a certain way. She understands her world and the rules in it, experiments with language, joins in the action and gets what she wanted, indirectly as she learns language because of the purpose and not because of the wish of learning a language in the void.

A last point that I want to make when planning lessons for young learners is that the language methodology chosen has to take into consideration the children’s nascent literacy skills. Literacy teaching in the foreign language should be sensitive to the development of first language literacy, to the differences between the first language and

---

<sup>3</sup>I illustrate the abilities of the children as language learners with examples gathered from my experience as an elementary school teacher in a bilingual school in Mexico.

English in the relationship between spoken and written forms, and to the learners' knowledge of spoken English (Cameron, 2003, p. 108). This is important if the development of the first language is to be preserved and not delayed at the expense of the development of the foreign language.

The language learning approaches explored in this thesis were chosen because they have the potential to address children's needs as language learners that arise from their characteristics as language learners discussed above. In addition, they allow that instruction materials be chosen taking into consideration children's literacy needs. The following sections discuss one of the language methods explored in this thesis: storytelling. First I describe the role played by stories in the education of young children. This is followed by an analysis of how the delivery of stories supported by technology may enhance a storytelling session whilst encouraging language teachers to use this important resource with young language learners.

## 2.4 Children, stories and language learning

The practice of storytelling and the creation of literary environments where children have access to storybooks have contributed to the education of young children. Donaldson (1987) and Wells (1987) share the notion that through the language used in stories, children are able to reflect and internalize ideas generated through real life experiences, which is considered to be an important process in children's advance of knowledge. By serving as a vehicle for socialization and transference of social knowledge (Engel, 1995; Egan, 1989), stories are believed to encourage social and emotional development as well as a sense of cultural inheritance.

The use of stories and the practice of storytelling for educational purposes have been widely supported by several authors and researchers (Garvie, 1990; Wright, 2000; Messner, 1989; Malkina, 1995) because children feel drawn to stories. After conducting a review of research projects related to storytelling, Boltman (2001) found three major reasons why children like stories, namely, stories help the children to make sense of the world, to construct a sense of self, and to participate in the culture. G. Ellis and Brewster (1991) support these notions, suggesting that stories exercise children's imagination in fun and motivational ways by allowing them to know social experiences that can be shared with others. It has been recognized that the use of stories benefits children in numerous ways. In particular, stories :

- have the capacity to help children to make sense of their world by means of exploring the diverse situations that take place in stories of different genres (Phillips, 2005);
- encourage children's social and emotional development (G. Ellis & Brewster, 1991);
- support the development of literacy skills such as story comprehension and recall in English as L1 (Boltman, 2001); story comprehension of stories read in Spanish and English in a biliteracy context (Martínez-Roldán & Sayer, 2006); story comprehension (through reading stories that have a pattern of repetition elements in their construction (Darnton, 2001; Ghosn, 1997)) and use of decontextualized language, that is, language detached from historical or spatial context (Ryokai, Vaucelle & Cassell, 2003);
- foster the acquisition of vocabulary (Ryokai et al., 2003; Nation, 2001);
- support the acquisition of foreign languages (through patterns of repetition) (Garvie, 1990; Tsou et al., 2006; G. Ellis & Brewster, 1991; Wright, 1995; Ghosn, 2002; Rixon, 1988); support the development of children's listening skills (G. Ellis & Brewster, 1991; Luque, 2000); play an important role in increasing children's motivation to participate in language lessons (Garvie, 1990; Wright, 2000; Cameron, 2001).

Ghosn (2002) recommends the use of literature in the primary classroom for four reasons: stories increase motivation, promote language learning, encourage academic literacy and transform the social attitude of children towards diversity. The following studies serve to illustrate the above reasons in research practice.

Regarding the reason of how stories promote language learning, Rixon (1988) presented her work to a group of elementary school teachers in Italy during a year of training as teachers. The use of storytelling to support the teaching of languages and the type of stories that may appeal to the young language learner were among the topics discussed. They studied the use of stories with a simple structure, constructed with cumulative repetition patterns, such as the one found in the story of "The Great Big Enormous Turnip" in which each new episode adds an element from the previous. In this story, repetition takes place when a description is given for how the characters of the man, followed by the old woman and then the grandson cannot pull the turnip up: (1) "the man pulled the turnip" (2) "the old woman pulled the old man, the old man pulled the turnip" (3) "the grandson pulled the old woman, the old woman pulled the old man, the old man pulled the turnip." The teachers in these training sessions found this type of story highly useful as they organised complete sessions based on them. The possibility

of using tapes to support or provide another telling of the stories was also discussed in the sessions. Furthermore, the use of stories written for native speakers was explored and encouraged, as their use widens the range of materials that could be adapted for the young learner. This last aspect of the training conducted by Rixon (1988) also addresses another of the reasons suggested by Ghosn (2002) about why the use of literature in the original language is valuable for the expansion of academic literacy. By presenting children with high quality literature in the foreign language, children are offered the opportunity of developing critical thinking skills, as for example comparing or searching for cause-effect relationships (Rixon, 1988, p. 176).

Ryokai et al. (2003) conducted a study which involved 28 five-year-old girls interacting with an ICT-based storyteller pal in order to study the children's social interaction during storytelling sessions. The study involved the creation of Sam, a system composed of a conversational agent designed to resemble a six-year-old child which was projected on a screen, and a toy castle with a small character. After having observed the participating children's interactions with the toy and/or with Sam, they concluded that Sam's presence as a storytelling partner increased the complexity of children's stories, taking as comparative features the number of spatial and time expressions and quoted speech used by children while telling their stories. Children in the study who played with Sam produced more decontextualized language, considered to be an important element in the development of children's literacy skills (Snow, 1983 cited by Ryokai et al., 2003). This research exemplifies how the use of stories to introduce complex language to children (taking children's age as reference to establish degree of complexity), results in linguistic learning, as attested by researchers such as G. Ellis and Brewster(1991), Wells (1987), Grugeon and Gardner (2000), Phillips (2005). I must note that although Ryokai et al. (2003)'s study was conducted with native speakers of English and not language learners as described by Ghosn (1997) earlier, repetitious structures have been seen to be helpful for beginner L1 or L2 language learners.

In a study that involved 26 4-year-old kindergarten children learning English, she observed how the pattern of repetition from the story *The Very Hungry Caterpillar* helped pre-readers get engaged and understand the plot of the story. Ghosn and the class teacher, Miss Betty, prepared a lesson which started with the reading of the story. After the reading the children started to discuss the story and the food items that the caterpillar ate throughout the narrative. The teacher allowed the children to comment on the story using L1 (Arabic) and Miss Betty listened to the children's comments adding to or translating them into English. The exercise for the English lesson resulted in a very positive experience as vocabulary from the story was used to set up a grocery shop in the classroom, and the story itself motivated the children to participate in the lesson and even make attempts to "read" the story to friends. The repetitive structure of

the story allowed the children to predict the episodes and understand the story without asking for a translation. A conclusion that can be drawn from the previous examples is that repetition patterns of stories have the potential to support both L1 and L2 learning and/or development.

In a year-long study conducted by Mello (2001), the social transformational potential of stories was experienced. A group of year 4 students of diverse backgrounds including Franco-American, Irish-American, Native American and “Yankee” (quotation marks in the original) participated in two storytelling sessions per month in which they heard stories from different places around the world. In the sessions, children listened to stories and discussed them with the group, relating them to their own lives. Through the stories, they learned about places and peoples, establishing “empathical” connections with them. In her conclusions Mello (2001) writes: “by participating in storytelling, the children in this study created transactional experiences that increased their knowledge of self and others. They did this by reflecting on images and conditions in stories and linking them to known cultural concepts and paradigms” (p. 10). Her ideas are shared by Messner (1989) who, in a small scale study to identify the effects of the fairy tale genre of stories, found that stories have the power to influence students’ views about diversity and equity.

With respect to the acquisition of foreign languages, Wright (1995) advocates that an important reason why stories should play a central role in teaching a foreign language to children is the practice that learners receive in all four language skills. Listening, speaking, reading, and writing are all in one way or another influenced by listening to and eventually telling stories. Skills such as fluency in listening and reading are supported by the continuous practice of being in contact with stories. Children’s motivation to keep listening to stories, and their continuous search for purpose in what they are listening, which in turn improves their understanding, prediction skills, and language awareness, are abilities practiced, learned, or encouraged by storytelling. For Dunning (1997), two central qualities of stories, content and process, make them very valuable in language teaching and learning languages -French in his case. The content quality of stories present people’s centuries of experiences “*across families, communities and nations*” (p. 5); the process quality offers structure: (1) of the way the story is constructed with a beginning and end, characters involved, choices they make, actions they take and results of such actions and (2) of language structure in forms of fixed sentences, expressions and vocabulary.

Garvie (1990) notes that “children would learn another language more easily if they knew more about the patterns and strategies of [the foreign] language” (p. 10). Stories written for native speakers are structured with patterns and strategies that belong to

the native language. If children learning languages are exposed to these natural language structures (as opposed to material designed purposefully for language textbooks) in books or educational software, it seems likely that language awareness and children's learning of the language could be naturally supported. I must add that even though story structure is limited to the genre of stories, research has connected children's understanding of sequential structure typical in stories (events that occur first, second, last) with reading comprehension (Whitehurst & Lonigan, 1998) in later stages of literacy development. It seems that in the path towards traditional literacy, broader story/reading comprehension is as important as decoding printed text.

Cameron (2001) and Ghosn (2002) emphasise the importance of considering language content as well as number of episodes of stories when selecting this type of material for the language classroom. Episode repetition, repeated grammatical structures and a certain amount of formulaic expressions are useful elements to take into consideration when selecting stories for young learners. Books for language learners, however, tend to be constructed with language that is unlikely to be used in real life situations and do not take advantage of the language elements that enhance the value of stories.

Figure 2.2 shows two scanned images from the story of Goldilocks and the Three Bears found in a storytelling textbook aimed at young learners in ESL/EFL contexts. They are included in here to illustrate how some materials created for language lessons do not take advantage of the repetition structures which seem to help the young language learners to understand stories (Ghosn, 2002; Crystal, 1987; Exton & O'Rourke, 1993). As can be observed, right after the episode of Goldilocks and the chairs comes an illustration of Goldilocks sleeping in Baby Bear's bed. The repetition pattern that in this story children could use to predict what Goldilocks might do after trying something belonging to Father Bear and then something belonging to Mother Bear is absent, and as a consequence the material fails to provide the support that prediction offers to understanding (Exton & O'Rourke, 1993, p. 27). It could be hypothesised that the authors' decision to shorten the length of the text and the range of vocabulary used in the story has the purpose of simplifying the story to make it easier for the children to understand. However, as has been seen in the work of Rixon (1988) described earlier, it should not be necessary. The story can be used as it has been written for the native-speaker of English child, as long as considerations of linguistic support provided by the story (in terms of repetition), illustrations, story-related activities and number of episodes (with more linear sequences for the younger children, minimising the amount of twists in the story) are taken.

The literature discussed above has looked into the traditional mode of delivering stories, that is, printed text with or without pictures or images. The following section

FIGURE 2.2: Images from Storyworld: An ESL/EFL English language course



now introduces the concept of modern forms of storytelling and ICT-enhanced stories, in order to focus the interest of this project: children's development of emergent literacy skills supported by stories delivered via a computer.

*Traditional and ICT-enhanced storytelling.*

Stories in the classroom have been delivered for many years in the traditional storytelling fashion: children gather in a semi-circle in front of the teacher while she reads a story from a printed book (standard size or big-book versions), holding it in her hands and showing -if possible-, the pictures of the story to the children. On occasion, in traditional storytelling scenarios, teachers use support material such as puppets or story-related objects to attract the children's attention and keep them interested or to help them reach an overall understanding of the story. The use of added devices such as puppets and daily life objects, supports the notion that the use of props and other resources during storytelling can assist learners in such processes as the general understanding of a story plot; story recall, (Boltman, 2001) or an increase in listeners' attention span (Garvie, 1990).

In recent years, advances in technology have increased the number of means used to deliver stories, strengthening indirectly the storytelling activity by making it more engaging and less challenging. Technology makes it possible to tell facts or myths without having to rely on memory and to support the telling with special sound effects or music. Such technological means include the use of tape recorders, specialized software for computers and the Internet. According to Haddad and Jurich (2002), ICT may be a powerful "added device" which can enhance the delivery of texts read to children. They suggest that:

*ICTs can take students on exciting journeys through time and space. Movies, videos, audio technology, and computer animations bring sound and movement to static textbook lessons and enliven children's reading classes (p. 35).*

Similarly, Chen, Ferdig and Wood (2003) note: “[...] with the advent of extensive technology integration in our society and in our schools, the way in which a story can be presented is dramatically changing” (p. 1). Such changes are evidenced by recent storytelling-related efforts such as those of digital storytelling or interactive digital storytelling (Gobel, 2004), in which a number of technological devices such as video and photographic cameras as well as software applications based on artificial intelligence concepts are used to strengthen the telling of stories, making them more memorable or adaptable to the audience.

The use of technology to deliver stories is not new. For instance, tape recorders have been used for decades to support the delivery of stories in foreign language lessons. G. Ellis and Brewster (1991) associate the following advantages with playing stories:

- learners can hear English with an accent and voice different than the teacher's, providing variety;
- the recording voice is from native speakers, which provides an accurate model of natural spoken English;
- the special sound-effects that some recordings offer increase the opportunity for learners to understand the story, the vocabulary, and the context in entertaining and motivational ways.

Advances in technology have widened the choice of devices that can be used in storytelling. As such, ICT-delivered stories (via computers, talking books or video games) are now widely used in classrooms to support literacy lessons (Lankshear & Knobel, 2003) or language lessons (Chapelle, 2003). The advantages over tape recorders that other types of media offer are the features such as animations and interactivity provided by multimedia capabilities of the device. As a result, a CD-ROM played on a computer delivers audio and video, extra activities associated with the story and interacts with the reader, extending its potential to create or enhance learning opportunities. The ways that technology has enhanced stories used in classrooms, particularly for the group identified as very young learners, has been by adding elements that exploit the features of the technology (see Table 2.1). Features like highlighted text which use colour to emphasise the text of the story as the narration plays, sound effects and animations that add meaning to the graphics or games related to stories provide the “software scaffolding” (Yelland & Masters, 2007), that is, the contextual support required by children to

TABLE 2.1: Characteristics of ICT-enhanced stories

Hardware/Software features	Ways stories are enhanced
Electronic scaffolding	Animations can support understanding of vocabulary used in the story
Sound	Pronounced words; narrated stories (oral readings); songs; oral feedback
Text	Linear and multilinear; hotspots (icons on the screen that execute an action when clicked) or hyperlinks
Games	Interactive activities that can reinforce concepts related to the story e.g. vocabulary, story plot
Multimedia	Multiple representations of the same concept through text, sound, and animations or pictures. This feature scaffolds story comprehension and enhances the story and the storytelling task by animating text and pictures

make sense of the plot of a story during the process of story comprehension (Chen et al., 2003), to increase and/or maintain their interest in the story (Lewin, 2000) or to help the children when they interact with stories on their own (James, 1999). As a result children may understand stories or learn more complex vocabulary structures thanks to the auditory and visual clues provided by the story software (de Jong & Bus, 2003).

Many people believe that storytelling is a challenging task. Whether a story is told from memory or read from a book not all teachers feel they have the skills to be good storytellers. In addition, if the story has to be told or read in a different language, the challenge increases and the chances for the stories to be used in the language classroom decrease (Garvie, 1990). The use of tape recorders CD/DVD players, computers, and projectors, software applications and so forth to deliver stories can extend their use in educational contexts by giving practitioners new perspectives on how they can be used in the classroom. Furthermore, multimedia capabilities of technology could persuade teachers to use stories in language lessons by helping them to solve the challenges that they might face when using stories written for native speakers in language lessons (Tsou et al., 2006). Teachers could organize storytelling sessions with children and play the story on a computer instead of reading it, easing the demands of telling a story with the correct pronunciation and in ways that motivate the children to listen. In Taiwan, Shih, Chang and Chen (2007) explore this hypothesis by developing a storyteller robot to motivate teachers to use stories in the language classroom (Shih et al., 2007). The system includes a software interface for the students and a tangible user interface for the teacher. The software allows the users to program actions for the robot

including repetition of phrases, body gestures and emotional expressions. According to his creators, these features enhance the storytelling experience by allowing the teacher to program as many actions as required to help students understand the meaning of the story. The storytelling robot project has in my view two important limitations. First, the robot was tried with Year 5 students, which narrows the age of the learner who might be able to use the software to work with the robot. Students working with this system would be required to have a certain language level since the meaning from the story would have to be constructed from the oral telling offered by the robot and the human-like movements which would accompany the story. This support for understanding might not be enough for younger learners given the level of language that they have. In addition, supporting the activity of storytelling with technology requires preparation from the teacher and the whole solution might raise issues such as teacher ICT training and confidence to exploit such a system.

Like Shih et al. (2007), intending to explore ways in which ICT may encourage teachers' use of stories in foreign language lessons, but in a more viable format, Tsou et al. (2006) designed and implemented a storytelling website for a group of Taiwanese primary children with the purpose of studying how web-based technology could assist EFL teaching and learning processes through storytelling and story recalls. In a 5th grade class, 35 children used the storytelling website for 10 weeks and at the end of this period they were tested in general language proficiency, story sentence complexity and story comprehension. Differences in learners' story recall and recreation were found between the control group (who worked with the same language teacher in a traditional oral storytelling mode) and the experimental group who worked via the storytelling website. Through the results of the study, Tsou et al. (2006) suggest that: "[...] with the multimedia computer-assisted process, students retained more words, phrases and sentences. Thus, when recall stories, they tended to copy or recreate more language from what they listened and read, and this resulted in greater sentence complexity and language proficiency" (Tsou et al., 2006, p. 26).

In summary this section has discussed the use of stories in diverse areas of education of young children. It has also presented how technology has enhanced the delivery of stories through the exploitation of multimedia capabilities like sound and animation. Such capabilities can benefit the audience by scaffolding story comprehension and learning. Additionally, I developed the notion that technology might encourage teachers in foreign language contexts to make use of the rich resource that stories could be. The following section describes the second language methodology reviewed in this thesis: TBL. A connection between children's characteristics and needs as language learners and pedagogical principles of TBL is presented (Table 2.2). Through this connection, I provide

a theoretical rationale why TBL with ICT-stories may be suitable for the teaching of a foreign language to young children.

## 2.5 The potential of Task-based learning (TBL)

As part of the communicative approach to language teaching, TBL is situated in the group of methodologies that base lesson design from a learner-centred perspective (Gilabert, 2004; Richards & Rodgers, 2001). TBL differs from grammar-translation or audio-lingual approaches by changing the underlying principles of curriculum design (R. Ellis, 2003). In TBL, morphosyntactic, phonological, and lexical language elements (grammar, phonology, discourse, and vocabulary) are located second in curriculum design, while specific learners' needs and ways of learning the language are situated first (Nunan, 1991; R. Ellis, 2003). This thesis is focused on TBL because of the possibilities it offers to design lessons centred on the learner. A look into the characteristics of TBL (J. Willis, 1996; Edwards & Willis, 2005; R. Ellis, 2003; D. Willis & Willis, 2007), shows its potential to address young children's educational needs by (1) catering their characteristics as language learners (See 2.4) and (2) providing the methodological support required to design a language curriculum for them. The assumptions to support the potential of TBL as a methodology include:

- It has a rich base of language teachers using the approach with learners of all ages, offering the basis for planning courses for young children (Edwards & Willis, 2005);
- It addresses the issue of teaching grammar and the amount of L1 and L2 that could be used within the language lessons taking into consideration learners' age and knowledge of the language (D. Willis & Willis, 2007);
- Recent research on TBL has produced positive results related to young children's learning of a foreign language (Pinter, 2006; Carless, 2002, 2004).

Bourke (2006) reporting on his work of designing a topic-based curriculum for young learners (where a topic could be story-theme based), states that a language cannot be taught but the conditions in which it can be acquired could be created, although adding that those optimal conditions remain an elusive question (p. 281). Krashen (1987) suggest that among optimal factors required to create opportunities for language acquisition are found: providing the learners with comprehensible input, a stress-free environment and rich interaction. TBL has the potential to create these environments since it allows curriculum designers and practitioners to focus on learners' needs and tailor language lessons according to these, promoting the use of materials targeted at providing the

comprehensible input required by the learners, and encouraging rich interaction in the language lesson (D. Willis & Willis, 2007).

### 2.5.1 The concept of task for very young language learners

The diverse understanding of the elements that compose task definition, namely scope, perspective, authenticity, linguistic skills, and psychological processes concerned with task performance, is the source of the varied meanings of tasks found in the literature (R. Ellis, 2003). For instance, considerations regarding the scope of tasks vary in terms of differentiating a classroom exercise from a task, so while some believe that tasks are “activities that call for primarily meaning-focused language use” others think that ‘any kind of language activity’ can be considered a task” (ibid. p. 3). For instance, Nunan (1991) writes that a task is a piece of classroom work which involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is principally focused on meaning rather than form. (p. 10). Prabhu (1987) considers that tasks should involve learners in making connections, deducing, and evaluation pieces of information. R. Ellis (2003) expands this view by considering other skills involved in task performance, such as visual skills put in practice when doing tasks. This diversity of definitions affects each of the elements of task definition mentioned above, and as it is not my intention to create a new meaning for “task”, I suggest the use of a working definition, based on already existing descriptions (R. Ellis, 2003; Prabhu, 1987; Cameron, 2001; Skehan, 1998; Nunan, 1989) and that considers the age of the learners that will be using tasks and the context in which the tasks will be implemented. In view of these conditions, task within this research project is defined as:

*A meaningful and purposeful activity [specifically for young children] that involves learners in comprehending -understanding-, manipulating, producing or interacting in the target language, while their attention is principally focused on meaning rather than form; there should be specific requirements set by the teacher as to what will be regarded as successful completion of the task -not necessarily the production of language-, where learners are required to arrive at an outcome from given information through some process of thought.*

Types of task that suit young learners related to the storytelling approach are shown in Table 2.3. The collection of tasks presented are based on those suggested by J. Willis (1996) and on tasks carried out during a literacy course for Reception Year children that I attended before conducting field work (See Chapter 4 section 4.2.1). The tasks

described were successful with the children as could be observed in their level of interest, understanding and outcome of the task. Tasks included listing (characters from stories); ordering and sorting (elements from stories such as vocabulary); comparing (story versions) and problem-solving (story plots) (J. Willis, 1996). Taking into account that this classification is not all-embracing (R. Ellis, 2003) other types of tasks can be used when planning lessons for young learners.

FIGURE 2.3: Story tasks suitable for young learners

Story-related task	Means	Variations
Teacher telling a story	Oral telling	Fiction and non-fiction Short and long versions of the same story With/without props Asking questions to the children as the story was being told
Children retelling a story	Oral retelling	Using the pictures from the book as cues Using puppets: Individually/group
Drawing a picture	Pictorial	Without asking children to describe the drawing. Asking for a description
Recognizing vocabulary	Oral Symbolic	Having children recognize words from their sound, from pictures, or through written text
Recognizing phonological patterns	Oral	Asking children to repeat and distinguish patterns: rhyming, alliterations, middle sound. Hat/pat; cat/car; train/rain
Making puppets	Pictorial	Pictures of characters directly taken from the story read Pictures of characters different from the pictures of the story
Role-playing with puppets	Oral	Individual Group
Writing sentences to describe pictures	Writing	With corrections: letter formation, punctuation, capitalization Without corrections

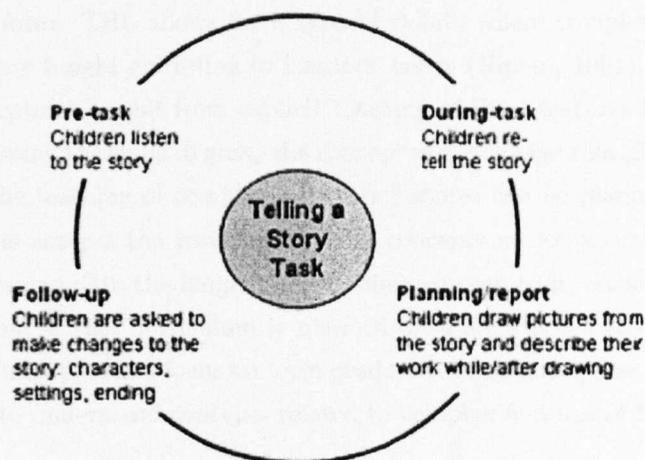
Based on the task-cycle suggested by (J. Willis, 1996), a telling-a-story-task would follow the pattern shown in Figure 2.4. In this type of task, children are asked to tell a story and are encouraged to construct their telling using a beginning-middle-end structure. Following the same task-cycle and taking into consideration children’s abilities (including motors skills when asked to draw or cut out), other tasks based on stories may include ordering the characters as they appear in the story, comparing one character with another or “read” the story to a friend.

### 2.5.2 TBL attributes in the light of young children’s characteristics as language learners

This thesis proposes that young learners of English can benefit from a methodology that situates learners at the starting point of syllabi design. This is based on a speculative connection between children’s characteristics as language learners (described in detail in Section 2.4) and the characteristics of the methodology. This connection is summarised in Table ?? (p. ??) and analysed below.

1. Learners’ needs. As Cameron (2003) children use language -among other reasons-, to understand the world, to make sense of their reality and the rules to engage

FIGURE 2.4: Storytelling-based task cycle: Telling a story



with other children and adults. Tasks in a language classroom can address the need of children to make sense of their reality because the approach allows for planning the language objectives based on learners' needs. For example, a task in a young learner classroom could be to draw a picture about how Goldilocks felt when she left the bears' house and talk about this picture with the target language vocabulary related to emotions. The language task will help the children understand or deal with the moral of the story, that which advises children not to get to other people's house without a proper invitation.

2. **Learner-centred curriculum.** In TBL, learners influence curriculum design (D. Willis & Willis, 2007). This is interesting when the learners are young children who can change the course of a task or go beyond its expected outcome because of their natural curiosity towards new experiences. If the teaching approach provides room to let learners guide the learning process to an extent which the teacher considers appropriate or useful, more opportunities to create environments conducive to language acquisition will arise.
3. **Learners communicating in the target language.** One of the purposes of using communicative tasks in language classrooms is to get learners to talk in the target language (J. Willis, 1996; R. Ellis, 2003; D. Willis & Willis, 2007). Children's typical lack of inhibition to talk and communicate (McIlvain, 2004) becomes an advantage because if the topic of the tasks interests children, communication is likely to occur and even be initiated by children effortlessly. It must be recognized that very young learners might be communicating largely in L1. However, because they are unlikely to feel intimidated by the use of the target language, teachers can

still encourage its use and children will likely respond positively to it, imitating the teacher's use of the target language.

4. Focus on form. TBL allows for a type of syllabi where complex features of the language are taught according to learners' needs (Nunan, 1991). Young children probably cannot benefit from explicit teaching of these features because they are still developing the skills to grasp the concept of a language rule (Snow, 2006). The delay in the teaching of complex language features can be planned because TBL in principle accepts the teaching of these concepts as secondary. Learner needs such as playing with the language and being exposed to it, come first. Moreover, if the young learner curriculum is planned on a long-term basis, communicative tasks can incorporate a focus on form gradually, considering how children develop the skills to understand concepts related to complex features of language.
5. Correction of form. TBL asks for a focus on form to happen in "natural interventions" (Harley & Swain, 1984) as for instance when learners ask for an explanation or actually make a mistake. If for instance children use the wrong form of the past tense of a verb, parents, family or carers might correct them. However, these corrections happen naturally without formal teaching of a language rule. The person who corrects a child does not go into detail as of why the form for the past tense of the verb run is *ran* and not "*runned*." In TBL communicative tasks, focus on form can happen spontaneously. If children doing communicative tasks make a mistake with form, they can be corrected in the way they would be corrected by parents, when the mistake occurs and without formal language rule explanation. Furthermore, the focus on form is not necessary for communicative tasks to take place.

#### *Research on TBL and young learners.*

The common feature of the majority of studies in the task-based literature is that they focus on the performance of sophisticated adult English language learners whose English is of fairly high level (Pinter, 2005, p. 113). To date, with the exception of studies conducted at the primary level (Prabhu, 1987; Carless, 2002; Lee, 2005), studies connected to the implementation of TBL with children in the age range of 3 to 5 years old are scarce. Research in the field is encouraged by Carless (2003) who, in a study conducted in Hong Kong primary schools, concluded that curriculum innovation based on the task-based approach needs to be adapted to local contextual conditions and the characteristics of the target learners, but such adaptation requires investigation. Two relevant studies are that of Pinter (2005) because her work focuses on young learners of English and that of Prabhu (1987) because of his views on the importance of involving teachers in a project regarding the implementation of a task-based approach.

In a small number of elementary and secondary English classes in India, Prabhu (1987) conducted a study that involved changing the language curriculum prevalent at the time (based on a structural-oral-situational method which resembles the direct teaching instruction of the audio-lingual method), to a communicative approach. Findings from the five-year-long study that looked into teachers' role for the successful implementation of the communicative approach suggest that teachers' involvement in curriculum innovation is critical to success. Teachers were given opportunities to input ideas and experience into the project and so their level of involvement increased, as ideas from "outside" were not imposed without valuing teachers' own notions about language teaching. In addition to involvement, Prabhu stresses the importance of teaching materials which according to him should be source books and not text books, that is, teachers should ideally be allowed to plan lessons based on materials that meet learners' needs. Findings from the study of Carless (2003) are in line with Prabhu's when he points out that the factors that were found to influence how primary school teachers implemented the use of communicative tasks include teacher's attitudes and beliefs about the innovation. When those are incompatible with the changes in the curriculum, implementation success is reduced (p. 6).

Pinter (2007) found benefits in using "spot-the-difference" communicative tasks with two elementary school children learning English in Hungary. The task consisted of discussing differences between two pictures (each child had different versions of the picture). One of the pictures for instance was a house with five rooms in which people were performing different activities and objects present in one picture were absent in the other. In total the children worked the same type of task four times. The first one was conducted in Hungarian so that children understood how to work with the task and the other three (spread throughout three weeks) were performed in English. After analysing recordings from the children working on the task and interviews, Pinter found the use of the task to be beneficial for the children in three ways. First, the children enjoyed the opportunity to speak English spontaneously created by the task, second, solving the task served as a vehicle for children to interact with each other, listen attentively to their contributions and use assisting skills with the purpose of solving a task and third, repetition of the task allowed children to improve their performance each time they solved the task, moving from an individual way of working out the task to a more collaborative one. From this study it may be concluded that the use of communicative tasks with young children provides opportunities for language learning that are motivating. Furthermore, allowing the children to repeat the same task was also beneficial.

As has been pointed out, the literature on this topic although scarce, shows the potential of communicative task use with young children. For this reason, this study

TABLE 2.2: Methodological characteristics of TBL and young children's characteristics as language learners

	Methodological characteristics of TBL	Children's characteristics as language learners
Learners' needs	Language learning activities should directly reflect what learners "potentially or actually need to do with the target language" (the "rehearsal rationale" [Nunan, 1991])	Children as language learners are always looking for meaning (Cameron, 2003). They are involved actively in the formulation of rules that lead to the understanding of the world (Wells, 1987).
Curriculum flexibility	Teacher-control instruction lessens in favour of learner-centredness (Willis, 1996; Skehan, 1998)	They like to process new experiences, ask questions, experiment (Donaldson, 1987; Tizard and Hughes, 1984).
Learners communicating in the target language	Communicative tasks are especially suited for this approach (Ellis, 2003; Skehan, 1998; Willis, 1996).	They are less inhibited than older learners to talk in the foreign language (Cameron, 2003). Most lack self-consciousness when they speak a new language (McIlvain, 2004).
Focus on form	Procedural syllabi allows for a random selection and sequencing of tasks (Gilabert, 2004). In TBL, morphosyntactic, phonological, and lexical language elements (grammar, phonology, discourse, and vocabulary) are located secondly and curriculum [and tasks] design parts from specific learners needs and ways of learning the language (Nunan, 1991).	They are developing first and second language literacy, familiarizing with the written word (Cameron, 2003).
Correction of form	Focus on form is required (to foster the acquisition of formal linguistic elements) but should occur in natural interventions during tasks (Harley and Swain, 1984).	They require that language learning opportunities have appropriate literacy demands. They may not be ready for certain structures and complexities in either first or second language (McIlvain, 2004).

explores the implementation of an English course based on the TBL approach with very young children.

Having reviewed the approaches for language teaching that were explored in this thesis, the following section analyses the approach to literacy that I studied with the children, based on the reasoning that using stories with children and using technology to deliver stories has an effect on the development of literacy of young children.

## 2.6 The emergent literacy approach

One of the aims of this thesis is concerned with very young children studying a foreign language from an early age. In the literature, a recognised benefit that can result from this practice is the gaining of native-like spoken fluency that children can develop because of an early exposure to the phonemic system of the foreign language (Lightbown & Spada, 2006). This point however has been challenged by research that shows that adult learners can also acquire that level of fluency in specific circumstances (Molina-Navarrete, 2006; Lightbown & Spada, 2006). Because of this, I wanted to explore other benefits that learning a foreign language could bring to very young learners. Since one of the methodologies investigated in this study is storytelling and one of the most important gains associated with the use of stories with young children has been connected to the development of literacy skills, I decided to investigate emergent literacy development as a potential benefit of learning a foreign language. Could children's encounters with stories heard and viewed in English be supportive to the development of story-related emergent literacy skills? If so, this could be recognised as a benefit of starting to learn a language from an early age. Furthermore, literacy has long been an area of interest for educators, parents and researchers because of suggestions that children who learn to read early could develop the skills to read more and as a result extend the knowledge they can acquire over time. These reasons were strong motivators to explore in my research the development of skills related to literacy.

### *Historical notions of emergent literacy.*

Research into literacy has been influenced by two distinct perspectives: reading readiness and emergent literacy. Reading readiness was closely linked to assumptions that children were ready to understand concepts related to print at around seven years old and only then they were ready to receive reading instruction (Prinsloo, 2005). Teale and Sulzby (1986) suggest that the maturationalist perspective prevalent in the 1920s and 1930s, which rejected the effect that the environment could have on children's thinking, supported the notion of reading readiness. It was best to delay the instruction of literacy-related concepts until the children were ready to understand, and consequently, learn them.

In the late 60s, developments in the field of psychology which started to regard young children as active participants in the development of their own language, made researchers turn their attention to the first years of a child's life to understand reading and writing in the light of language acquisition (Prinsloo, 2005). It was argued that reading readiness did not take into consideration children's thinking and it was disregarded when studying literacy development. Teale and Sulzby (1986) suggest:

*It might be said that reading readiness was a good concept that got applied in a bad way. There should be no quarrel with the notion that certain prior knowledge, language facility, cognitive development, and attitudinal orientations toward literacy all probably facilitate the child's learning to write and read in school-like settings. However, the reading readiness program is built upon a logical analysis of literacy skills from an adult perspective rather than upon a developmental perspective [which] recognizes children's thinking as being qualitatively different from, yet growing toward, adult modes [...] (p. xiv)*

The maturationalist perspective began to change under the influence of developmental concerns which regarded the contribution of environmental factors to children's literacy development (Teale & Sulzby, 1986). As a result, literacy acquisition began to be perceived as a process which originated in infancy, developed over time and was influenced by children's literacy experiences (Talley, 1994). This perception became known as emergent literacy in the research of Clay (1979) regarding literary development of beginning readers in which she introduced the term (Whitehurst & Lonigan, 1998; Teale & Sulzby, 1986).

The concept of emergent literacy characterizes "a new perspective which stresses that legitimate, conceptual, developmental literacy learning is occurring during the first years of a child's life" (Teale & Sulzby, 1986, p. 28). McGee and Lomax (1990) echo Teale and Sulzby and note:

*[...] a basic concept of emergent literacy is that children do read and write even though their products are not conventional and that this unconventional reading and writing are as crucial to literacy acquisition as any other reading or writing (p. 134).*

Emergent literacy proponents conceptualize literacy in a way that differs from conventional definitions. Literacy is no longer perceived as simply a cognitive skill but as a process encompassing cognitive, social, linguistic, and psychological elements (Teale & Sulzby, 1989). Literacy is viewed as the ability of individuals to communicate effectively for real life applications, including the skills required to read, write, and think (Zygouris-Coe, 2001).

For the emergent literacy approach, literacy development does not begin when children start receiving formal literacy instruction in school nor do children go through a pre-literacy stage in the path to literacy development (McGee & Lomax, 1990). In this

sense, emergent literacy “signaled a break with the theoretical concept of reading readiness particularly with the notions that young children needed to be taught a series of prerequisite skills prior to reading [...]” (Yaden, Rowe & MacGillivray, 2000, p. 425).

Situations that foster literacy development take place during activities in school or home while reading to children. These situations generate opportunities for children to interact with print and language (Talley, 1994, p. 1) and take place when there is not an overt intention of teaching conventional components of literacy, such as letter recognition or phonemic awareness. According to Mason and Allen (1986:37) “[...] linguistic contexts for learning play profound roles in the course of literacy development.” Zygouris-Coe (2001) expands the notion indicating that parents, teachers or peers can provide real life opportunities and support required by children to develop emergent literacy abilities. These linguistic contexts or real life opportunities necessary to encourage literacy development in children include storybook reading scenarios, such as following a story being read by an adult or telling a story using pictures (Hiebert & Papierz, 1990; Gunn K., Simmons C. & Kameenui J., 2004). In situations like these, reading is perceived in a non-conventional way in the sense that children’s interpretation of the illustrations found in a picture storybook and their attempts to tell the story are seen as “reading” (Snow, 2006). Whitehurst and Lonigan (1998) and Yaden et al. (2000) write that the abilities, knowledge, and attitudes that very young children use in such reading attempts which include learning how to correctly hold and turn pages of books, telling a story from a book while pretending to read it, constructing a narrative, and using invented spelling to write messages (Goodman, 1984; Reyes, 2006; Ziolkowski, 2004), eventually grow into conventional literacy.

*Framing this thesis within the emergent-literacy approach.*

Whitehurst and Lonigan (1998) identified two major research strands in the field of emergent literacy: studies situated in the quantitative tradition which have tracked children’s knowledge of literacy as it moves to conventional literacy (relation between emergent and conventional literacy) and studies from the qualitative tradition which have “examined the development of behaviours of preschool-aged children in response to literacy materials and tasks” (Whitehurst & Lonigan, 1998, p. 849). Sulzby and Teale (1991) classified research on emergent literacy into four areas, namely storybook reading, emergent writing, home literacy influences, and metalinguistic awareness. This thesis focuses on storybook reading, which has been traditionally studied by researchers interested in investigating how the exposure to stories can help the children to develop an understanding of structure of stories (Cutspec, 2004; Whitehurst et al., 1994; Whitehurst & Lonigan, 1998).

Story structure under the approach of story grammar has been used to study children's development of language and narrative abilities (J. Miller, 1981; Talley, Lancy & Lee, 1997; Uzuner, Kircaali-Iftar & Karasu, 2005) and knowledge of stories acquired from viewing television (Talley, 1994, p. 13). Story grammar sees stories as consisting of different elements arranged in sequence (Stein & Glenn, 1979; Rumelhart, 1980; Schirmer, 2003; Uzuner et al., 2005) where characters initiate events with the purpose to reach a goal and the stories end with consequences related to the characters' actions (Uzuner et al., 2005, p. 16).

In my research, the approach of story grammar is used to investigate acquisition of story structure from stories viewed on a computer given that ICT and stories working together create a dual relationship where features of technology equip stories with tools to support literacy development (Plowman & Stephen, 2003). Furthermore, my research is situated within the qualitative category since the focus lies in the moment-by-moment evolutionary, systemic nature of literacy growth [...] (Yaden et al., 2000, p. 428) without attempting to follow the changes between this growth and later conventional literacy.

### 2.6.1 Studies on emergent literacy development of bilingual children

Studies of emergent literacy had been mostly conducted with monolingual English-speaking children (Whitehurst & Lonigan, 1998, p. 849); recently however the development of early literacy under this approach has been used in studies with children who speak other languages and with children in second language contexts. Examples of these include Hebrew-speaking children, (Korat & Shamir, 2008), children learning Dutch as a second language (de Jong & Bus, 2004; Verhallen, Bus & de Jong, 2006) and children learning English as a second language (Reyes, 2006; Martínez-Roldán & Sayer, 2006; Araujo, 2002).

According to Reyes (2006) and Araujo (2002), there is little research on literacy development among young emergent bilinguals. Reyes (2006) reported case studies of three four-year-old children living in a community in the south of the United States predominantly composed by Latino families. The children who live in these communities speak Spanish and English in school and since much of the interaction outside school takes place also in Spanish, literacy development in English may be delayed (hence the consideration of these children as at-risk of falling behind expected literacy development). She found in her study that children who are exposed to stories both at home and school show gains in certain components of emergent literacy, including print and metaliteracy awareness. Similarly, Araujo (2002) conducted a year-long study in which 20 kindergarten children enrolled in a full-day Portuguese-English bilingual

program were observed participating in literacy events that took place in the classroom. The purpose of the study was to investigate the effects of a literature-based literacy curriculum on the children's literacy growth. The researchers report that emphasizing construction of meaning from texts supported children's construction of literacy understandings. In addition, the limited oral language proficiency of the children did not restrict their emergent reading development.

In the case of the study conducted by Martínez-Roldán and Sayer (2006) the literacy development of bilingual third grade students of Latino background was followed for two years. They used a story grammar approach to analyse 24 retellings of story books told in Spanish and English. The researchers wanted to investigate the role of language in the readings and retellings of the students. What they found in the first year of the study was that comprehension scores of stories was higher in Spanish but as the children progressed through school, comprehension scores differences reduced between the two languages. Interestingly, Martínez-Roldán and Sayer and colleagues also found that the children used the two languages to negotiate comprehension and construction of stories, giving indication of their growth as bilinguals. Another relevant finding was that related to the influence of the contents of the story on the retellings. The children for instance had higher scores in the story that was close to their cultural background as Mexican American children.

The studies so far reviewed look into the emergent literacy development of young children in ESL contexts that have not used ICT. Below I present a review of research that has used ICT-delivered stories to study literacy development of children in various contexts and languages.

### **2.6.2 Research into ICT-stories and development of emergent literacy**

ICT-delivered stories have been shown to have a positive effect on the development of early literacy skills in young learners. The studies reviewed in this section have looked at discrete components of literacy (phonological awareness, letter recognition, and lexical access) coming from an instructed position view of literacy, or holistic components (meaning-making and understanding of story structure) coming from a more social and culturally-distinct view. While some studies have compared the use of the same book presented in printed and electronic formats (Matthew, 1997; L. Miller, Blackstock & Miller, 1994; de Jong & Bus, 2002), others have looked at the benefits to literacy skills development within contexts of ICT-story use, comparing development when more or less story assistance or entertainment features are activated (Boltman, 2001; Lewin, 2000; Talley, 1994; Trushell, Maitland & Burrell, 2003). It is important to note that

although the studies are mainly focused on contexts with monolingual English-speaking children, some studies have investigated children with language backgrounds other than English.

In a study to compare the impact of electronic text and printed text on reading comprehension and retelling of third-grade students, Matthew (1997) found the students who read the CD-ROM storybooks scoring significantly higher on retellings than the students in the print-read group. These results suggest that features from the electronic version of the story (animation, dictionary support, and sound effects) could have been supportive to reading comprehension and consequently to enhancement of retellings. In a similar comparative study of stories delivered in different media, L. Miller et al. (1994) also found CD-ROM readings advantageous compared to traditional print storybook readings. In their study, they asked four 8-year-old children to repeatedly read stories from a CD-ROM and printed stories in five separate sessions. Their findings suggest that the availability of the on-demand help features in the electronic stories fostered the rate of vocabulary gains and general reading improvement in the children. In a comparative study that yielded mixed results about the benefits of reading from CD-ROMs, de Jong and Bus (2002) found the features contained in electronic books to be potentially disruptive to the reading process when a child is left to read an electronic book without adult support. Their findings suggest the electronic book to be "less efficient [in] supporting internalizations of story content" (p. 154). From a total sample of forty-eight children assigned to four different conditions (regular book, computer book with restricted game features, computer book unrestricted, and control groups), twelve children were read a story from a print book and twenty-four children explored an electronic book. During the reading sessions, the children who were asked to explore the electronic book in the unrestricted group, which allowed them to have full access to the games contained in the software, could not complete a full reading of the story in the six reading sessions. The many attractive options of the unrestricted version of the story diverted the children's attention from text. The result was that they played games 43% of the time. The children in the restricted computer book group heard the whole story three times at most, in comparison to the children of the regular book who heard the story six times. The results on emergent literacy gains which do not statistically favour the children in the computer group, can be linked not to the failure of the electronic book to provide support in the development of emergent literacy reading, but to the design of the software. As it has been pointed out by Korat and Shamir (2008), "good quality CD-ROM storybooks, which include hotspots that are congruent with and integrated into the content of the story, fostered children's understanding of the story line (Labbo & Kuhn, 2000) and their story recall ability (Underwood & Underwood, 1998)" (p. 111). One important conclusion from the innovative study of de Jong and Bus (2002) is that

reading from an electronic book does not substitute the practice of reading from printed text nor does it provide all the support that an adult could offer to a child interacting with an electronic story.

The study conducted by G. Underwood and Underwood (1998) did not look into stories presented in different media, but into the effects of gender composition when children were asked to work in pairs with a CD-ROM story. The researchers studied children's dyads interacting with ICT-delivered stories in order to understand differences in comprehension and recall by gender. They focused on the interactive features and animations of the ICT-talking books, and found that the children used and enjoyed these features while working with the stories. Interestingly, results on comprehension did not differ between groups of children (girl-girl, boy-boy and girl-boy). However, on recall measures, pairs formed by girls outperformed the other pair types. Interaction with the stories was not found to be influenced by gender composition. A second study conducted by J. Underwood (2000) compared the use of CD-ROM stories using different features offered by the software. The author found that the use of talking books had effects on the children evidenced in learning gains (comprehension and recall), although she described these gains as "serendipitous." Differences were suggested to be influenced by characteristics of the story software.

Other studies have not compared stories delivered in different formats. Instead, they have focused on the support that assistance features (dictionary, pronunciation) or multimedia features (hotspots, music, zooming) of story software offer to children's development of early literacy (Boltman, 2001; Lewin, 2000; Talley, 1994; Trushell et al., 2003).

Boltman (2001) conducted a study in which 72 children aged between 6- and 7- years old, distributed evenly between two schools located in England and Sweden, were assigned to one of three conditions: a printed picture book, a computer presentation of the printed book with traditional hyperlinks or a spatial computer presentation of the book (which included animated panning and zooming between pictures). The children in the study were asked to look at the story with one of the three conditions. Afterwards, each participant completed a retelling task, a recall task (narrating the story without looking at pictures) and an affective task (answering questions about their experiences with the story). Results of the study show greater gains in elaboration of stories on the children in the spatial computer presentation group. More complex story structure and greater understanding of initiating events and goals were aspects observed in children's stories. Considering that half of the children in the school in Sweden had language backgrounds other than English, the findings are relevant for the effects on story construction that the

storytelling technology used in the study (KidPad) had on this group of second language learners.

In a study by Lewin (2000) of 5 and 6 year old children identified as struggling readers, the participant children were asked to work with two different versions of talking books, one with features of highlighted speech and the other with other added features such as pronunciation hints and reinforcement activities. During the one-month intervention of the study, the children were asked to read online multimedia talking books. Children were found to benefit from talking books which included reinforcement activities related to the story presented as evidenced by increased measures of word recognition. Findings from the study suggest that interactive storybook software would motivate children and contribute to development of general reading and ICT skills.

Talley (1994) studied the effects of the IBM CD-ROM story "Stories and More" on 73 children of diverse language backgrounds enrolled in a Head Start program. All the children were aged 4-years-old at the beginning of the study. In a 12-day intervention, children in one of two conditions (well-read-to at home and not-well-read-to at home) spent an average of 15 minutes per day working individually with the computer stories. After the intervention period, post-test results showed significant improvement in children's emergent literacy levels (concepts about print and print awareness). Her findings suggest that "exposure to CD-ROM storybooks is valuable for even the youngest students, helping pre-readers to develop an understanding of story structure and sequence" (Strangman & Hall, 2003, p. 10). Furthermore, children were motivated to use computers and an improved hand-eye coordination was observed during the children's interaction with the stories. It is worth noticing that the children in the test group had increased measures of emergent literacy but still did not reach the scores of the well-read-to group, which would emphasise the importance of the home environment in the literacy development of a child.

A study that is cautious about how ICT-stories are used in classrooms was conducted by Trushell et al. (2003) with three Year 5 classes organised into seven groups. Students watched Kiyeko and the Lost Night (Jacquin & Testamarck, 1995), a story about a fearless Indian boy who rescues the night from the snakes by trading it for a rattle and poison, and by doing so he gave origin to the rattle snake. The groups were observed viewing the story without teacher intervention and were later asked questions to measure episode recall according to the story grammar of the plot. Poor episode recall was associated with the number of story feature cued animations and effects referred to as "eye-candy", which totaled 200 throughout the story, and which were not always supportive to the story plot. Like in the study of de Jong and Bus(2002), children benefit from the use of this type of stories if there is at least minimal adult intervention

as only two groups out of the seven read the story from beginning to end. Teacher would ensure a linear progression while reading and help to ensure a more moderate use of “eye-candy” features.

It is important to note that although children who use CD-ROM stories can benefit from the interaction with this technology (Blok et al., 2001), in comparison with other media studies provide mixed evidence of the benefits of using CD-ROM stories in the development of literacy. Given that research has shown the positive effects that the interaction with this type of technology has on children, perhaps it is more useful to explore ways in which it can reach more children instead of comparing the media in order to find the “best.” Just like the debate of Clark (1983) and Kozma (1991) on the advantages of learning from media compared to traditional teaching methods proved to be not useful, this debate might end leading us nowhere. On one hand, it has been seen that children benefit from books and benefit from ICT-stories. On the other, it is a fact that technology is not meant to substitute parents or teachers, but to support the learning experiences of children. Our efforts should focus on finding ways to provide access to literature for children by every means available.

As it has been discussed, many aspects have been studied from the interactions that children have with ICT-stories. For instance, the development of children’s social skills or the ways in which software features support the development of literacy with regards to story understanding, vocabulary development and phonological awareness. There are, however, other areas that require exploration. In this regard, Plowman and Stephen (2003) write:

*There is a need to explore further the use of screen-based literacy software to support pre-school children’s emerging literacy. The evidence suggests that this is most likely to be effective when part of a planned programme for literacy. Researchers and practitioners should find ways to explore further the ways in which ICT use can assist with particular aspects of emergent reading and writing in a way that accommodates children’s learning styles and needs (Plowman & Stephen, 2003, p. 25).*

The current study attempts to contribute to the area of emergent literacy within the line of research of de Jong and Bus (2004), Talley and Korat and Shamir (2008) who have studied emergent literacy development of pre-kindergarten children learning a second language or a first language respectively. Results of those studies suggest that children who are learning a second language or those who have not had much interaction with printed books can develop components of emergent literacy when hearing ICT-stories. Listening to these stories resembles the moments when children are being read to by an

adult. There is an emphasis on the notion that technology should not substitute the important activity of traditional storytelling with children. Technology should enhance the activity or provide the children with opportunities to interact with books and be part of literacy events. In the current study, development of emergent literacy, in particular development of story comprehension and story structure of a group of preschool-age children in a foreign language context is investigated in the current study through the cognitive device of a story grammar model (Stein & Glenn, 1979). The use of this approach and the context in which development of emergent literacy is investigated are two aspects that differentiate my study from those aforementioned.

From this review of the literature on the areas of ICT and young learners, storytelling and TBL and emergent literacy development supported by ICT the following issues arise:

- Can the methods of storytelling and TBL be used in practice with 3- and 4-year-old learners;
- If the methods were implemented in an English course, would there be effects on the development of emergent literacy skills, given the fact that the course is based on stories?;
- Would children enjoy it?;
- Would teachers implement it?

Subsequently, the research questions that originated from the literature are:

- Q1. What pedagogical and technical aspects are involved in the design and implementation of a work scheme based on ICT-enhanced stories to teach English to young children?
- Q2. Can some form of change in children's skills associated with emergent literacy development, specifically in story grammar elements incorporated into children's story retellings, be observed throughout the lessons prepared with the work scheme?
  - Q2a. If yes, what type of development?
  - Q2b. What were the indicators of the observed development?
- Q3. What is the attitude of the children towards learning English using ICT-enhanced stories integrated in the work scheme? About the English course at all?

- Q4. What are the opinions of the teachers involved in the study about the integration of ICT in the preschool curriculum?

## 2.7 Summary

The fact that children are being taught English at ages younger than ever brings implications to language curriculum design; to training provision; to language teaching methodologies; to children's L1 development as a result of learning a foreign language from an early age. Practitioners face the challenge of finding methods of instruction that can cater for the needs of the new group of young learners and of developing strategies to integrate the methods into the curriculum.

Amidst all these changes in language teaching practice, a second important trend is the increasing inclusion of technology in the preschool classroom. Research has shown the potential of ICT to enhance the learning opportunities that young children meet during their preschool education. One of the ways to exploit the potential of ICT is by integrating technology available into the subjects and goals of the curriculum. For instance, using technology to support school projects like printing pictures to decorate a story, using digital cameras to illustrate how a bean sprouts or using a text processor to write sentences and practice punctuation rules.

In this study I decided to look at modern forms of storytelling and task-based learning approaches to investigate the above issues. The decision to use both methods was based on a review of the literature related to foreign language instruction and was supported by personal experience in teaching English to young children. The following summarizes the major aspects developed through the literature review.

- Storytelling has been used in language teaching with young children because stories have characteristics that can appeal to young children. Stories are entertaining and engaging, they constitute a natural way for children to understand their world, they promote creativity and comprehension, and they can influence multicultural awareness in children by presenting other people's traditions and culture in a way that children understand and enjoy. When a lesson is built around a story theme, the children are given a purpose for learning a language. Adding to the story theme, when ICT tools are the delivery medium of the story, the learning experience can be enhanced due to the support provided by technology.
- ICT features can provide teachers with tools to support children's understanding of stories written for L1 English speakers. As a consequence, language learners can be

exposed to materials written for children learning English as L1. The result of this practice could be an increase in learners' proficiency in L2, since there is a contact with the natural (unmodified) structure of English. The "unconscious" awareness that young learners can develop of the structure of a foreign language could provide them with a better understanding of the discourse differences between languages.

- Task-based learning was the second language approach reviewed for language teaching. This method allows for the design of language learning environments where learners can approach the foreign language following their own purpose for learning it. The method can be used to create story-related tasks and provide children as language learners with a goal to learn a target language. The goal might be amusement from the children's perspective because of the nature of the tasks and the developmental stage of young children, which makes children see every event in their life as a game. However, the same goal is educational from the teacher's perspective.
- According to the emergent literacy approach, young children can develop the behaviours and attitudes that lead to conventional literacy by being immersed in environments where stories are available and frequently used. This implies that using stories to teach a foreign language could support the development of emergent literacy skills of the learners.

## Chapter 3

# Constructing the methodology

### 3.1 Overview

Chapter 1 outlined the questions that this project aimed to answer. In this chapter, I firstly return to those questions with the purpose of describing the design of the study. Secondly, I attend to the nature of the study by explaining the paradigm under which it was set. Thirdly, I present a summary of ethical considerations when conducting research with young children and how these influenced the choice of methods adopted in the study. I also include a description and rationale for the methods used in each phase of the study. The chapter ends with a description of the measures taken to enhance the validity and reliability of the data collected through the chosen methods.

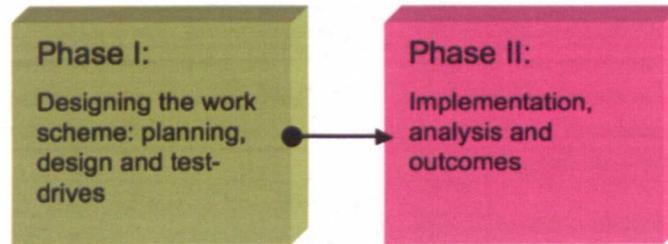
The design of the study involved two phases. Since I present the methodology for each phase separately, this chapter is complemented by Chapters 4 and 6. Chapter 4 describes the procedures followed during the design of a work scheme to teach English to young learners, the preparation of twelve English lessons under such work scheme and the pilot report of one lesson. Chapter 6 presents procedures used during the implementation of these lessons, thus representing the fieldwork of the study.

### 3.2 Aims and structure of the study

As has been explained in Chapter 1, this project was set up to explore whether a work scheme based on the storytelling approach enhanced by technological tools can lead to the development of emergent literacy skills of young children in a foreign language context, hypothesizing that technology would be able to provide the support required

by young learners to develop such skills. The study had four main aims planned to be reached in two Phases (Figure 3.1).

FIGURE 3.1: Phases of the study



Phase I: Designing the work scheme. During this stage, a work scheme to teach English to young learners based on ICT-enhanced stories and the task-based learning approach was designed and piloted. The work scheme design and pilot were planned to take place within the first year and a half of the project timeline.

Phase II. Implementation, analysis and outcomes. The work scheme was implemented during a summer course. The lessons were prepared with the teacher who was teaching the course. The lessons were observed and audio taped. Language samples from the children were collected from retelling stories for later analysis.

The aims and the research questions which guided the work conducted in the two phases of my research are presented in Table 3.1 (p. 57). A detailed account of the events that occurred in each phase is presented in Chapter 4 and Chapter 6.

### 3.3 Situating the study within the paradigm of naturalistic inquiry

A researcher's inquiry is guided by a belief system that within the research endeavour is referred to as paradigm (Creswell, 1998, p. 74). A paradigm is constituted by the "blocks that construct the theoretical systems or structures" (Tashakkori & Teddlie, 1998, p. 3), that is, what an individual accepts as reality and valid knowledge within a particular discipline at a given time. Historically, positivism has been the research paradigm that has most strongly influenced research practice, including educational research. In its purest form, positivism holds that it is possible for research inquiry to produce generalizations independent of context and time; that causes of social phenomena can be established; and that inquiry is free of values, because the observer can be isolated from the social

TABLE 3.1: Phases of study and research questions

Phase	Aim	Research question
I	Aim 1: Design and implementation of a work scheme based on ICT-enhanced stories to teach English to preschool-aged children	Q1. What pedagogical and technical aspects are involved in the design and implementation of a work scheme based on ICT-enhanced stories to teach English to young children?
II	Aim 2: Exploration of the effects of the work scheme on the development of emergent literacy skills in a group of preschool-aged children	Q2. Can some form of change in children's skills associated with emergent literacy development, specifically in story grammar elements incorporated into children's story retellings, be observed throughout the lessons prepared with the work scheme?  Q2a. If yes, what type of development?  Q2b. What were the indicators of the observed development?
	Aim 3: Identification and analysis of children's attitudes towards learning English and ICT-enhanced stories via the work scheme	Q3. What is the attitude of the children towards learning English using ICT-enhanced stories integrated in the work scheme? About the English course at all?
	Aim 4: Identification and analysis of teacher's attitudes towards the work scheme, the use of ICT and ICT-enhanced stories in the teaching of English to preschool-aged children	Q4. What are the opinions of the teachers involved in the study about the integration of ICT in the preschool curriculum?

reality being investigated (Onwuegbuzie, 2002). Changes in the way researchers view reality, especially within the social sciences, gave rise to a different paradigmatic position, the interpretivist paradigm, also called constructivist or naturalist. Advocates of this school believe that:

*[...] reality is socially constructed and only knowable from multiple and subjective points of view. The knower and the known are inseparable [...] and inductive logic and qualitative methods are generally employed with the goal of understanding a particular phenomenon within its social context [Furthermore] from this perspective, inquiry is considered to be inevitably value laden. (Rocco, Bliss, Gallagher & Perez-Prado, 2003, p. 21).*

The qualitative approach to research is linked to the interpretivist paradigm and consequently it has always been directed to individuals, relies heavily on the context where

research is taking place and does not consider generalisability as an ultimate goal of the research. This approach has made extensive use of research methods that allow the researcher to study phenomena in close and individualistic detail such as semi-structured or open-ended interviews, participatory observations or document and audiovisual material analysis.

In this study, the decision to take a naturalistic or constructivist approach (from how reality is known) or qualitative (from the methods employed) as postulated by Lincoln and Guba (1985) stemmed from the aims of the project which attempt to “discover constructs and propositions” (Tesch, 1990, p. 90) that explain the phenomenon under study from an individualistic and participatory stance. The constructivist paradigm allowed for the exploration of the project’s questions and constructs since they are consistent with the most important tenets of interpretive inquiry as have been presented by different authors (Johnson & Onwuegbuzie, 2004; Guba & Lincoln, 1989; Lincoln & Guba, 2000; Tashakkori & Teddlie, 1998). How my study is consistent with these principles is explained below.

*Ontology.* From the various approaches that can be used to study children’s literacy development (e.g. socio-political, psycholinguistic), I decided to situate the aim of the study related to this area under the emergent literacy construct which shares the views of the socio-cultural approach to literacy (Yaden & Tam, 2000). From this perspective, literacy is “social, psycholinguistic, conceptual, and developmental in nature” (Teale & Sulzby, 1986, p. xxi) and as such considers home literacy environments, literacy events and adult interactions as relevant elements in the study of children’s emergent literacy development (McGee & Purcell-Gates, 1997).

This view of literacy provides a multi-dimensional perspective on how being literate can be conceptualized, and differs from the reading readiness concept that defines being literate as a “product of either natural maturation or the acquisition of prerequisite skills” (Yaden & Tam, 2000, p. 6). It is in this sense that in this study being literate is constructed within one of the multiple approaches that can be used to define literacy, hence agreeing with the ontological notion shared by the naturalistic inquiry related to the existence of multiple realities, in other words, multiple definitions of literacy.

*Epistemology.* The semi-participant or fully-participant observations that are required when working with very young children would make me part of the classroom community. The fact that I planned to be the person in charge of the ICT tools in order to complete the work that the children had to do on the computer would turn me into an active part of the class more than a spectator. By becoming an active participant of the phenomenon (the-wanted-to-be-known) under study and interacting with the children

in a direct way, an inseparable relationship was created between the knower and the known (the researcher and the children).

*Generalisibility.* This is a study of one group of children that does not seek to generate conclusions applicable to the whole of the preschool population of the studied community. The number of children who participated in the study and the procedure followed to select the participants left no scope to attempt generalisibility of the findings. However, the study seeks for replicability considering that interventions in small settings like the one described in the study can over time provide the required “numbers” to attempt a generalisibility claim. Moreover, it is hoped that the research outcome will provide relevant ideas to inform the fields of study involved in the project, and open more sources of research that can be followed on a larger scale in different contexts. I must note that replicability in this study considers that contexts are varied and modifications to the design need to be considered. Additionally, the word “numbers” is used figuratively, that is, I do not imply statistical numbers, but number of replicated cases of the study.

*Possibility of causal linkages.* This study does not seek to establish a cause-effect relationship between what I set to study and the results obtained. It is important to note that there could be different explanations connected to children’s literacy development during the course, if this is observed at all. I can say that the English course designed under the guidelines of the work scheme influenced the development of children’s emergent literacy skills, but I must accept that factors like home literacy events can influence the same skills. Since I am not observing children in their home environment, I am just seeing a part of the picture. The children in this study are not isolated from the rest of the world and it is this principle that emergent literacy acknowledges in developing its fundamental theory. The exposure that children have in different literacy events to printed text or literacy material, including watching stories on television, influences the development of emergent literacy skills (Irlen, 2003). I then did not intend to establish a cause-effect relationship between the intervention and the development of the skills. However, I wanted to observe the influence of the intervention on the skills by understanding the circumstances in which they are supposed to be developed and observing changes on children’s emergent literacy skills during the intervention. Within the scope of this study cause is different from influence. Whereas a cause triggers an effect and its absence eliminates it, influence has an effect on consequences but its absence does not necessarily eliminate them. For instance, the absence of the summer course does not mean that the participant children are not going to develop emergent literacy skills. Their participation in the course however, would provide the occasions for the children to practice story related skills that could lead to development. The provision of the story-related occasions then influences development but in a less restrictive way than a cause-effect relationship could present.

*Axiology.* Aims and research questions in the study were advanced assuming that emergent literacy skills can in fact develop when young children are exposed to stories (Teale & Sulzby, 1986) even if these are presented in a foreign language, just as long as the story has elements that support children's understanding of the story (de Jong & Bus, 2004). Those were the values which guided the development of the study and must be considered especially at the stage of analyzing data and interpreting results.

### 3.4 An exploratory study

This study follows an exploratory design (Tesch, 1990) from the perspective that it is not following a previous theoretical model where stories, TBL and ICT had previously been brought together to look at the development of emergent literacy skills of young children in a foreign language context. Previous studies on emergent literacy development have mainly been conducted using children's L1 (Teale & Sulzby, 1986; Korat & Shamir, 2008) and only recently have researchers started to look at the development of these skills in second language contexts using young children's L1 and L2 (de Jong & Bus, 2004; Reyes, 2006). This study focuses on foreign language context in an attempt to find what is out there with relation to children with fledging language skills immersed in foreign language lessons.

The exploratory nature of this study is also reflected on the ways that the teachers and the children participated in the study and the place where data collection took place. The teacher in charge of the classroom is able to make changes in the lesson and make decisions on the participation of the children in the tasks. The children are allowed to withdraw from the tasks. The implications for the study are mostly related to the challenges that empowering the participants in this way may result in the research not developing as planned. The benefits should be a study which is not as disruptive for the children and the teacher as a project conducted in an "artificial" setting, such as a laboratory. The importance of collecting the data in natural and realistic environments is that in life, literacy events occur in real settings, such as home or the classroom. Such contexts are noisy, interruptions are likely to occur and distractions are normal. In spite of the complications that conducting the work in the children's classroom could bring to the collection of the data for my study, there are also important advantages. Children normally feel safe in these places and they are "themselves". They do not try to behave in particular manners because they are in control of the environment. I decided that working with the children in such ways would provide the same sense of security that they would find in other familiar settings and as such, the study would not present stressful experiences. The fact that studying emergent literacy in the classroom,

as was designed in my study, was not based on previous research models, also required an exploratory design.

A further feature of my study determined the nature of the design. My goal was to provide rich descriptions of the context of study adding to the perspectives that have been described in previous studies of the same nature (de Jong & Bus, 2004). Hence, the study required that the description of the context and the processes that took place during field work started from a holistic perspective. In an exploratory study it is possible to begin an investigation studying the whole and to gain precision as the research advances (Routio, 2007).

Finally, my study is exploratory since the focus of studying foreign language contexts is novel to the emergent literacy approach, I wanted to provide the richest description of the context of study which would allow for a deep understanding of the hypothesis that started this study.

### 3.5 Ethical considerations when conducting research with young children: design issues

Conducting research with very young children is not a simple task. As is the case for conducting research with older participants, doing research demands careful planning and arduous work. In addition however, working with children requires that the researcher take careful consideration of method in order to minimize the influence that as adults we could have on children due to power and status relationships. Concerning these points, Clacherty and Kushlick (2004) write:

*Enabling and assisting young children to articulate their knowledge, feelings, or reactions [...] without leading their responses and within the responsibility of an ethical framework requires a skilled fieldworker with tailored methodologies and tools (p. 5).*

Young children hold a view of the world that does not always conform to the one shared by adults and their experience of the world does not allow them to understand the concept of being participants of a research project. However their views and opinions are as legitimate as those of older participants. For these reasons, consent to participate in a study must be granted by an adult responsible for the child but has to be agreed with the child as well. Consequently, in this study I followed what Homan (2001) describes as gaining access to children via “gatekeepers”, in this case, their teacher and their parents. Additionally, in order to give children their own voice, which involved respecting their

right to withdraw from the study at any time and involving them in the decision of being part of the study or not, the children were invited to voluntarily participate in the individual story retelling tasks that were designed to take place during the study's fieldwork. If any child decided not to participate, his or her decision was respected. Children need to get used to the people in their environment (school, neighbourhood) in order to trust them. This has an impact on some of the techniques that may be used to gather data during fieldwork. For instance, it is not possible to consider the use of non-participant observations with them since their natural curiosity towards the world that surrounds them is going to raise their interest in any new event happening within their world, such as the case of a researcher coming into their classroom. In addition, gaining children's trust takes time that should be considered during the period of data collection. Children also need to be at all times protected from any form of distress that the activity of research could cause them. As with all participants involved in research studies, participants' well being always comes before the project's objectives. With children this is especially true as they are more vulnerable and can be more easily affected by changes occurring in their daily lives, including changes introduced by research projects. Thus, in order to allow the children to stay in a friendly environment while participating in the project I collected the research data in their classroom. This was an important decision in the project because it considered the children's well-being and simultaneously enhanced the validity of the data collected, in the way pointed out by Fraser et al. (2004):

*[...] research with young children which is carried out in an environment that is familiar to them may be of greater value in terms of the validity of the findings than studying the children in an unfamiliar setting" (Fraser et al., 2004, p. 153).*

### 3.6 Choice of methods

Some of the ethical implications of working with young children result in restrictions on the type of research methods available for use during the fieldwork of a research project. In this study, these implications were reflected in the use of audio recorders for the conduction of the fieldwork. The Ministry of Education in the area of Spain where this study took place does not allow the use of photography or video cameras in school grounds. Even though the use of video cameras could have been advantageous to understand and record children's reactions when working with the computer or while listening to the stories, as had been the case in previous projects such as Klerfelt (2007) who used video to study children's gestures when creating stories using computers, in this case this was not possible. Nevertheless, other studies that have analyzed children's

stories have relied on audio taped speech (Isbell, Sobol, Lindauer & Lowrance, 2004). Seeing that it was possible, I planned for the use of audio recorders during the fieldwork of the project.

I also decided to conduct participatory observations in order to establish a relationship of trust with the children. As O’Kane (2000) suggests, the use of participatory techniques can bring more value to research projects involving children by allowing them to “ [...] engage more productively with [the] research questions using the talents which they, as children, possess (Jones, 1995 p. 15 in O’Kane, 2000).”

Each phase of this study used the methods deemed necessary to gather the data required to answer the research questions. The methods used and the reasons for using them are described below.

### 3.7 Rationale for the instruments used in Phase I of the study

The purpose of the methods used in phase I of my study is detailed below. A summary of these instruments, the type of data gathered through them and the strategy followed to analyze the data are shown in Table 3.2 (p. 66).

#### *Research diary*

Detailed descriptions of the activities that took place during the planning and development of the work scheme were kept in a research journal. In it, I kept track of the activities regarding the making of a set of guidelines that could be used by a teacher to plan English lessons for young learners following the criterion of using ICT-delivered stories and the TBL approach to plan the lessons. This journal achieved two main goals. It systematised the development of the work scheme by providing insight into what was involved during the process of establishing connections between theory and practice. It yielded the data directed at responding the first research question of this study. The research journal was started in November 2005 and completed in March 2006. The following entries from the research diary illustrate the records that were kept.

*18/03/06. The work scheme will rely on ICT tools to provide the support that L2 children would require in order to understand the stories that will be presented to them construct a conducive learning environment based on the fact that children like stories and the assumptions that interactive stories appeal to children because they call to their learning styles as young learners; to children’s natural curiosity to try new things; to the notions that a story with*

*music, sounds, special effects, and a type of interaction, i. e. a story played in the computer where the child can decide whether to hear it (narrated) or play with it (a narrator tells the story but the child must change the page, click on objects to see what happens, hear characters say things off the main story, such as jokes, or put together a puzzle from a caption of the story). Some of these stories: The Book of Lulu, Payuta the Ice God, Kiyeko, Digitexts from Longman <http://www.longman.co.uk/Digitexts/interactive/index.html>, BBCinteractive stories. Now, in order to investigate, a work scheme is created and lessons implemented. For its creation, several observation events have taken place in order to learn how stories are used in an L1 environment. During so many weeks (check my family literacy journal to gather the exact number) a literacy course has been observed in one school plus other 2 schools have been visited (all reception years) and records have been kept. From these visits, the main conclusion is: it is possible to use this approach because it already happens with children of the same age. Children in a second language environment but who speak English in school and everywhere but not home. The remaining question is: how to adequate it to an L2 CR. Two stories have been taken and worked with a child (in an additional language environment) as a case study alike observation: The Book of Lulu and Kiyeko. Some of the conclusions from these activities [...]*

*29/03/06. Belen and I spent an hour chatting in the msn about the work scheme and the summer course. The stories chosen are fine with her, but she wants to work the tasks more carefully. She is going to create a list of tasks and share them with me next Wednesday. Story to work with now: The Gingerbread Man. Ah! The objective of the summer course has been set up.*

*5/11/05 MN: The following activities will be carried out during the next two weeks. A detailed account of the tasks performed to complete them will be written in this Diary. 1. Review methodologies that make use of ICT even if they are aimed at higher school levels or subjects other than English 2. Review literature regarding the development of a language methodology*

*5/13/05. Stern, H. H. (1992) in his book Issues and Options in Language Teaching presents another categorization for goals. This time offering four types of goals: Proficiency goals, Cognitive Goals, Affective goals, Transfer goals. Objectives*

*In terms of type, objectives are mainly categorized as general and specific.*

*In terms of function, J. D. Brown (1995) adapted a criteria suggested by Robert R. Mager (1962) in his book *Preparing Instructional Objectives*, and indicated that for objectives to be useful, they must contain five elements: the subject to whom the objectives are thought for, expected performance, conditions for the subjects to perform, assessment measure and criterion -how well the subject will be able to perform. (J. D. Brown reference: *Elements of language curriculum: a systematic approach to program development*, 1995). Defining goals and objectives could become a somewhat paradoxical activity, considering that under the constructivism approach, learners should be allowed to establish their own learning goals and objectives according to their needs and learning preferences. Nevertheless, it is clear that it would be quite difficult to face a whole annual, semester, or summer program with a blank picture of the aspects of language that are expected from students to learn, practice, or improve. The paths to construct that final picture might change along the way, so goals and objectives are expected to be flexible and adaptable enough to always address students needs. So if students needs change or the objective set is being too challenging or too unchallenging, the objectives -and even goals- can be adapted in order to provide students an appropriate learning environment suited to their needs and interests.*

The main topics included in the research diary after conducting an analysis of its contents were:

- Personal reflections on the technical restrictions that could arise when there is an intention to introduce ICT in a young learners' classroom.
- Record of the process followed in the selection of teaching materials and the creation of lessons plans.
- Description of the learning experiences that I acquired as researcher throughout the development of the work scheme, such as interactions with the participant teacher or some of the tensions that arise between theory and restrictions imposed by practice.

Conversations with my supervisors led me to reflect on the reasons that I had for stopping this journal. In all honesty, I stopped due to time constraints imposed by the conduct of the fieldwork. However, I recognize that it would have been valuable for the research to continue working on the journal.

TABLE 3.2: Research stages: Phase I

Research question	Strategy for data collection	Source	Outcome/Data	Strategy for analysis
Q1	Research diary	Newbury, D. (2001); Parents' literacy course; Personal reflections; Personal communications with participant teacher; Literature review	Entries in research journal	Nature: Qualitative Interpretive. Tool NVivo. Coding of journal and summarized notes; selection of patterns or groups of notes with similar themes
Q4	English lessons to be trialled in Phase II prepared under the guidelines of the work scheme	Participant teacher	Entries in research journal. English lessons	Nature: Qualitative Interpretive. Tool NVivo. Coding of summarized notes; selection of patterns or groups of notes with similar themes

A final version of the document referred in this thesis as the *work scheme* was sent to the participant teacher in February 2006 so that the preparation of the lessons could start. A copy of this document can be seen in Appendix A.

#### *English lessons*

The participant teacher and I exchanged notes on what were the requirements of the lessons according to the aims of the project. During our conversations, she talked about what the children in the Spanish context knew about English, based on her experience, what tasks she believed the children were going to be able to complete during the lessons and whether the stories that I had chosen to work with were suitable for the children's age and interests. Notes on these exchanges were kept with the purpose of analyzing them and complementing the teacher's opinions on the use of ICT with young children gathered through interviews conducted in Phase II.

### 3.8 Rationale for the instruments used in Phase II of the study

Data collected during the second phase of the study required the use of diverse research methods, namely recordings of children's retellings, semi-structured interviews, classroom observations, a collection of materials from some of the children's tasks and a

survey responded by the children. In this section I present the reasons for the use of each of these methods. The type of data gathered during phase II of this study along with the strategy followed to analyze the data are described in Table 3.3 (p. 68).

#### *Children's retellings*

The purpose of collecting the individual stories retold by the children was to answer question two of this study.

Q2. Can some form of change in children's skills associated with emergent literacy development, specifically in story grammar elements incorporated into children's story retellings, be observed throughout and/or after the lessons prepared with the work scheme?

Q2a. If yes, what type of development?

Q2b. What were the indicators of the observed development?

To this end, children's retold stories were audio taped following the work of J. Miller (1981) in which the process of defining elicitation contexts, sampling recording and interpretation are thoroughly detailed. I transcribed and further analyzed the retellings, comparing the children's stories of Weeks 1 and 2 and Weeks 2 and 3. The analysis was conducted by means of a software application developed by J. Miller and Chapman (2006) which is an analysis tool for narratives of children whose language background is English and/or Spanish.

#### *Semi-structured interviews*

Interviews are understood as the dialogue in which the researcher as interviewer and the participants as interviewees engage with the purpose of generating and obtaining information relevant to the research, and where the researcher takes the decision of topic relevance (Johnson & Christensen, 2004). Semi-structured interviews allow for some flexibility in the scope of the interviewees' responses because the questions are answered by the participants without choosing from a pool of provided choices. Topics that may arise during an interview can be discussed even if the researcher did not originally consider them (Hoepfl, 1997). I was interested in giving the teachers interviewed the flexibility of elaborating on their responses in order to gather data related to their own teaching contexts. I also wanted to have the opportunity to probe for expansion of answers when I considered it necessary or interesting following the goals of the research. This type of interview met these needs. In this study, semi-structured interviews were used to find out the participant teachers' opinions regarding:

- The use of ICT with very young children;

TABLE 3.3: Research stages: Phase II

Research question	Strategy for data collection	Source	Outcome/Data	Strategy for analysis
Q2.	Recordings of children's retellings	Individual ICT-tasks conducted with participant children	Children's retelling of stories	Nature of analysis: Qualitative and Quantitative. Tool: SALT
Q1. Q3. Q4.	Semi-structured interviews	Based on previous research studies (Clements et al., 1993; Bolstad, 2004; Han, 2003; Miles & Sweetland, 2001; Plowman & Stephen, 2003; O'Rourke & Harrison, 2004, KidSmart: Guide to Early Learning and Technology)	Teacher's opinions on: -the use of ICT with young children -the use of ICT-delivered stories to teach English to very young children -children's attitude towards the work scheme -the integration of ICT in the preschool classroom	Nature: Qualitative. Tool: NVivo. Transcription; coding of summarized notes; identification of patterns and classification of answers in the defined categories; cross-reference with data from observations
Q3.	Classroom semi-participant observations	Researcher field notes	Researcher's record of the activities that took place in the classroom during the lessons before and during implementation of the work. Record of teacher's views of the lesson after the lesson. Record of children's attitudes towards the English lesson and the stories that took place outside the classroom	Nature: Qualitative. Tool: NVivo. Coding of summarized notes; selection of patterns or groups of notes with similar themes. Cross-referenced with data coming from interviews
Q3.	Materials from activities	Material created by children during the sessions will be kept in separate per-child files	Posters. Story sequencing task	Nature: Qualitative. Interpretive. Used to illustrate the children's cases
Q3.	Rating scale	Adapted version of Airey, Plowman, Connolly and Luckin (2002): Rating children's enjoyment of toys, games and media	Children's preferences of the tasks that took place in the classroom and the stories viewed	Nature: Qualitative. Interpretive. Used to support of children's opinion on the lesson structure and materials

- The role that ICT could have on the teaching of English as a foreign language;
- How ICT supports the teacher's professional development.

I designed the interview (Appendix C) based on previous research that looked into teachers' perceptions of using ICT in the education of young learners (Bolstad, 2004). The reason why I decided to base my interview in previous work was that these issues were not the primary purpose of my study (as mentioned earlier the primary purpose is explored through research question two), hence, I did not approach the study of teacher's opinions on the use of ICT from a strict exploratory perspective. I had anticipated that to some extent, a successful implementation of the English lessons that were put into practice in Phase II of the study could be influenced by the teacher's opinion regarding the benefits that ICT could bring to young children or by the role played by ICT in teaching a foreign language, therefore gathering the opinions of the teachers involved in the project before the lessons implementation was important. I based this assumption on research results that showed that the success or failure of using some form of ICT for educational purposes can be influenced by the way it is implemented, that is, how the teachers ultimately deliver instruction with ICT (as a support tool or as integral part of the curriculum (Joy II & Garcia, 2000)). For all of these reasons I decided that it was necessary to gather teacher's opinions but keep them at the level of opinions and not beliefs, in the sense that teachers' responses were not studied against their teaching practices. How I approached this matter did not allow me to make strong claims regarding teachers' beliefs on the use of ICT with young learners. These data, however, provided rich insight related to the reasons for teachers' use of ICT during English lessons with young learners.

**Piloting the semi-structured interview.** In September 2005, I interviewed a teacher working in the Foundation Stage of a state school in the UK to pilot this instrument. The objective of the piloting was twofold: (1) review the interview instrument and (2) practice my skills as interviewer. In order to validate the instrument, I:

- Reviewed the construction of the questions to see if the participants' answers could provide the data that the study required;
- Reviewed the categories that I had selected from the literature to classify the data gathered through the interview (For a detailed explanation of why I chose to have a priori categories for the interview data in the context of a study using inductive analysis see Section 7.3 on p. 117);
- Gathered feedback on the instrument from the interviewee, namely clarity of questions and length of interview.

In order to practice my skills to conduct interviews for the purpose of collecting data, I transcribed the interviews and made observations regarding the tone I used during the interview and how I prompted the responses of my interviewee. Detailed below is the learning experience gathered from the pilot.

**Procedures.** The interview took place in the nursery classroom at the teacher's workplace after the children had gone home for the day. The way I conducted the interview was by reading the questions. The interview with Jane (pseudonym) was recorded after having obtained her consent. The conclusions reached after the pilot were related to the instrument and my own performance as interviewer.

**Regarding the questions asked during the interview.** In order to obtain feedback from the instrument itself, I asked Jane directly about the questions, whether she had found them difficult to understand and therefore answer, if they had been too long or covered too many ideas and led to any kind of confusion. Her response was positive and an interesting comment she made was: "It seems like I answered some of the questions before they were even asked." She referred to the fact that while answering some of the questions, her answer was related to a subsequent question. She noticed this because I was reading the questions and I would comment something such as: "Ok, we have covered this topic, so I'll go to the next question."

Something like the above happened when I asked interview questions 5 and 6:

5. Do you think ICT can be used to support language development? How?
6. How can ICT be used to support children from diverse cultural and language backgrounds?

When Jane was talking about language development, she chose to talk about children whose first language was not English, and therefore, mentioned that those children found the support from the computer programs highly useful. This seemed to me a positive feature of the interview questions because they prompted for the answers that I wanted to gather, and they did so naturally. If one answer did not provide sufficient data, the next question completed the information.

**Conclusions obtained from piloting the interview.** Data from the interview provided information to see that some topics can be explored in more depth, such as how ICT supports children in FL and L1 settings. Also, it showed how despite the difficulties related to working with ICT during daily activities, Jane found it useful and had ideas that with the proper equipment and technical support, she was willing to put into practice. The information that Jane provided was interesting enough to see the importance of exploring these topics deeper and with a larger number of teachers.

Given the fact that this is just one interview, the data generated from it was not used to reach any type of conclusions regarding the study's research questions. The major conclusion drawn with respect to data analysis was that the three categories that I had previously developed to organize the interview data proved to be useful for the initial stage of analysis.

I must recognize the fact that this interview was very friendly and easy to handle. Perhaps the fact that I had known Jane for a year by the time of the pilot influenced the way in which the interview developed. However, reflecting on the whole process and reviewing the interview data, I could see that I tended to over-sympathize with Jane by using expressions such as: "That's great" when Jane said something that corroborated in a way what I have read in books and articles about the topics being discussed. Because I was aware that this type of behaviour can develop when a researcher does not have too much experience in conducting interviews, I was able to "see" myself using such expressions while the interview was taking place and thus, at some point along the way, I stopped using those words or gesturing in response to Jane's answers and just nodded, limited myself to say OK or prompted for any other comments related to the question.

*Semi-participant and participant observations.* Observational methods are techniques that allow researchers to collect visual evidence of the natural actions performed by individuals at the settings where they are occurring (Creswell, 2003). Observations in this study provided data to inform research questions 3 and 4, on the topics of:

- Children's attitude towards learning English using ICT;
- Children's reactions towards the stories;
- The use of ICT-delivered stories and tasks in the English lesson.

Although it is true that it is possible to conduct interviews with young children, in this study the participants were too young to expect large answers from them whilst being interviewed. It would have been difficult to decide whether the children's answers represented what they thought or if their answers would have been somewhat influenced to what they thought I was expecting to hear. Because of the children's age, it was more advisable to conduct observations and gather field notes. Field notes from observations were taken during the whole class storytelling sessions and during/after the children worked individually in the ICT-tasks of the lesson. The aspects observed grouped in themes were (explained in more detail in Chapter 7 Section 7.2 on p. 114):

- Children's attitude towards ICT;
- Dynamics of the storytelling session with the computer as the delivery medium;

- Teacher's participation during the storytelling session;
- Attitude towards the stories selected (from the perspective of children's behaviours);
- Children's reaction towards the content of the story;
- Children's comprehension of the familiar and new stories;
- Use of L1 during the English lessons;
- Organization of lessons into tasks;
- Children's reactions towards working with clay, cut-outs and puppets during non-ICT tasks;
- How target vocabulary was introduced and practiced;
- Children's use of target vocabulary;
- Reaction to the songs;
- Story comprehension;
- Children's reactions during retelling of stories;
- Children's participation and reactions during drama tasks.

Recordings of the lessons, the individual ICT-tasks conducted with the children and teacher's comments after the lessons complemented the field notes taken during the observations.

*Rating Scale.* By means of a modified version of the "Sticky ladder rating scale" as described by Airey et al. (2002), children were asked to rate the tasks carried out during the English lessons as well as the stories viewed. The children were given cut-outs of pictures that represented the lesson tasks and asked to paste their pictures in a horizontal manner under a face that represented how much they liked the task. The modification consisted of asking the children to give their opinion by looking at pictures distributed horizontally. The stories however, followed the criteria from Airey and colleagues (2002) as the children were asked to paste pictures from the stories from least favourite to most favourite following a vertical bottom-up order. The main purpose of generating this data was to learn how children felt regarding the activities that took place in the classroom and where they participated. The importance of this tool was that it allowed me to learn children's opinions directly from them, increasing the value of the data and conclusions related to children's attitude towards the lessons based on ICT-delivered stories and TBL.

*Materials from activities.* Materials that resulted from the children's work during the English course were used to support field notes related to children's success with the sequencing-story tasks. Scanned images of these materials are shown in section 7.5 of Chapter 7 (p. 122.).

### 3.9 Validity and reliability

Validity as defined by Eisenhart and Howe (1992, p. 644) refers to the "trustworthiness of inferences drawn from data". It represents the degree of accuracy to which an account describes research phenomena (Hammersley, 1998). Validity is highly significant to the research process as it is the mechanism that will corroborate and legitimize the interpretations of the findings developed from the entire research process (Onwuegbuzie & Leech, 2005, p. 288).

Reliability is concerned with the research instruments and the replicability of scientific findings over time and groups of respondents (Cohen, Manion & Morrison, 2000). Independent researchers should be able to reach the same conclusions through the same methods in similar contexts (LeCompte & Goetz, 1982, p. 32).

In educational research, in the light of the quantitative-qualitative debate, some prefer to avoid the use of the terms "validity" and "reliability". In this study however, I chose to use them, agreeing with Niglas (2004) when she writes:

*However narrow or broad a meaning we adopt for the term "validity" in different research contexts, there is a common notion of correctness and truth value of the research as well as (trust)worthiness [reliability] of the results connected to it (Niglas, 2004, p. 13).*

The outcome drawn from a research study must sustain the rationalization provided by the researcher, thus, considerations of validity and reliability were planned in the present study in a number of ways.

*Validity of interpretations.* Three strategies were used to enhance the validity of interpretations drawn from the data.

- Corroboration via data comparisons. An overall strategy to corroborate data interpretations was the comparison of different data that enabled me to study the same phenomenon. Thus, data from interviews was compared to the data gathered from classroom observations. Similarly, data from children's responses in the

rating scale was compared against data from teachers' interviews and field notes. Interpretations regarding the success of the work scheme and the children's attitude towards learning English were then supported by data coming from three sources.

- Translations from interview data. In order to validate the translation of the interview data, excerpts from the transcribed interviews were sent to two Spanish-speaking external coders. As a "back-translation" strategy, I asked them to translate the excerpt back to Spanish. Afterwards, I compared their version of the excerpt with the original transcription from the interview. In this way, I was able to compare if both texts conveyed the same meaning. The comparison of the excerpts did not provide differences on the ideas expressed by the participant teachers during the interviews.
- Scoring of children's retellings. Three native Spanish-speaking researchers and myself scored the retellings independently. The transcribed retellings were sent to the reviewers without providing information on the dates of collection, enhancing the treatment of each retelling as an independent account (See section 7.6 in Chapter 7 on p. 125).

*Validity of data used for interpretations.* Field notes were written during the lesson and immediately after. In addition, the lesson was audio-recorded. Individual work with the children during which the retellings were collected was audio-recorded as well. The children were asked to respond individually to a survey on paper. This format allows the survey data to be tracked back to each child, validating their responses.

*Reliability.* A rich account of the research design and the processes followed during field work of the study is presented in Chapters 4 and 6. This description has the purpose of enhancing reliability since those chapters can be followed by other researchers to transfer the study to different contexts.

### 3.10 Summary

The most important points discussed in this chapter are as follows:

- The reasons why this study is of a qualitative nature and why it was set under the naturalistic paradigm were detailed. These reasons are:
  - Literacy, seen as a cultural and social influenced process, lends itself to qualitative methods and much can be learned about reading processes by studying children from a socio-cultural perspective (Reyes, 2006);

- Qualitative methods of study can produce valid and rich data from very young children when studying literacy development from the emergent literacy perspective;
  - In this project there is an intervention, but it does not have the characteristics of an experiment. There is no control group and the conclusions drawn from the intervention are interpreted from a developmental perspective, that is, looking at changes between each week of the intervention and not from a pre/post-intervention analysis.
- General concerns in relation to ethical considerations when doing research with young children that needed to be taken into account and that influenced the choice of methods used in this study were explained.
  - Finally, I presented the general structure of the methodology adopted in the study. Specific detail of the methodological procedures followed in each of the two phases of my research are presented in the following two chapters.

## Chapter 4

# Methodology I: The work scheme and the lessons

### 4.1 Overview

This chapter details the procedures followed during data collection for Phase I of the study. The goal of this phase was to collect the data aimed at answering research question 1 and part of question 4. A full response to the latter is reached after completion of the second phase of the study.

- Q1. What pedagogical and technical aspects are involved in the design and implementation of a work scheme based on ICT-enhanced stories to teach English to young children?
- Q4. What are the opinions of the teachers involved in the study about the integration of ICT in the preschool curriculum?

The activities that took place during this phase followed two different directions: the planning and design of the work scheme to teach English to young children, and the organization of the fieldwork. Planning and design involved different tasks, which included a review of the literature regarding storytelling and TBL approaches and my own training as a researcher. The organization of the fieldwork mainly consisted of finding the most suitable school to trial the scheme and making the required preparations to undertake the fieldwork. The two sets of activities occurred almost in parallel and took place between October 2005 and May 2006. The organization of the present chapter is as follows:

- Process followed during the development of the work scheme;
- Report on the pilot of the work scheme;
- Lessons created for implementation in Phase II;
- Fieldwork plan.

## 4.2 Designing the work scheme

I present in this section the steps followed in the planning, design and development of the work scheme. The activities that took place in this phase were:

- Reviewing materials available;
- Selecting the language teaching approach to use in the work scheme;
- Talking to practitioners about the use of stories with preschool-aged children.

### 4.2.1 Plan, design and development

The design of the work scheme started by conducting an analysis of the young learner curriculum in Spanish contexts, considering how the task-based approach could be used to address the needs that learners in the preschool age have, as discussed in Section 2.5 of Chapter 2.

As part of this analysis and with the purpose of studying the context and the language teaching scenario for the young learner age group, I conducted a search of English programmes which could include all the elements that my study brought together, that is, ICT-stories embedded within TBL directed towards very young learners. The search did not yield results regarding the existence of a programme that met the requirements of the study, and as a result, I made the decision to develop a work scheme based on the literature and the practical experience that I gained from the activities that followed the literature analysis (the stories however, as detailed later in Section 4.3, were selected from commercial material).

What I called practical experience occurred when I joined a literacy course at a Reception Year class in a school in the UK (currently part of the Foundation Stage). The course ran from September 2005 to May 2006 in weekly sessions of 3 hours in length. The course was directed to the parents of children enrolled in the Reception year of the school. It was initially provided by an organization external to the school and was

continued by the children's teacher. The purpose of being part of this course was to learn how young children worked with stories in school settings. I was also interested in learning from the teacher the kind of activities that could be designed using the story as a central theme. Finally, I wanted to learn what a successful outcome of a task was, in terms of the objectives set by the teacher and the children's performance. Throughout the duration of the literacy course, I kept a detailed account of the sessions in a research diary by taking notes right after each session. An analysis of these notes provided practical teaching ideas and a pedagogical basis for the design of the work scheme. I reported the case of one of the children from the literacy course that I was attending through an article which was published in a Spanish magazine for English teachers (Recio, 2005). This exercise provided me with feedback on the acceptance of my ideas in the academic and teachers' communities in the context of the research. Later, I also gave a presentation (TESS: Teachers of English to Spanish Speakers: Learning to Teach and Teaching to Learn. Department of English Philology, University of Jaén 2006) about the material from the course on the topic of how the TBL approach in combination with stories could be an appropriate methodology to teach young children. This opportunity provided an audience for the project and allowed me to see possible reactions related to the idea of the work scheme. Parenthetically, I found the reactions to be positive based on the conversations that I had with researchers who had worked with Spanish-English bilingual children and teachers who had worked in Spain with primary children.

In order to extend the knowledge that I was gaining from my participation in the literacy course, I visited the Reception Class of a second school. I found many similarities in the type of activities that the teachers were doing with the children in the Literacy Hour with stories and the activities from the course. I also found that this second school made extensive use of the computer in the classroom for the support of literacy activities. They kept a record of the times that a child worked on the computer, and made sure that every child worked on different activities at the computer at least once a week, with some of the children working two or three times a week. Also, the teachers in this class used stories found in various web sites made available by other Reception Year teachers to reinforce the stories that they used in the Literacy Hour. Finally, I conducted a pilot in another Reception class in a third school with a group of 4-year-old children, putting into practice one of the lessons designed by the teacher who had agreed to participate in my project.

#### 4.2.2 Test drives: piloting a lesson

Piloting of the work scheme took place on June 19, 2006. It involved 5 children attending a nursery class of a state school in the UK. The children's age ranged between 4 and

5 years. The trial lesson lasted 48 minutes. The ICT-story used during the pilot was "The Gingerbread Man" (*Inside Stories*, 2003). The children were familiar with the Gingerbread Man story but according to their teacher, not with the version that I showed to them. The lesson used for the pilot was planned in collaboration with one of the teachers who participated in the study. I chose the story of The Gingerbread Man because I wanted to see children's reactions with respect to the story's ending. Ethical considerations during the pilot followed those that guided the whole project and which have been previously detailed in Section 3.5 (p. 61).

All the children had a language background different from English as the school is located in an area highly populated by families of Pakistani origins. For this reason, the children were ESL students under special circumstances, as it "cannot be said [that they were] immersed outside school in a rich English-speaking culture" (Andrews, 2004, p. 94). This circumstance limits the amount of practice that children have with English outside the classroom and presents the controversy of whether this group should be considered ESL or EFL. However, for the sake of simplicity, I considered this context as ESL since English is "the language of the wider community and the official language at national level" (*ibid.* p. 94-95).

#### *Procedures*

##### *Plot of the story used: The Gingerbread Man*

The Gingerbread Man is a story with multiple variations. In all versions it is about a couple that bakes gingerbread shaped as a man from which the story takes its title. The Gingerbread Man character jumps out of the oven to avoid being eaten and is chased by different characters, including its makers. The chasing characters are usually animals, although in some versions there are also children, as was the case of the story that I used. As the Gingerbread Man escapes from its chasers, he repeats his well-known phrase: "Run, run as fast as you can. You can't catch me -I'm the Gingerbread Man!" showing its confidence on being faster than others and to some extent unbeatable. At the end of the story and in spite of the Gingerbread's speed and cleverness, the character is finally tricked by an astute fox and gets eaten.

#### *Layout*

I sat with the five children around a small table in their nursery classroom. I used a 12" monitor laptop to play the story software (*Inside Stories*, 2003) and a short song about the Gingerbread Man. I started telling the children about the things we were going to do. Because their teacher had told me that for them speaking English could be difficult, I tried to keep the pace slow.

### Story session

I started the lesson with a story-related activity by asking the children to sing “I like Gingerbread” song. The children did not see the lyrics of the song but I asked them to mimic the movements that I was doing as they sang along. After the singing task, the children watched the story once. My original idea was not to pause it, but because the children got really interested in the story and the pictures of this version of the Gingerbread Man, I had to pause the story after the narration of every scene. The children started to compare this version of the story with the previous versions that they had seen. I decided to ask them questions about the pictures and the actions during the pauses.

In order to see whether the interface of the software that I was using would engage the children and was friendly enough for the children to understand how to interact with it, I asked them what they thought they needed to do to make the story “move forward” after pausing it, and they could not tell me. I then showed them the arrow icon at the bottom of the screen (as shown in Figure 4.1) and demonstrated that by clicking that picture the story would start again. One of the boys sitting next to me understood this and every time the narration stopped and the arrow changed colour, indicating the ending of the scene, he would immediately say “Click again! And then click again.”

FIGURE 4.1: Image from the story of The Gingerbread Man



During the pilot session, I asked the children to do the following story-related tasks:

- Colour in a gingerbread man: After the story, I gave out a big gingerbread picture to the children so they could colour it in. As they coloured they talked about the story, the characters, the clothes of the Gingerbread Man, and their choice of colours for their picture.
- Paper-Puppets. Children also coloured in the characters of the story to make paper puppets. We used straws taped to the picture to let the children handle the puppet more freely.

- ICT-supported story-sequencing. I showed the children four pictures on the screen that were related to the story. These pictures had to be ordered in four empty squares labelled with the numbers 1 to 4. I explained to them that the pictures were from the story but that they were not in the right order. They had to put the pictures inside the empty squares to show how things had happened in the story. Each time a picture was dropped inside a square, the story software provided feedback on the action, indicating whether the choice was correct or not. The children were able to complete the task by telling me what picture to move, but I kept control of the mouse on the laptop all the time. Due to time constraints to complete the pilot lesson in one session, I did not give the children the opportunity to drag the pictures to the squares by themselves, as this would have increased the time to complete the task.
- Story-retelling. Using the puppets, I helped the children to retell the story as a group. I gave each of the children a role from the characters of the story and asked them to hold up the paper character that they would play when their turn to talk came. Then, I started telling the story but when it was the turn of a character to speak, I would go quiet and encourage the children to say what the character should be saying. The resulting story is shown in Figure 4.2.

All the names of the children who took part of the lessons piloted were changed to pseudonyms.

FIGURE 4.2: Retelling of the Gingerbread Man from pilot session

<b>A</b>	Now, you'll say "I want to make gingerbread" (imitating the lady's voice)
<b>Abbar</b>	I now make gingerbread!
<b>A</b>	And the gingerbread goes out of the oven and says ...
<b>Noor</b>	I want to get out of the oven! I want to get out of the oven
<b>A</b>	Very good. And the girl sees the gingerbread running and what does she say?
<b>Aasir</b>	I say No, no <i>shilop</i> there I re re mu eat you
<b>A</b>	Very good. And the dog? What does he say? when he sees the gingerbread
<b>Munir</b>	Eh, eh stop it. want to eat you
<b>A</b>	Very good. And the fox finally, what does he do?
<b>Kazi</b>	Eat him

Girl: Noor Boys: Abbar, Aasir, Munir, Kazi Researcher: A (Alejandra)

#### 4.2.3 Conclusions from pilot session that influenced fieldwork

Even though the context of the pilot differed from the context where the fieldwork of the project took place, the experience obtained provided insightful and useful information for

its organization. The children's reactions towards the tasks and materials helped me to see that the lessons that were prepared could work successfully with 4 year-old children in a school context. The reflections and decisions taken after the pilot are detailed below.

*Interface of the story software.* The children's successful understanding of the story interface was observed in the behaviour of the child who cued me when to click for the next "page" of the story when the arrow was highlighted after each of the episodes. Understanding was also evident when I asked the children a second time what I had to do to move through the story. Noor responded by saying "Out" while pointing at the icon of the arrow. I realized then that a symbol of an arrow is used in some signs to indicate "Exit", hence, Noor's association of the icon with the action of leaving or moving out of an episode to enter another made sense. Finally, children's interest in the animations and the differences between this story and other versions showed that the story had an appropriate design to raise the interest of children of the age required in the study.

*Retelling task.* I learned that the amount of language that children would produce was not extensive. However, they showed clear understanding of the task and the concept of retelling, since the children were able to follow the beginning, middle and end structure of the story, albeit with my support. In this respect, the retelling tasks planned for fieldwork could be more challenging, as I need the children to re-tell the stories by themselves. Knowing this in advance allowed me to think of possible support questions to give the children without leading them completely during the retelling.

*Motivation.* The children showed interest throughout the lesson and enjoyed all the tasks that had been prepared. This showed me that the tasks were balanced in terms of demand. It also showed that the length of the lesson was appropriate, since children were willing to work through all of the tasks.

On the whole, the lesson raised children's interest to the point that it kept one of the most active students in the nursery class busy and attentive during the time we worked on the lesson. When I arrived at the classroom and before starting the work, the teacher had expressed some concerns about this boy's participating in my lesson because of his usual behaviour. I however did not find any of the children distracted while working on the tasks. Although there could be many reasons for this behaviour, it was positive to learn that the lesson's structure, the story and the materials prepared worked very well with the children, including the most active one.

*Technical aspects.*

- **Screen size.** During the pilot, I used a 12" screen laptop and saw that a monitor of this dimension might be difficult to work with when more children are involved in the story session. On this occasion, the children were able to see the story properly, but with only five it was possible to sit all of them around a table in front of the laptop. In a larger class, this screen would be too small because the reflection of the light on the screen would not let everybody see clearly. Ideally I should work with a 17" screen.
- **Speakers.** It is necessary to have speakers for the computer.
- **Mouse.** It could be difficult to let children handle the mouse, but it might be worth trying as they showed interest in clicking the arrow on the screen used to advance the story by themselves.
- **Recording the children's interactions.** The voices recorded were very clear and easily recognizable and the recorder that I used seemed appropriate. I realized that the children lost interest in the recorder as soon as I told them what the device was and how it worked, so I was able to place it in the middle of the table.

### 4.3 Organization of the fieldwork

As has already been noted, Phase I of the project involved two different tasks that were carried out simultaneously. The second of these tasks was the organization and planning of the fieldwork of the study. This second task also involved a series of activities which are described below.

*Contacting an English teacher who had experience working with very young children and who would be willing to take part in the project.* In July 2005, I searched for a school in Spain which worked with very young children in an intensive English course. Through friends, I learned of a school that met the conditions required for the project and contacted Isabel (pseudonym), the teacher in charge of the instruction of English in this school. I established and maintained contact with Isabel via e-mail until we finally met in March 2006. By then, the work scheme was ready. In our meeting, Isabel and I discussed the details of the work scheme and I was able to answer all the questions she had regarding the study. I informed her of the need to conduct two interviews as part of the work to be done: the first interview at the time the English course was about to start and a second

one at the end of the course. I also informed her of the need to audiotape the English lessons and my role during the classes. Other details remained unclear as at that time she still did not know the number of children who would be enrolled on the course and how the school would handle consent of participating in the research project, including the parents on behalf of the children. However, these issues were still unclear even for the school, so I kept close contact with the head teachers of the school to keep myself informed on these matters. By establishing a relationship of trust and regular communication, I ensured that the plan for the work to be carried out during the summer remained. Isabel was also part of this communication so all the participants of the project were informed of the latest decisions or events.

*Story selection.* As the stories would be used without providing a translation, and the experience in English of the children where the stories would be used was limited, the selection of appropriate material was a vital aspect for the participant children and their teachers. In the selection of the stories I took into consideration aspects of content, including the language and the structure of the stories, and technical aspects related to the graphical interface, namely animations and sounds used to support the delivery of the stories.

For the analysis of content, specifically the structure of the story, I looked for stories that exploited repetition as support to meaning construction, based on the assumption that a repetition pattern would help children to understand the story plot. Hoey (2001) uses the story of Goldilocks and the Three Bears to describe the pattern of triads found in stories where the main character or characters experience similar events on three occasions. He concludes that this structure supports children's comprehension of stories in L1. Based on Hoey's work, Darnton (2001) studied structures of repetition found in stories. She used the structures to measure reading comprehension of a number of traditional stories that are well-used in school (The Three Little Pigs, The Very Hungry Caterpillar, and A Big Fat Pie). The results were positive in terms of increased comprehension when repetitive linguistic structures were present in the text of the story.

In order to reduce the pressure of not having a translation for the ICT-delivered stories that the children were working with during field work, I decided to start the English course using a familiar story. I had expected that this decision would provide the children with the opportunity of using intertextuality as a linguistic strategy to construct the meaning of the story. The children in this study were familiar with Goldilocks and the Three Bears, hence this became the first ICT-story in the field work. The Gingerbread Man and Three Billy Goats Gruff all

use a *three-moment* construction to develop the plot and so I selected them as the other two stories for my field work.

Length of story and the features included in the software were the technical aspects used in the selection of the stories. Since the story would be used in a 45-min. lesson, its length had to be in the range of 7 to 10 minutes. The storytelling activity alone would be taking a fourth of the lesson time, therefore that length was reasonable. Furthermore, this length was appropriate for the children, as I had previously experienced in the literacy course I attended, the results of the pilot and also with my daughter (aged 4 at the time I chose the stories), who provided very insightful feedback on the titles that I analyzed. The features of the story provided by the software had to include images that attracted the children's attention. The story had to include animations and highlighted text. In this respect, the works of de Jong and Bus (2003) and Turbill (2001) concerning evaluation of ICT-stories proved useful in the selection process with regard to quality of content and appropriateness of materials for the age of the participant children. I focused the assessment of the stories on software features that included highlighted text, story playing controls, simple interface, multimedia support to understanding and story length. The stories that met the criteria that I had established were three titles from the series *Inside Stories* (*Inside Stories*, 2003).

During our meeting in March I gave Isabel the ICT-delivered stories that would be used to design the English lessons. With all the information that we exchanged and the materials that I gave her, she started planning the lessons that were later used in June/July 2006.

*Communication.* I had virtual meetings with Isabel through MSN (Microsoft Messenger IRC software). During these meetings, we discussed the particular activities that the children would carry out. By this time, the activities were called tasks as the work scheme followed a communicative approach to language teaching.

*Lesson design.* By the third week of June 2006, Isabel and I had prepared 15 lessons which followed the work scheme guidelines (an extract of a lesson can be seen in Appendix B). These lessons respected the procedures that I had set in the work scheme, but working with Isabel also was a helpful and constructive experience. Our work continued to re-inform the work scheme on practical matters, such as the level of difficulty of the tasks that I had thought as viable for the work scheme, as for instance answering comprehension questions related to the story. Isabel provided insightful feedback for the work scheme from her experience of working with young children, the knowledge of the context where the implementation took place, and her own training as a professional. She had studied in Scotland for a

year and had practice with the use of stories and technology (although not with ICT-stories) in young children's classrooms.

*Number of trial lessons.* The primary question of this study is:

Q2. Can some form of change in children's skills associated with emergent literacy development, specifically in story grammar elements incorporated into children's story retellings, be observed throughout the lessons prepared with the work scheme?

Q2a. If yes, what type of development?

Q2b. What were the indicators of the observed development?

The procedure to gather the data aimed at answering this question was a retelling task supported by pictures displayed on the computer used during the lessons. I planned to carry out three retelling tasks per child that took place within the time of the lesson. I worked with one child while the others worked with their teacher on other story-related activities. In order to calculate the number of lessons required to collect the data for this question only, I decided on the length of the tasks first. Research on language analysis suggests that young children in retelling stories tasks of 3 to 5 minutes in length could produce language samples of 20 - 60 utterances per participant. This sample size is deemed to be appropriate for further linguistic analysis as suggested by Miller (undated) "[t]he figures comparing sample sizes of 25 to 150 utterances suggest that small samples can be informative if they are collected under consistent conditions [...]. Developing databases of children retelling the same story would provide insight into the development of vocabulary choice, specific referencing and story structure. These analyses do not require long samples, just samples that focus on the same content." Considering these figures, and adding up the approximate time that other tasks would take during fieldwork, I calculated the minimum number of English lessons that would be required to collect the data for the project, and came to a total of 12 lessons minimum. With this number of lessons, I would have enough time to collect three language samples per child and 12 whole-class ICT storytelling sessions. Each lesson would be constructed with the whole-class storytelling session, an individual computer task with the children, and a story-related task to be completed by the children with the teacher in 45 minute-length lessons.

*Length of trial.* The reasons to implement the lessons in an intensive English course are related to the aims of the project and the requirements of at least 12 lessons. An intensive English course would provide daily English lessons that would allow covering 12 lessons in 3 weeks. This to a certain extent could help to control the issue of children's exposure to other stories that would more likely take place on

a long-term basis and that according to the emergent literacy approach, is a base for the children's emergent literacy development. English classes throughout the school year take place once or twice a week, which would then require the fieldwork to take place throughout a period of 3 months. It is fair to believe that during this period children would be exposed to a variety of stories and perhaps English material, which would not allow me to establish a strong connection between the English lessons and the ICT-delivered stories to the results obtained from the data gathered in the study.

With the plan for fieldwork completed, Phase II of the project started in June 2006. The activities that took place during the five-week English course where fieldwork took place are described in Chapter 6 of this thesis.

#### 4.4 Summary

The main topics covered in this chapter are:

- Procedures, results and conclusions drawn from a pilot exercise;
- Description of how the design of fieldwork was planned;
- Initial contact and strategies followed in the organisation of work with the first participant teacher, Isabel;
- Preliminary steps taken for the selection of the research site.

## Chapter 5

# The work scheme: Data analysis and findings

### 5.1 Overview

This chapter details the steps that I followed in the analysis of the data generated in Phase I of this study, coming from the research diary where the procedures followed during the development of the work scheme detailed in Chapter 4 were described. The first part of the chapter discusses theoretical aspects of the analysis of qualitative data. The second presents the procedures followed during the analysis of the research diary and the findings from these data.

Interpretations and reflections from these findings, which are aimed at answering RQ1 and in some measure RQ4 of this thesis, are proposed in Chapter 10.

### 5.2 Theoretical underpinnings of the research diary, interviews and field notes data analysis

The main goal of the analysis stage in research studies is to make sense of a vast amount of data. Webster's dictionary defines analysis as a "detailed examination of anything complex made in order to understand its nature or to determine its essential features" (Gove & Webster, 1961, p. 77). Although this definition seems to be straightforward, the procedure that researchers have to follow in order to make sense of data is not. Different research approaches suggest the use of different analysis procedures according to the philosophical stances underlying each approach, making it difficult for researchers

TABLE 5.1: Analytic strategies of three qualitative approaches

Methodology	Analytic strategy
Grounded theory	Constant comparative analysis
Phenomenology	Phenomenological reduction; hermeneutic analysis
Ethnography	Representation, inscription, translation, and textualisation of culture in writing

Source: Tesch (1990); Thorne (2000)

to decide on the best way to conduct data analysis. Table 5.1 illustrates this notion by presenting the different analytic strategies that researchers follow according to the qualitative research approaches of grounded theory, phenomenology and ethnography. Salient similarities observed in different analytic strategies are highlighted below.

- Interpretational qualitative analysis generally occurs in two stages: data organization and data interpretation. In spite of the need to organize data before starting the process of theme identification and construction of hypotheses or “propositional statements” (Bogdan & Taylor, 1975, p. 79), the two stages are often “intellectually intertwined and happen simultaneously” (Tesch, 1990, p. 114). That is, the process of organising the data simultaneously raises ideas of what the data mean and how can they be related, hence one process cannot be separated from the other.
- It is clear that the analysis process is inductive and iterative (Lichtman, 2006; Thorne, 2000; Seidel, 1998; Lacey & Luff, 2001). This could be inconsistent in some studies that are guided by pre-existing thematic frameworks during data categorisation, which is the case of the interview data in this study. However, reasons that justify these choices would be provided by the purpose and nature of each study. In this study, the reasons I had to combine *a priori* and emergent thematic frameworks during coding of the interview data are detailed in section 7.3 of Chapter 7, where I describe the procedure followed during the analysis of the interviews.
- Analysis occurs in stages that usually overlap in a continuous “to-ing and fro-ing” (George, 2007, p. 56) from the whole set of data to the particular elements that the researcher wants to study within the set. Iterations of analysis to categorize and re-categorize data allow the researcher to familiarise herself with the data and enhance the process of identification of findings.

- The researcher familiarises herself with the data by organising and/or transcribing it.
- Data are coded or indexed in terms of an existing thematic framework or through the framework that emerges from the coding of the data.
- Data are organized in tables or charts to facilitate interpretation.
- Data are interpreted through the search for associations or patterns. The aim of this stage is the search for common occurrences in the data that will lead to explanations of the phenomena under study and for the themes that could have emerged from the data.

Based on the above considerations, the analysis strategy that I followed to explore data from the research diary, the field notes taken during classroom observations and the semi-structured interviews was mainly based on that suggested by Lacey and Luff (2001), but it was complemented with other strategies within each of the stages of their model. This approach to analysis allowed me to work with an analytical strategy that provided a systematic guide during the analysis stage of the study, facilitating the organisation of the data, the coding process, and the presentation and interpretation of findings. Lacey and Luff (*ibid.*) propose the use of a strategy known as Framework Analysis which occurs in five major steps: (1) Familiarisation (2) Identification of a thematic framework (3) Coding or indexing (4) Charting (5) Mapping and interpretation. In addition, it allows for the use of a priori and/or emerging themes during data coding, which was a strategy followed during the analysis of the data from interviews. Each of the analysis stages under this approach is explained below, while I detail the procedure followed in the analysis of the research diary. Data from the interviews and field notes were explored under the same analytical strategy as the one used in the diary. The procedures taken to explore these data are however detailed in the section of the thesis corresponding to Phase II of this study (Chapter 7), because data from interviews and field notes belong to that stage.

### 5.3 Analysis of the research diary

The analysis of the research diary was not based on pre-existing categories and therefore the themes that were used to label these data were identified as I was reading the text in search of patterns. The procedure followed during the analysis of these data is described below.

**Familiarisation.** The journal was typed and stored electronically; therefore the first step of analysis consisted only of reading and rereading the document that I produced during the months when I kept the journal.

At this stage, I also decided on a software programme that would be used to assist in the mechanical process of coding the data and producing reports of the coded transcriptions. My choice of software for this task was NVivo because of its reporting features. The use of NVivo (a Computer Assisted Qualitative Data Analysis software package) to categorize the transcription files facilitated the analysis process by taking over the task of manually keeping track of changes in themes and categorisation of data segments. The impact on the workload related to the creation or deletion of categories and subcategories of themes used in the categorisation of data is minimised through the features of this type of software application. Software analysis tools take up the hard work of keeping track of text labelling and report generation with texts that have been pigeonholed within a specific category. NVivo allows text to be labelled with any given category, to overlap categories (for example categorizing the same text under different coding themes), to create themes or to delete them without affecting the already categorised segments of text. The capabilities of NVivo helped me to engage in a creative process of understanding the text and working with it, enriching the analysis.

**Identification of a thematic framework.** After having read the document in its entirety, I went through it with the goal of finding salient themes or categories in the data. I wrote a list of recurrent and/or interesting themes. These categories arose from the data following the open code strategy as indicated by Glaser and Strauss (1967). The list of themes that resulted from the first iteration was:

1. Concepts
2. Objectives
3. Brainstorming
4. Communications with participant teacher
5. Methodological notes
6. Observational notes
7. Theoretical notes
8. Scratch notes
9. Results

**Coding or Indexing.** Using NVivo features, I labelled segments of the document in terms of the preliminary categorization. These categories were not mutually exclusive, so segments of text that could correspond to more than one category were multi-labelled. During this stage, I also made notes that complemented the coding process as they provided reasons why the category was created or why the segments were categorized under determined themes. This stage became complex and tangled, however, the coded data that resulted from it were useful at the moment of interpreting the results coming from the diary.

After the first categorization iteration and when I was not able to identify new categories, I conducted a validity exercise with two external coders who looked at random samples of data from the diary and categorised them following the thematic framework listed above. Since these data did not produce categorisation disagreements among the coders, I decided that the themes were comprehensive and data had been categorised in a logical manner, that is, in accordance with the thematic framework that had emerged from the diary.

At this point I decided to refine the themes with the purpose of presenting the findings in a way that could facilitate their theoretical interpretations and representations. Therefore, I conducted a second categorisation iteration through a reduction of the themes that were related through patterns found in the data. This second categorisation iteration was useful in two important ways in relation to analysing qualitative data. First, it allowed me to re-familiarise myself with the data and enhance the interpretations that I drew from them. Second, it simplified the presentation of the findings, which in my view is relevant since findings are effective as long as they are clear. The final thematic framework resulted in the following themes:

1. Concepts (integrated theoretical notes)
2. Methodological notes (integrated objectives)
3. Reflections on procedures followed (integrated brainstorming; communications with participant teacher; scratch notes; observational notes)
4. Preliminary conclusions before implementation.

#### **5.4 Charting: results directed towards answering research questions 1 and 4**

The fourth stage of analysis under the approach I chose consists of the display of findings that resulted from the analysis of the data. The stage is called "Charting" as it presents

the findings in tables that can be organised by themes or participants' cases. These tables are built upon the thematic framework, the research questions or personal considerations of the ways in which the study can best be presented (Lacey & Luff, 2001, p. 182).

Data from the research diary were used to answer research questions 1 and 4. For question 4, the findings from the interviews complemented the findings from the diary (Section 7.3 p. 117), providing a more far-reaching response for this question. In order to organise the presentation of the findings charts, I bring the research questions in here.

*RQ1.* What pedagogical and technical aspects are involved in the design and implementation of a work scheme based on ICT-enhanced stories to teach English to young children?

*RQ4.* What are the opinions of the teachers involved in the study about the integration of ICT in the preschool curriculum?

*Description of how the findings tables work.* An important feature of the findings tables is that data is not presented directly from the data sources, namely extracts from transcriptions. Instead, representative phrases are used to summarise the findings that stemmed from the data. The phrases reflect the overall idea that the participants reported in relation to each theme. The tables are afterwards explained using data sources that support the summary of findings.

In this section, sources of data excerpts are identified by the following nomenclature: Data source: Date, so for instance if a quote is labelled MSN:29.03.06 it means that the source was Microsoft Instant messaging service (MSN) from the 29th of March 2006 (from the "virtual" meetings that I maintained with Isabel). NVi represents the source as NVivo reports with its corresponding reference within the report (from the analysis of the research diary) and Em@ identifies the source as e-mail messages.

For the data coming from the diary, I chose to create the charts using the final thematic framework that resulted during the analysis of these data and across participants (in this stage of the research, Isabel and myself). In the tables I used a representative phrase of the findings for each theme. The phrases have the purpose of pre-viewing the most relevant finding under each category. This stage was the first step towards responding the research questions based on evidence coming from the data.

*Personal learning as researcher during the design of the work scheme.* The first entries in the diary recorded the concepts that I investigated to develop the work scheme (shown in Table 5.2 on p. 94). The most salient concepts in the diary were related to definitions of language teaching methods and requirements of design (Brown, 1995; Graves, 2000; Richards & Rodgers, 2001). The revision of the concepts had the purpose

TABLE 5.2: Chart 1: Research Diary. Concepts explored during work scheme development

	Pedagogical	Methodological for the EFL area	Research re- lated	Technical
Researcher	Learning about the constituents of a language method	Learning about storytelling and TBL	Learning about research diaries as data collection instruments	Learning about ICT-stories and requirements for their use in a classroom with young children

of learning the elements that had to be included in the work scheme (later sent to the participant teacher). Exploring the literature about storytelling and TBL led me to substantiate their use with young learners. In order to enhance the usefulness of the data from the diary, I learned about developing a research diary so it could be used as instrument or strategy for data collection (Newbury, 2001; Mellor, 2001).

Regarding ICT-stories, I explored the aspects that teachers looked at when working with this type of material in classroom settings. Software aspects found by teachers to be the required included stimulating animations, uncluttered interfaces, simple navigations, suitability for whole class teaching, friendliness for installation and access, vocabulary appropriateness to the age range of the children (users) and text structure. Using those aspects, I reviewed seven ICT-stories which included four titles from the InsideStories series (Goldilocks and the Three Bears, The Gingerbread Man, Three Little Pigs and Three Billy Goats Gruff) (*Inside Stories*, 2003) (See Section 4.3), Lulu's Enchanted Book (Victor-Pujebet, 1995), Kiyeko and the Lost Night (Jacquin & Testamarck, 1995) and Payuta and the Ice God (Desarnaud & Raviart, 1996). I also discussed the InsideStories titles with a nursery teacher and found the material appropriate for the research. At this stage I also decided to use stories developed by one publisher with the purpose of maintaining consistency across stories.

*Creating the lessons based on the work scheme.* During the time that Isabel and I worked in the planning of the lessons based on the guidelines that I provided, different aspects connected to how language approaches can be put into practice were frequently reiterated. Tables 5.3 (p. 95) and 5.4 (p. 96) present the aspects of the lesson that we discussed, which included (1) the opinions of Isabel on teaching vocabulary (2) on maintaining a low level of difficulty in the lesson tasks by controlling the games that the children could play on the computer and their exposure to text and (3) the importance

TABLE 5.3: Research Diary: planning the work scheme lessons

	Defining course objectives	Regarding the tasks for the work scheme lessons	On the use of written text
Isabel	Course objectives shaped by teacher's experience	Emphasis on the explicit teaching of target vocabulary; The role of repetition [language and tasks] in lesson for preschoolers; Level of difficulty of ICT-tasks; Children's interest in the English lesson	Reluctance to expose children to written text while working with ICT-stories
Researcher	Defining objectives: back and forth from theory to practice	Appropriateness and diversity of lesson's materials; Emphasis on the use of unmodified materials (written for native speakers)	Keen on allowing children to work with written text

of planning tasks of short length in order to maintain the children's interest during the lesson.

(1) Isabel believed that the teaching of target vocabulary needs audio support, and that is how she saw the audio in the ICT-story, as supportive. Isabel commented that although she was aware that the TBL approach "does not promote the use of separate vocabulary tasks" (her words), she believed that the age of the children required it. She talked about using pre-tasks and while-listening activities, such as story character presentation with puppets, gestures and miming while listening to the songs. She believed that starting a lesson with stories could lead to children losing interest and perhaps becoming bored. Stories were for her a "wonderful idea" to make young children experience English. However, for her, story use needs to be supported by songs, puppets and games. Isabel thought that it was important to use Spanish in the introduction of the story vocabulary. She emphasised that children should not be exposed to written text while working with ICT-stories and if so, text must be at "word" and not "phrase" level MSN:29.03.06 Em@:11.4.06 Em@:31.5.06. From the review that I conducted on TBL, I concluded that explicit teaching of vocabulary in pre-tasks (previous the story-task) is not required but could take place, specially if the learners required it (Edwards & Willis, 2005), so I let Isabel know this. In the guidelines provided to Isabel for the preparation of the lessons a variety of tasks which could suit young learners were offered (See p. 38). They included children retelling a story, drawing a picture, making puppets, role-playing, recognising vocabulary and writing sentences to describe pictures.

(2) Isabel judged the level of difficulty of the tasks contained in the software related to the story to be challenging for the children in this EFL context because of their level of language development, both in Spanish and English. Isabel thought that skills

TABLE 5.4: Research Diary: language methods in practice through the work scheme lessons

	TBL	Storytelling
Isabel	Adapting the TBL approach	Sequencing tasks; Complementing ICT-stories; Language of instruction in vocabulary tasks; Comprehension questions tasks via oral and visual tasks

required to handle the mouse could be too demanding for the children and that the physical challenge added to a high cognitive demand task could get to be demotivating. She thought that children might not even be able to understand the purpose of the task. She did not believe that children should work independently and that the number of teachers working with the children in all types of tasks is relevant because of the children's age. She agreed to setting up a course or lesson project because that could help to raise children's interest. Her experience was always what she used as the basis to plan the course, like for instance, her experience with using songs and nursery rhymes with children.

(3) A significant aspect for Isabel when planning the lessons was time. She insisted on taking into consideration the time that children could spend on a task, which according to her experience could not be prolonged to more than ten minutes per task. In my experience, timing during lesson planning is an intuitive skill. However, Isabel's concerns led me to wonder whether a "minimum" time for children to work on any given task to consider it successful should be set. In the working definition of task suggested in Chapter 2 (See p. 37) a communicative task for the young learner includes the outcome and the process required to reach the intended outcome, but not the time that the learner should spend on it. Perhaps the minimum or maximum time that young learners should spend on a single task is a consideration when planning the use of TBL with young learners.

A component from the stories selected that Isabel believed to be important was the pattern of repetition that some stories have. Following the notion of repetition in the content of the stories, in one of our conversations we evaluated the use of the story of *The Three Little Pigs* which also is also structured in a three-moment repetition pattern, but later decided against its use because the children were familiar with it. Isabel approved the three stories required for the course (*Goldilocks*, *The Gingerbread Man* and *Three Billy Goats Gruff*) because all of them were based on the three-moment pattern of events.

TABLE 5.5: Research Diary: reflections on procedures followed during lesson design

	Setting up objectives	Reviewing software	Keeping <i>virtual</i> meetings
Isabel	Based on previous experience of working with young children; <i>Holistic</i> approach toward English teaching	Appropriateness of materials	Useful to keep work going and necessary
Researcher	Based on pre-school curriculum and the contents of the stories	Software used in other contexts; Experience during the pilot	Constant contact with the participants eased the organisation of the field work

Isabel had some experience working with pre-school aged children in Scotland and she had used ICT in her lessons with older students in Spain. In her view, the guidelines that I provided her suggested ways of working with young children that she had not experienced before in the teaching context of Spain. This resulted in her expressing a degree of uncertainty towards the work with the ICT-stories. She did not know what to expect and was constantly discussing the importance of controlling the difficulty level of the lesson tasks. She commented on the complexity to follow “someone else’s method of work” MSN:6.4.06. Planning lessons with stories and technology required knowledge of the context where they were to be used because I was willing to let the children work individually on the computer given my own teaching experience. I offered Isabel continuous support on the planning of the lessons, the understanding of the work scheme and of the research project. I shared my ideas with Isabel about letting the children interact with or be exposed to written text and put an emphasis on the use of ICT tasks as provided by the software of the story, based on having seen children with language backgrounds other than English working successfully with them.

*Reflections surrounding the process of lesson design.* Considerations regarding lesson design which I considered to be independent of the language teaching approaches used in the lesson are summarised in Table 5.5. These were as follow: (1) Isabel based the lessons on her work experience in the research context (2) She evaluated the materials for the lesson from the perspective of “appropriateness” for the young language learner (3) Some advantages of using ICT to maintain contact with the participants of a research study.

(1) Isabel expressed her interest in organising the lessons using a holistic approach toward English teaching. She used the term “holistic” to refer to a language lesson where children would practice English beyond the lesson, for example, asking children to play the songs from the story during playtime.

The importance of offering stimulating yet highly structured lessons was an aspect that Isabel emphasised during the process of lesson design. She wanted to offer the children opportunities to learn and practice English while attending to their developmental needs. Hence she wanted the lesson plans to be flexible (adaptable according to children's responses), highly dynamic (including several activities where children had to walk, run, colour or sing) and structured in terms of the objectives that the lesson and individual tasks had. Isabel wanted the lesson to occur in short-length tasks which could be sequenced according to complexity. Looking at the types of language lessons that can be designed according to different underlying methodological principles and the characteristics of task-based syllabi, it is possible to match Isabel's notions of a lesson for young learners with a task-based syllabus (Gilabert, 2004) in four ways. First, based on experience, she identified the target tasks that very young children would need to perform in English, for instance singing, role-playing, telling stories, drawing and making story characters. Secondly, with the aim of controlling the cognitive demands that tasks imposed on the children, she adjusted them according to children's language proficiency and motor skills. This was evident in her insistence on taking into consideration the children's age and the type of tasks they would be able to complete on the computer, given their mouse-handling skills on the one hand and their language development on the other (the decision of not planning tasks where children would work with text was derived from this idea). Thirdly, she arranged the task sequence according to increasing complexity. Her lessons started with a vocabulary focused task and moved to the song and then the story. Fourthly, she kept a complete focus on meaning and, thus, there were no tasks that presented notions of English grammar.

I was able to keep the planning and contents of the lessons close to the research aims by continuously going back to the guidelines of the work scheme. That is, Isabel designed the lesson guided by her work experience at a state nursery in the UK, in Spain and in the school context, but she understood the importance of keeping certain aspects of the lesson unchanged, such as playing the story without providing translations and allowing time for the children to work individually with me on the computer.

(2) Isabel also took part in the choice of the stories used, as she asked to look at the software before approving them for the course. Based on her knowledge of the research context, she found the software that I had selected and the choice of stories appropriate for the children, and hence she agreed to use them in the lessons without translations or modifications.

(3) An important aspect of the implementation strategy was the constant contact with Isabel during the months previous to the implementation of the lessons. Her close involvement in the project and the time and effort that she gave to the research before

the summer course were an incentive to overcome the problems that arose during the field work. Our virtual meetings (held via MSN) and exchange of e-mails supported the process of lesson design, adding value to my research through the input and participation of Isabel.

*Before implementation.* The last category of data from the research diary which included those aspects that I considered as learning experiences and that were important to keep in mind before implementation, namely (1) the importance of using a variety of tasks in the lesson (2) the limited use of the material contained in the story software and (3) the differences in teaching styles of two people using the same materials.

(1) For Isabel, one of the considerations that was obligatory in the lessons was the use of a wide range of games. She said that there had to be room for improvisation because with young children lessons do not always go as planned. Tasks had to be of a low language complexity and the stories were going to be used with previous teaching of vocabulary and after completing other introductory tasks such as songs or vocabulary related games.

(2) Isabel decided not to use the games contained in the story software to minimise the children's interaction with written text. It can be said that she was inclined to plan lessons based on objectives but with a strong drive for providing the children with opportunities to have fun. A positive outcome for my research with regards to how Isabel decided to use the stories was that she agreed to play them as they were delivered by the software, without translating the story at the end or after each episode.

(3) During the process of lesson design I realised the numerous ways in which the same teaching material may be exploited. From my experience of teaching English to young learners, I am inclined to use materials that contain written text. Children's curiosity creates opportunities for learning concepts of language through games and without formal instruction. Isabel on the other hand thought that the children of the age of the participants should work most of the time with oral input and their work on paper be limited to drawing or cutting and pasting. We both agreed that the children needed to learn while having fun, moving, dancing or singing, but we would achieve this through different types of tasks.

For me as a researcher, I found that having worked with the participant teacher during the lesson planning allowed me to familiarise myself with the research context through her experiences. The link between the school and the researcher was kept thanks in part to Isabel's involvement and her enthusiasm regarding the study. Furthermore,

knowing the lessons in advance prepared me for fieldwork, allowing me to have an idea of what I needed to observe in the lessons.

**Mapping** The final stage of analysis under the framework approach is referred to as mapping. It consists of formulating creative explanations and interpretations for the associations and or patterns found in the data. Explanations of the findings might be discussed with the support of diagrams or maps that provide a graphical explanation for those findings. These maps ultimately support the response that the results of the study provide for the research questions. For the purpose of organisation, a discussion of the findings obtained throughout this study via all collection methods is presented in Chapter 10, thus, the present chapter ends with a summary of the data analysis from the research diary.

In order to preview the discussion of the findings, I shall say at first glance that creating a work scheme as this project has described it is pedagogically and technically possible. The teacher involved in this project found the work scheme to be useful since it provided her with an informed and systematic basis for the development of English lessons for young children. In general, she judged the participation in the project to be a valuable experience for her practice and, as it is discussed in Chapter 10, she was surprised to see how the children were able to participate in the lessons prepared using the work scheme guidelines even though during the planning she had thought them too challenging. Implementing the work scheme presented an altogether different challenge, since this task involved the participation of not only the teacher who prepared the language lessons, but also the children and head teacher. The challenges discussed by the teacher are further analyzed in following chapters, where I report the results obtained after the implementation of the work scheme lessons.

## 5.5 Summary

Chapter 5 has covered the analysis of the research diary and the findings that resulted from it. The most important findings from this data source are:

- Informing the creation of a work scheme to teach English to young learners required from me as a researcher to explore EFL approaches from a theoretical perspective. This investigation led me to form high expectations in terms of what theory says learners are able to do. The stage where theory was confronted with practice (during the time when Isabel prepared the lessons based on the guidelines that I provided and the lessons were implemented) was vital for me as researcher (to make theory practical) and highly useful for the practicing teacher. since this

confrontation helped her to open up to learning possibilities during the lesson after having seen the children's response to the materials and tasks.

- During development of the lessons and the selection of the materials to use, Isabel felt that some of the story-related tasks were too challenging for the children.
- Exposing young children to written text was viewed as a potentially negative experience for the children because they were not "ready" to work with the written text;
- The use of ICT to support the teaching of English was considered to be positive. However, according to Isabel, allowing children to work alone with computers is an idea that teachers might not accept easily.
- TBL methodology was adapted by Isabel to accommodate explicit teaching of target vocabulary selected from the story.
- The storytelling approach to teaching English was always evaluated as a very useful and extremely appropriate method to teach young children

The next chapter presents the methodology followed in the implementation of the lessons that Isabel prepared based on the work scheme. These procedures constituted Phase II of this project.

## Chapter 6

# Methodology II: Fieldwork

### 6.1 Overview

This chapter describes the methods used and the procedures followed during Phase II of the study to generate data aimed at answering research questions Q2 and Q3 and complement the answer to question Q4 which was partially answered by data gathered in Phase I.

- Q2. Can some form of change in children's skills associated with emergent literacy development, specifically in story grammar elements incorporated into children's story retellings, be observed throughout and/or after the lessons prepared with the work scheme?
- Q2a. If yes, what type of development?
- Q2b. What were the indicators of the observed development?
- Q3. What is the attitude of the children towards learning English using ICT-enhanced stories integrated in the work scheme? About the English course at all?
- Q4. What are the opinions of the teachers involved in the study about the integration of ICT in the preschool curriculum?

The activities in this phase included the implementation of the lessons prepared under the work scheme described in Chapter 4, as well as the procedures followed to gather story retellings from the children participating in the study during the English course.

Since the selection of the school where fieldwork of this study took place was agreed well before the actual fieldwork started, the description of this activity could then have been included in Chapter 4. However, considering that I did not have access to the school until the course started, I was able to describe it only at a later stage of the study and not while I was working with Isabel. For these reasons, I decided to present in this chapter all of the activities that belong to what I refer to as *Implementation of the work scheme* which covers the trial of the lessons prepared in Phase I of the study and the related required activities for this trial to take place. Accordingly, the descriptions of the research context, the school where fieldwork took place and the participants' profile are included in this chapter as part of the effort of implementing the lesson.

The organization of the present chapter is as follows:

- Implementation of work scheme lessons
- Procedures to conduct the field work
- Summary of data collected.

## 6.2 Implementation of the work scheme

With respect to the place where fieldwork took place, it must be noted that the arguments I have made so far in connection with the use of ICT-enhanced stories and preschool aged children could apply to language contexts other than Spanish speaking children learning English. Contexts where the type of ICT-delivered stories similar to the ones used in this study are employed to teach preschool children a foreign or second language would have suited this research. I decided to conduct the study in Spain because of my language background, my experience of teaching English as a foreign language with Spanish-speaking children and because organizing and conducting the fieldwork in the chosen site presented advantages to the development of the study, as I was able to keep close contact with the participant teacher during eight months previous the fieldwork started (traveling to Spain three times before commencing field work).

### 6.2.1 Outer context: the Andalusian region of Spain

A review of the context where the study was going to take place was started when the decision of the site was reached, as was explained in Methodology I. Following educational reforms started by the Spanish government in 1990, the preschool curriculum has been modified making the learning of a foreign language compulsory. In the Andalusian

province, these changes are reflected in the Plan de Fomento del Plurilinguismo (Plurilingualism Promotion Plan: A language policy for Andalusian society, 2005), a government initiative aimed at promoting the teaching of foreign languages through a series of actions which include the creation of 400 bilingual centres in the region. Three-year-old children are expected to receive English instruction in state schools as part of the official infant curriculum.

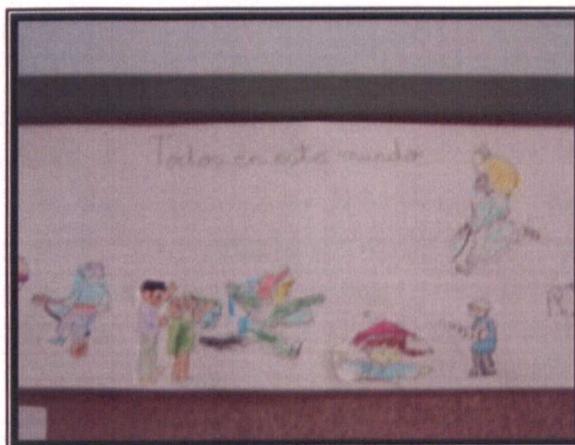
### 6.2.2 Inner context: the School

Having completed the design of the study, the school was chosen on the basis of whether it offered English lessons intensively (4 or 5 hours per week) and was willing to let me interview teachers and the headteacher, observe and work with the children during lessons and playtime and change the English programme prepared for the summer course. Through friends I learned about a school located in the Andalusia region of Spain that would be suitable for the research. The school offered English lessons to 3-4 year old children in daily sessions of 45 min. in length within the context of a summer course and fitted the requirements of the study, specifically, the minimum age of the children accepted to receive English lessons, the frequency of the lessons, the interest of the participant teachers and headteacher, the course length and the possibility to change the English programme and work with the children. This non-probabilistic selection strategy of the research site has been described by Patton (1990) as purposive sampling, since I first defined the requirements of the research site and then selected the one that fitted the prerequisites.

The selected school offered a course to children of different ages and accepted children as young as 3 years old. The summer course was programmed to last five weeks and parents could register their children in any available week. However, most of the children were registered for the whole duration of the summer course. This was a non-compulsory course offered outside school terms, and was highly useful to working parents. Children were grouped according to age and received a variety of lessons throughout the day. These lessons included Theatre (Drama), Water-games, English and Storytelling. During the Theatre lessons children would rehearse a short play and perform it on Fridays to parents and teachers. Water-games included balloon-fights and getting wet with a water-hose. The children would wear a bathing suit and run around the playground while their teachers sprinkled water on them. Children enjoyed this activity greatly as it helped them to deal with the summer temperatures, which would range between 38-45 degrees Celsius at the time of the study. The storytelling session lasted 45 minutes during which the children were told a story and then asked to do some work related to it. Figure 6.1 shows a poster that the children completed after having heard a story about the

different peoples of the world. The purpose of my attending this session was to observe how children worked with stories, the activities that they completed, their reactions and behaviour during the sessions.

FIGURE 6.1: Todos en este mundo. All of us in this world



The school does not follow a specific English curriculum. Therefore, in order to plan the lessons for this subject, the English teacher is asked to present a proposal of the work to be done during the course. The school then approves the programme and makes changes if the headteacher considers it necessary -if for instance certain activities require parents' consent the organizers might decide to actually ask for the consent or simply eliminate the activity. The capacity that the teachers have to suggest the English programme constituted one of the reasons why this school was appropriate for my study. The teachers' freedom to follow their own programme allowed me to work with the teacher and make adjustments as it suited the study. English lessons for the summer of 2006 had been planned to take place twice a week, on Tuesdays and Thursdays. The remaining three days the children would have Storytelling sessions. English classes were scheduled to take place at 9:00 a.m. and Storytelling at 11:00 and the lessons were followed by playtime and water-games respectively. This schedule was modified in the case of the 3-4 year old children to accommodate the course that had been prepared in collaboration with Isabel. The children enrolled on the course came from different schools and so their previous experiences with English lessons varied. This meant that at the time of the study they might have had previous English lessons or not. Isabel agreed on the fact that this particular issue did not pose any problems and that more experienced children could offer support to other children during the sessions.

During the first two weeks of the summer course, the children received English and Storytelling lessons as had been originally organised by the school. The last three weeks

of the course, the schedule changed in order to increase the number of English lessons and meet the research objectives. This change was not problematic as I had arranged to conduct the research in this school a year before and they had kindly accepted to make any changes as required by the study should the need arise. On a personal note, I believe that the communication that I kept with Isabel created a relationship that helped to ensure that the research work would be carried out -giving and taking the adjustments that took place because of essentially uncontrollable circumstances. One of these circumstances was the fact that Isabel, who had planned the lessons and was originally teaching them, had to withdraw for personal reasons after the first week of implementation. Her role in the research changed as well and so, during the third week of the course, she acted as an observer and as link between the new teacher and my research. Teresa (pseudonym) was the teacher who taught the course and with Isabel's help, the transition between Teresa's original plan for the English lessons and those prepared by Isabel was not problematic. The major implications of this change were observed on the lesson plans and task sequence. This is discussed in more detail in section 10.5 of Chapter 10.

### 6.2.3 The participants

#### The Children

On average, 8 children attended all of the lessons. Table 6.1 shows the list of the children who participated in the study. In order to ensure confidentiality, their names were changed to pseudonyms. The age of the children at the time of data collection and salient characteristics of children's personalities which I observed and corroborated with the teachers are also shown.

#### The Teachers

##### Isabel

*Role in the project and work experience.* The first-contact teacher and the one with whom the workscheme lessons were planned. She had experience working with preschool and primary level children.

*Contribution to the project.* Preparation of the work scheme lessons. I interviewed her in June before the implementation of the work scheme. Two reflection sessions of one hour each after the first two implementation lessons of the course.

##### Teresa

TABLE 6.1: Participant children

Participant child	Age (months and years)	Annotations on children's personality. Source: field notes
Elena	43mo - 3yrs 7mo	Outgoing. Showed interest in all the computer tasks from the first trial lesson. She showed great interest in the story-related games that were part of the story software. She completed planned and unplanned ICT-tasks well. She showed signs of understanding oral feedback provided by the computer during the completion of one of the ICT-tasks.
Diego	47 - 3yrs 11mo	Quiet. Did not show too much interest in the stories or the computer.
Pablo	59 - 4yrs 11mo	Highly active. Continuously had to be called to order. Showed a lot of interest in the computer and the stories from the first day I went into the classroom.
Ana	55 - 4yrs 7mo	Shy. Always wanted to be with Isolda, she could go off task easily. Once her attention was on any given task, she showed interest and responded well. Language skills: still developing Spanish sounds.
Manuel	65 - 5yrs 5mo	Quiet and shy. He understood instructions easily and completed tasks, but he was not always willing to participate.
Enrique	51 - 4yrs 3mo	Very participative. Quiet but always interested in the tasks. He wanted to work on the computer every day. Loved the Gingerbread Man story.
Isolda	59 - 4yrs 11mo	Active. Participative. Open. Showed interest in the ICT-tasks. Told me she did not like English in the first lesson that I observed.
Angel	51 - 4yrs 3mo	Highly active. Angel showed interest but was not always keen on participating in the retelling task. At times, Angel's behaviour was disruptive to the lesson.

*Role in the project and work experience.* Teacher in charge of the English course. At the time of the study, Teresa had almost no experience working with very young children though she had experience in the Granja Escuela school programme of Spain. This programme is a project where children of all school levels can gain hands-on experience on topics related to the curriculum, such as farm projects.

*Contribution to the project.* Teresa was in charge of teaching the lessons. I interviewed her twice, the first time in June before the implementation of the work scheme and the second time in July at the end of the course. Personal communications after lessons to reflect on the tasks conducted during the lesson, the story, the children, and so forth.

**Cristina**

*Role in the project.* Headteacher of the school. She authorized my work in the school and was the contact with the parents throughout the course. Provided consent on behalf of the parents after having informed them of the project during a parents' meeting that took place before the course started.

#### 6.2.4 Understanding the research context: a parents' survey

In order to further understand the research context, a small-scale survey of the parents was conducted. Data from the survey were used to gain knowledge of the parents' position regarding the use of ICT or the teaching of English with and to very young children which would help to identify factors that might influence the success or failure of the work scheme being trialled (See Appendix F for a summary of the results of the survey).

### 6.3 Structure of the work scheme lessons

A typical lesson was structured in 4 different stages of different duration. Each lesson included generally:

- Whole class storytelling: 10 min.;
- Whole class vocabulary activity (colouring, games, paper puppets): 8 - 10 min.;
- Song or game related to the story: 5 min.;
- Small group or whole class manual activity in parallel to a computer task with one or two children at a time: 20 - 25 min.;

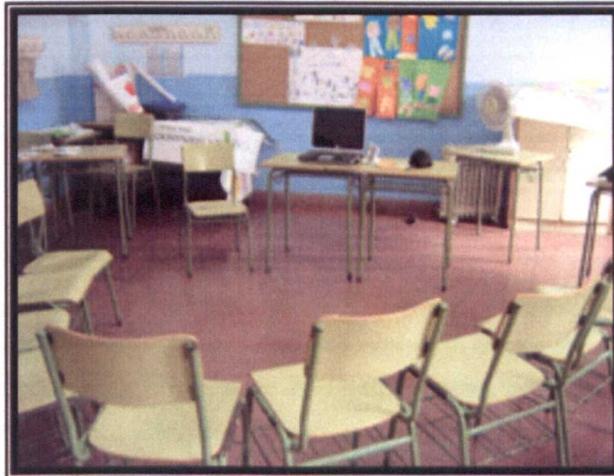
The language of instruction during the lessons was for the most part Spanish, with the exception of the times when Teresa used English to refer to selected vocabulary from the stories. The target vocabulary to teach was selected by Isabel because she considered that the children in this context need a base-vocabulary to build upon. That is, she thought that even though explicit teaching of vocabulary is not part of the communicative approach to language teaching, in this case it was important to adapt the method for the lesson because of the age of the learners, the context where they are learning English and the children's lack of a vocabulary base which she thought was necessary to start the lessons to scaffold children's understanding of the stories and as a base upon which a vocabulary repertoire may be built.

During the twelve implementation lessons observed, data from the tasks aimed at answering the primary question of this project were the whole-class telling of the story and the computer tasks. These activities were audio recorded and field notes were taken at the time of the lesson and after it. Some of these post-lesson observations/reflections included personal communications with Teresa.

### 6.3.1 ICT-task: whole-class storytelling

In the whole class stage of the lesson, the children sat in a semi-circle around two small desks where the computer and speakers were set (See Figure 6.2). This activity consisted of having the children watch the story from beginning to end. After the story, the children would respond to some comprehension questions related to the story. I first conducted the questions for Goldilocks but Teresa did the ones for the other two stories, *The Gingerbread Man* and *Three Billy Goats Gruff*. The conversations that took place before, during, and after the story were audio taped and field notes were taken. This activity was the starting task and children were told to pay attention every day because they would later do things related to the story: games, puppets, answer questions, pictures and/or working on the computer with me.

FIGURE 6.2: Classroom layout for whole-class storytelling activity

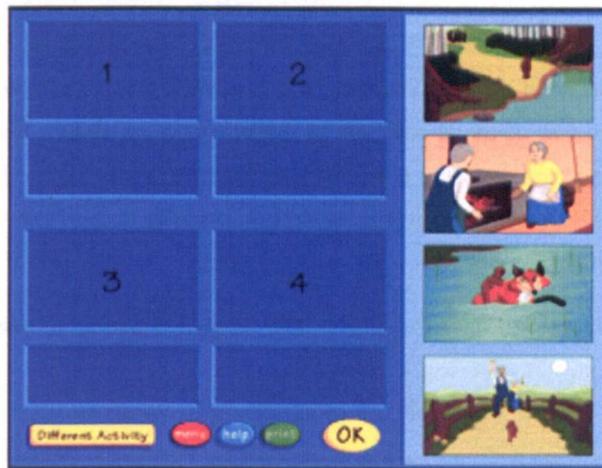


### 6.3.2 ICT-task: sequencing and retelling the stories

Sequencing and retelling tasks consisted of asking the children to order four pictures from the story used in the week. This task took place after the children had participated in the whole class storytelling at least two times. The pictures used in this task belonged to the story and were part of an activity suggested by the creators of the software. For

the stories Goldilocks and the Three Bears and The Gingerbread Man, the sequencing tasks were taken directly from the CD materials. However, for The Three Billy Goats Gruff, which was the last story used, there was no sequencing activity provided, so I made one following the criteria used in the two previous sequencing tasks. Figure 6.3 shows how the task was presented to the children at first. During this task, I spoke to the children in English and Spanish -translating the instructions- to encourage them to talk in English and making sure at the same time that they understood the task to complete (See Appendix K for an example of a retelling task).

FIGURE 6.3: Graphics for the sequencing task of The Gingerbread Man



Each time I called a child to complete this task, I tried to follow the same set of instructions, asking first if s/he had enjoyed the story and if s/he wanted to work on the computer doing work related to the story. Then, I would ask them a few questions about the story, trying to make them talk about it. Later, I would ask them to put the pictures in order, because I wanted to know what happened first, second and last in the story. If the children wanted to try and use the mouse, I would let them do it but I helped them with the dragging part, with the exception of two children who were able to do it by themselves after three tasks. When the pictures had been arranged, I would ask the children to tell me the story in their own words in Spanish or English, without looking at the pictures. All the children used Spanish to tell me the stories, and even though I had expected that Gingerbread Man was not going to be translated because they were not familiar with the story or with gingerbread, they found a term in Spanish to refer to this character. They called him “*El Pastelito*”, which can be translated as “The Little Cupcake Man.”

### 6.3.3 ICT-task: drawing a character

The software used to complete this task is called 2Create a Story (2Simple Software TM). I decided to use this program instead of Paint (Microsoft TM) because of the ease with which young children could handle the software interface. I tried this program with my daughter when she was 4 and she was able to handle it independently in approximately 15 minutes. She has had several opportunities to use a mouse, and I knew that this skill might not be present in the children from the course where I was going to work, but my daughter showed a great interest in the software and started using it to draw instead of Paint which is the program that she used to work with to draw on the computer. In order to draw a picture in this software, the children have to click on one of the menu of colours, displayed as felt pens on the left of the screen, and draw on the empty space of the screen on the right. Even though this software is more than a drawing tool, I did not use any of the features it offers to create animated stories.

### 6.3.4 ICT-task: a puzzle game via comprehension questions

The children tried to complete a puzzle task for the story of the Gingerbread Man included in the software. I had not considered the use of activities where comprehension questions had to be answered, but one of the children who got more interested in the use of the computer insisted on playing the games that came with the story, so from the choice of activities available in the CD, I asked the children to complete one which included comprehension questions from the story. It is worth explaining that during the design of the lesson plans (in phase I of the study), when I explained to Isabel the contents of the CD stories, I had suggested that the games and extra activities related to the story included in the CD could be used in the lesson. However, Isabel thought that the activities would be too challenging for the children so they were not part of the lesson plan. The decision to give the children the opportunity to play this game was based on their eagerness and continuous requests to “play with the games” on the computer (*Pablo’s request. Source: field notes*).

In the comprehension question game of the Gingerbread Man, the child or children have to answer one question from the story by clicking on one of three options provided. Each time a question was answered correctly, a piece of a puzzle that could be seen dimly in the background, would change colour. The questions were played so the child or children had to listen carefully in order to understand, and the choices to answer the questions were three pictures displayed on top of the puzzle. An example of one of the questions of this activity was: “Who baked the Gingerbread Man?” The choices to answer the question were “The Fox”, “The Children chasing after the Gingerbread

Man” and “The Old Woman.” The software would provide feedback according to the choice the child made. For incorrect answers, the feedback was: “I don’t think so” or “Try again.” For correct choices, the feedback response was “Well done!” During this task, I allowed the children to use the mouse to click on the pictures if they asked.

#### 6.4 Role of the researcher during the research lessons

I had two major roles during the lessons: as observer and as a teaching assistant. My role as an observer took place in the whole class storytelling activity. At this time, I would handle the computer to start or stop the story and to play the songs. On one occasion I asked the children comprehension questions related to the story (my intention being to show the teacher how this activity could be done, so in later lessons the same activity could be carried out). My role as a teaching assistant took place when the children were working on the computer. In the individual computer tasks, I would take a more pro-active role in terms of explaining to the children what they had to do on each occasion. However, when children were actually working on the task, I would take a reactive role in order to allow the children to work on the task as independently as possible. The language that prevailed during the time I interacted with the children was Spanish, however, with some children more English could be used as they showed more signs of understanding and willingness to try to understand and repeat my words. The instructions for the task were always given in English first and translated after to reinforce and confirm understanding. I took these measures to alleviate the pressure that the children were under due to the work that they were doing, specially after the introduction of the work-scheme lessons which included tasks new to the children, ICT-storytelling sessions and story retellings for instance.

#### 6.5 Summary

Figure 6.4 presents the data collected during the field work stage of this study. Green cells represent those activities that I completed directly with the teachers or the children. Yellow cells represent data collected by the participant teachers.

In summary, this chapter included a detailed description of:

- Procedures for the selection of the research site;
- Description of participants of the study: teachers and children;
- Procedures followed during the implementation of the work scheme lessons;

FIGURE 6.4: Summary of data collected during fieldwork

Activity	Week	1	2	3	4	5
Children's retellings				R		
Teachers' interviews						
Children's survey						T
Field notes from classroom observations						
Parents' survey						

R = Researcher    T = Participant teachers

- Structure of the work scheme lessons and types of tasks used in the lesson and as data collection strategies.

## Chapter 7

# Analysing the work scheme lessons, tasks and story retellings

### 7.1 Overview

The purpose of this chapter is to present the analysis procedures followed in exploring the data collected for Phase II of this study. Data collection methods for this stage, previously described in Chapter 3, included field notes from classroom observations, semi-structured interviews, rating scales, a selection of materials produced by the children during the English lessons and children's story retellings. The approach taken for the analysis, and procedure for each collection method are explained in separate sections of the chapter. Findings from these data are offered in Chapters 8 and 9 where I attempt to construct a response to research questions two, three and four from the perspective of four participant children and from an overall perspective of the study respectively. Interpretations of the findings are presented in Chapter 10.

### 7.2 Field notes from classroom semi-participant and participant observations

For the analysis of field notes, I followed the same strategy as the one used to explore data from the research diary; that is, I did not have a pre-existing thematic framework for the initial categorization of data segments. Likewise, I completed two labelling iterations in order to get to know the data and, based on the knowledge gained during the first categorization iteration, determine whether data could be associated in higher more comprehensive themes. Validity during data collection was enhanced through a

continuous exchange of opinions with the participant teachers in which I could confirm what I was seeing about the lesson and the children. The following sections provide a detailed account of the procedures followed during the analysis of data from field notes.

*Familiarisation.* Field notes taken during the implementation of the work scheme were hand written in English before, during and after each English lesson. I took notes of children's behaviour towards the tasks; their reactions during the storytelling sessions, and during the individual ICT tasks; how the teacher handled the tasks; how the children interpreted the stories; their level of attention, taking into consideration the number of times they went off-task as well as the probable reasons for this, and almost every detail that I considered to be relevant in understanding children's conduct. These data became the basis for the question regarding children's attitudes towards the work scheme. I complemented my notes with the teacher's perceptions of children's behaviour as I wanted to compare what I was observing about the children and the reasons that I thought explained their behaviour with the teacher's perceptions. This exercise allowed me to enhance the validity of these data as my views were supported or rejected by the teacher's views, reinforcing objectivity on the perceptions that I was constructing about the children. As a corroboration exercise, analysis and interpretation of field notes was later set against those coming from the rating scale, which reflected the participant children's views on the events that I was studying. The first step towards analysis started by transcribing all the field notes and categorizing them under a "header" during the transcription. The notes of each day would then be typed using the headers of the previous day but I kept adding headers as the data required them, that is, if I recognised new categories of notes, I would add headers to the thematic framework. This is how the list of themes grew to include 15 headers.

*Identification of a thematic framework.* The following is the list of original themes used in the categorization of field note data that emerged while typing the notes (as presented earlier in Chapter 3 Section 3.8 p. 66).

- Children's attitude towards ICT;
- Dynamics of the storytelling session with the computer as the delivery medium;
- Teachers' participation during the storytelling session;
- Attitude towards the stories selected;
- Children's reaction towards the content of the story;
- Children's comprehension of the familiar and new stories;
- Use of L1 during the English lessons;

- Organization of lessons into tasks;
- Children's reactions towards working with clay, cut-outs and puppets during non-ICT tasks;
- How target vocabulary was introduced and practiced;
- Children's use of target vocabulary;
- Reaction to the songs;
- Story comprehension;
- Children's reactions during retelling of stories;
- Children's participation and reactions during drama tasks.

*Coding.* Once the field notes were categorized the first time, I validated the thematic framework with two external coders (See 3.9). The themes were considered to be clear but one of the coders found that from the selection of notes that I sent for validation two data segments could not be categorized under any of the 15 original themes. After discussing these notes we decided on adding only one more category since one uncategorized segment did fall under one of the already identified themes. The added theme was: Contextual observation. After having validated the thematic framework, I carried out a second iteration of categorization with the field notes with the purpose of reducing the thematic framework. First I grouped the themes into three major categories according to notes regarding the children, the teacher or the lesson. Then I reduced the categories to include a wider range of data when I found a relationship between the notes as for example: reaction towards the content of the story/comprehension of the familiar and new stories/story comprehension. These three original categories look at how children reacted to or handled story comprehension and as such they were grouped under one single theme.

After the regrouping of themes, the final thematic framework that guided the categorization of field notes was:

Children:

- Attitude towards ICT;
- Working with story contents;
- Reactions towards working non-ICT tasks;
- Use of target vocabulary;

- Reactions during retelling of stories;
- Reactions to choice of stories.

Teachers’:

- Participation during the storytelling session;
- Reactions to choice of stories;
- Use of L1 during the English lessons;
- Introduction and practice of target vocabulary;
- Contextual observations.

The lesson:

- Dynamics of the storytelling session with the computer as the delivery medium;
- Organization of lessons into tasks.

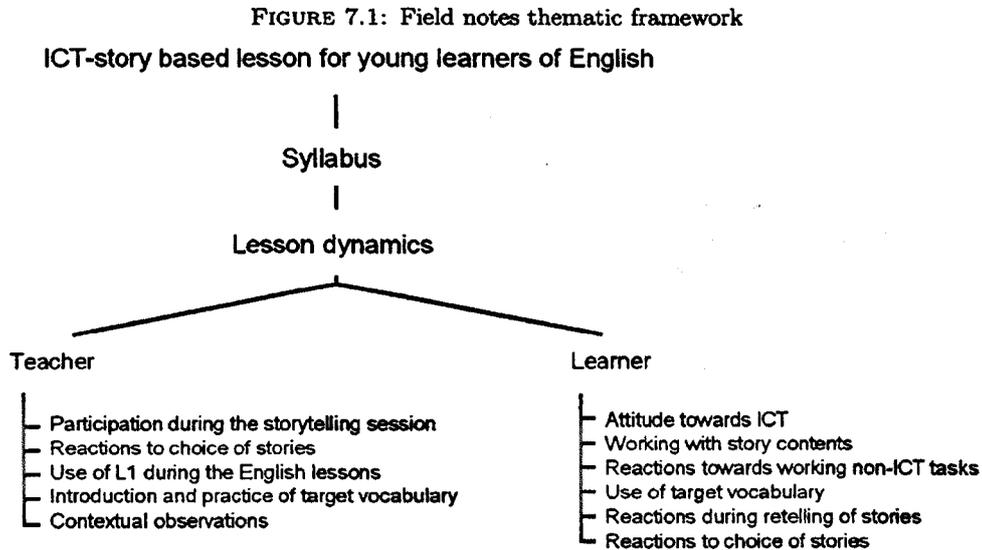
Figure 7.1 presents a summary of the themes that resulted from the analysis of field notes data. Because in my thesis I explored the feasibility of implementing the work scheme lessons described earlier in Chapter 4, the lessons are the central theme of the analysis. Elements of the lessons that were relevant to this thesis are syllabus: how TBL and storytelling which were used to design the lesson worked with the children; and lesson dynamics: how the participant teachers and children worked with and reacted to the lesson structure and components. The sub-themes under “Teacher” and “Learner” present the specific aspects of the lesson observed for each group of participants.

*Charting and Mapping.* Findings that resulted from the analysis of the field notes are shown in Chapter 9. As in the case of the research diary, interpretations of these data are presented in Chapter 10.

### 7.3 Semi-structured interviews

The process of analysing the data gathered during the interviews followed the same 5-stage strategy as the one used in the analysis of the research diary and the field notes.

*Familiarisation.* I transcribed the audio-recorded interviews in their entirety. Table 7.1 shows the number of the interviews conducted, the interviewee and the phase of



the study when the interview took place. This is relevant since the interviews were intended to capture the teachers' opinions on the matters under study before and after the implementation of the work scheme lessons. The purpose of this strategy was to track possible changes of the teachers' opinions regarding teaching English to the group of participant children using the lessons based on the ICT-delivered stories and TBL and the use of ICT in general with young children.

*Identification of a thematic framework.* Categorisation of data from interviews differed slightly from the procedures followed with the research diary and field notes in terms of the thematic framework that was used during coding. As has been noted in Chapter 3, questions for the interviews came from previous research related to teachers' views and experiences of the use of ICT with young children. This meant that I had an *a priori* thematic framework composed of three major themes, which were used in the first coding iteration, shown in Figure 7.2 (p. 120):

- ICT and its link to children's learning and development
- ICT and teachers' professional development
- Current use of ICT in the classroom and the support provided by the school to facilitate its use

Using an *a priori* thematic framework in the analysis of qualitative data can lead to conflict under some approaches, as for instance the case of studies that follow the grounded theory approach (Robson, 2002). Considering that my research design is exploratory and not based on the grounded theory schema, I was able to start the categorisation with a

TABLE 7.1: Interviews with participant teachers

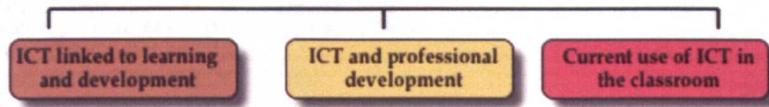
Project stage	Participant teacher	Interview schedule	Profile
Phase I. Pre work scheme intervention	Isabel	29.06.06	Teacher whom I worked with in the planning of the English lessons following the guidelines of the work scheme. She had work experience with young children having worked in a nursery in the UK. She was familiar with the TBL approach to languages and had implemented ICT projects in some of her language lessons.
Phase I & Phase II. Pre-Post intervention	Teresa	14.07.06 - 28.07.06	In charge of teaching the course. She has experience working with preschool and primary children in Spain.
Phase II. Post intervention	Cristina	28.07.06	Headteacher and coordinator of the course. She has worked in the school where fieldwork took place for the last two years.

pre-determined thematic framework. It must be noted that although the analysis was initiated with three predefined categories, I still explored the data with an “open mind” and allowed the original list of themes to grow and change by adding new categories as they emerged from the data during the coding stage of analysis. An analysis of previous studies of teachers’ views of the use of ICT in schools (See Section 2.2.2 on p. 22) led me to identify the three initial conceptual categories shown in Figure 7.2 (p. 120).

I anticipated that it was important to learn what the teachers thought of the matter as the teachers’ attitude towards ICT and young children could influence the outcomes of the study and the development of the activities planned for the conduct of the fieldwork. It is logical to assume that had the teacher not felt optimistic about the idea of using ICT with young children they would have refused to participate in the project. However, this would have been only an assumption. In order to avoid assumptions, I therefore decided to interview the participant teachers and learn their opinions and ideas related to ICT and young learners directly from them. These interviews allowed me to learn not only the benefits that the teachers believed could derive from the use of ICT with young learners but also the difficulties that they thought could arise from using technology with them. Basing the interviews on previous studies provided a sound starting point to explore these issues.

Since the questions that formed the semi-structured interview were related to the areas identified in the literature (See Appendix C for a full version of the interview), the data collected through them fit into the pre-established categories from the beginning. However, just as during the pilot of the interview, the teachers expanded the topics by providing rich answers to the questions. This is how data from the interview transcriptions produced new categories. After the first categorisation iteration, other themes emerged and data from the interview was then re-coded under the extended framework. The growth of themes and its further final reduction is explained in the stage of coding, since the themes emerged during categorization and labelling of the data.

FIGURE 7.2: *A priori* thematic framework for the interviews



*Coding.* The interviews were conducted in Spanish and the coding of the transcriptions of the interviews was done with the non-translated transcriptions. I thought it best to keep the language of the transcriptions until the end of the analysis to reduce the likelihood of changing the sense of the teachers' ideas during the translation of the text. The interview excerpts that I translated were those that I thought to be required in supporting the findings that resulted from the analysis of the interviews. New categories were entered into NVivo as they emerged from the transcriptions. I found that the data from the different interviews had common aspects that could be categorized under a new code. This is how the thematic framework changed from that presented in Figure 7.2 to the one shown in Figure 7.3, the latter including sub-themes that emerged from the data. *The work scheme within the school* (Figure 7.4) was the most important new main category that also emerged from the data and that became part of the final thematic framework.

*Expanded thematic framework of the interviews.* Figure 7.3 shows the categories that emerged after coding the interviews once.

Data from the interview was validated with two external coders. I asked for their opinion based on their professional experience. One of the coders had experience on working with lecturers who had used software applications to deliver course materials. The second coder had experience working with young children. The categories of the thematic framework for the interview were discussed also with other research students with the purpose of refining the themes and validating the clarity of data labelling. After the validation exercise and a second labelling iteration where I focused on finding

FIGURE 7.3: Thematic framework after the first interview coding iteration

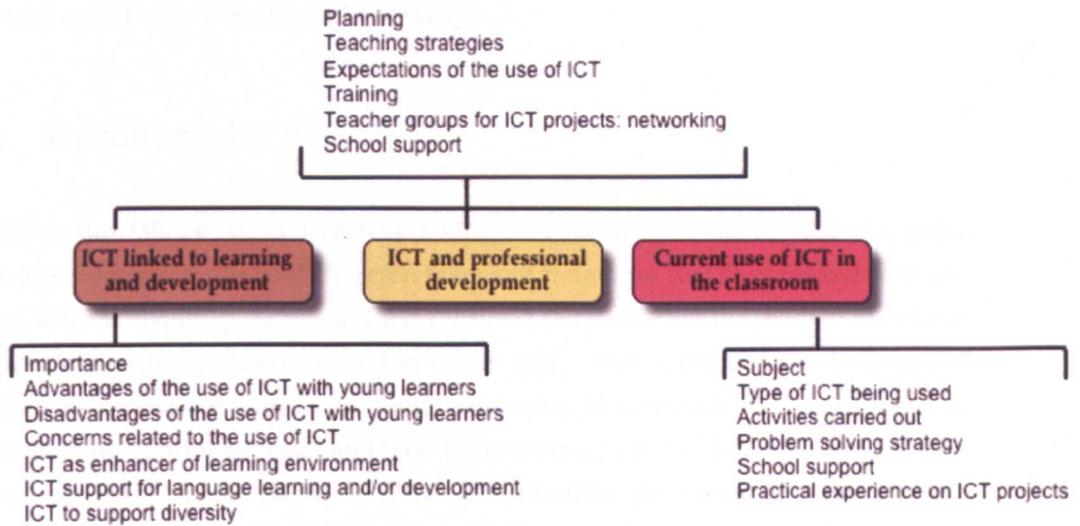
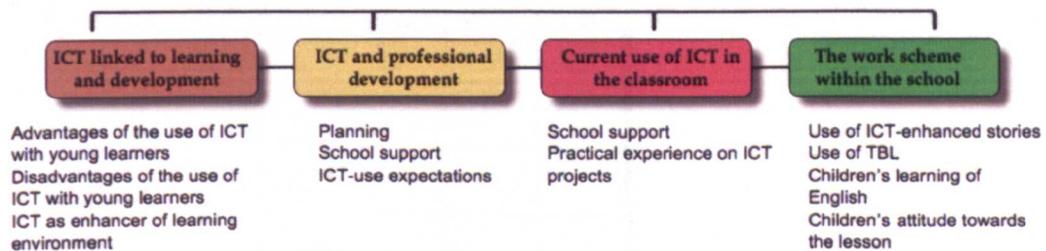


FIGURE 7.4: Main category added after the first coding iteration of interview data

**The work scheme within the school**

patterns and relationships in the data, the thematic framework was reduced. Figure 7.5 shows the final thematic framework used in the analysis of the interviews.

FIGURE 7.5: Thematic framework after the second coding iteration of interview data



*Charting.* Findings for these data are presented in Chapter 9 in Tables 9.1, 9.2, 9.2 and 9.3. The tables organise the results according to the themes used in the categorisation of data and across participant teachers. A concept that represents the opinion of the teachers regarding each theme is written in each cell. The concept presented within the cells are later illustrated with transcription excerpts from the interviews (See p. 163).

*Mapping.* Chapter 10 presents the interpretation of the findings that resulted from the data collected in this phase of the study.

## 7.4 Rating scales

The procedure followed to analyse data coming from the children's completion of a rating scale form to evaluate the English lesson tasks and the stories that they worked with was based on basic frequency statistics. First I scanned the forms that the children completed in order to obtain an electronic version of the data. Then I counted the frequency of children's responses. Figure 7.7 presents a summary of children's individual responses regarding their rate for the tasks and their favourite story choice. Tables 7.2 and 7.3 show the summarized data for the whole class. The resulting story scale of Diego, Enrique and Isolda differed from those of the rest of the class. Figure 7.6 presents a scanned image of the form that children had to fill in to evaluate tasks and stories. Finally, Table 7.4 shows choices of favourite stories seen from the perspective of the girls and the boys in the class. I found this to show interesting data on possible preferences of stories according to gender. Results from the survey only present data from 7 of the 8 participant children. This was due to Elena not attending the last week of the course. As with the rest of the data, interpretation of these findings are presented in Chapter 10.

FIGURE 7.6: Children's opinions of lesson tasks

I hate	I like	I love
		

## 7.5 Materials from a sequencing-a-story task

From the different tasks that children completed during the English course, I found a sequencing-the-story-on-paper task relevant to this study since I was asking the children

FIGURE 7.7: Children's individual task rating and choice of stories

	Task rating			Story choice
	I hated	I liked	I loved	
<b>Enrique</b>			Pup	TGM
			Son	
			Col	G3Bs
			Cla	
<b>Manuel</b>			ICT	3BGG
			Pup	G3Bs
			Son	
			Col	TGM
<b>Angel</b>			Cla	3BGG
			ICT	
	Pup			G3Bs
	Son			
<b>Diego</b>			Col	TGM
			Cla	
			ICT	3BGG
			Pup	G3Bs

	Task rating			Story choice
	I hated	I liked	I loved	
<b>Anna</b>			Pup	G3Bs
			Son	
			Col	TGM
			Cla	
<b>Isolda</b>			ICT	3BGG
			Pup	G3Bs
			Son	
			Col	3BGG
<b>Pablo</b>			Cla	TGM
			ICT	
	Pup			3BGG
	Son			
			Col	G3Bs
			Cla	
			ICT	TGM
			Pup	

TABLE 7.2: Rating Scale: Global Counting

Lesson task	I hated	I liked	I loved
ICT		1	6
Songs	2		5
Puppets	2		5
Play-Doh	2	1	4
Colouring	2		5

TABLE 7.3: Choice of favourite story: Global Counting

Story	Liked the best	Liked	Liked a little
Goldilocks and the Three Bears	3	3	1
The Gingerbread Man	2	2	3
Three Billy Goats Gruff	2	2	3

TABLE 7.4: Choice of favourite story: Girls and Boys

Story	Girls	Boys
Goldilocks and the Three Bears	2	1
The Gingerbread Man	0	2
Three Billy Goats Gruff	0	2

to complete sequencing tasks on the computer as well. The sequencing task on paper was Teresa's idea and thus she planned and completed it with the children. During the task, Teresa asked the children to draw on three separate white squares what had happened first, second and last in the story of *The Gingerbread Man*. The material from this activity was not analysed individually in relation to any of the study's research questions. However, it is used in Chapter 10 in the discussion of the story sequencing task that children completed on the computer. Figures 7.8, 7.9 and 7.10 are examples of the outcome of the task from scanned images of the children's work.

FIGURE 7.8: Enrique: sequencing-on-paper of *The Gingerbread Man*

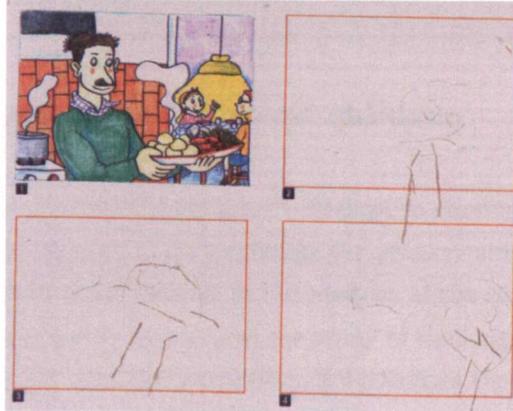
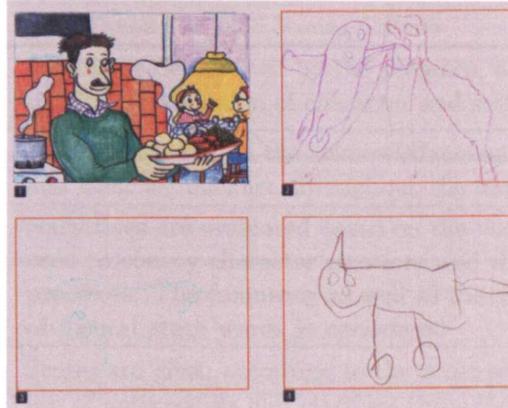


FIGURE 7.9: Isolda: sequencing-on-paper of *The Gingerbread Man*



The images of the story sequencing task on paper are added here to illustrate that none of the children in the group drew episodes that represented the whole story in sequence. The children used the space available on the paper to draw the main character of the story as illustrated in the drawings of Enrique (Figure 7.8), the Gingerbread Man, with the exception of Ana (Figure 7.10) and Isolda (Figure 7.9) who drew the character of "the cat" as well.

FIGURE 7.10: Ana: sequencing-on-paper of *The Gingerbread Man*

## 7.6 Retellings from participant children

Through the analysis of children's retellings I attempt to construct an answer directed towards research question two, which represents the primary aim of this study. In this section I detail the procedures involved in the analysis of the story retellings collected throughout the English course. It involved the study of the language that the children produced during the ICT retelling/sequencing of the stories that children viewed during the lessons. Each child was asked to participate in a retelling task once per week during the last three weeks of the course. Language produced during the development of these tasks was audio recorded and later transcribed. The analysis of the children's transcribed stories was based on changes in story grammar elements in the retold stories with the ultimate purpose of looking at the development of narrative as a component of literacy. In order to strengthen the results obtained from the story retellings, I conducted an analysis based on the story grammar approach from both quantitative and qualitative perspectives. The quantitative analysis was based on a numerical score and the qualitative on the content of the retellings from a comparison with elements of the story included in the children's retellings. The following sections detail the procedures followed in each of the analysis.

*Quantitative approach to analysis of story retellings.* In order to study the children's use of story grammar elements from a quantitative perspective of analysis, the transcriptions of the language produced during the re-telling/sequencing tasks were entered into a software programme called SALT (Software Analysis of Language Transcriptions) (J. Miller & Chapman, 2006). This software application has been used to study children's development of literacy. The features of this programme allowed me to track the changes in the number and the quality of story grammar elements within each retelling. Within SALT a numerical score is given to the transcriptions following a criteria that extended

TABLE 7.5: NSS Scoring Criteria

<b>Introduction</b>	Scores are determined by the presence, absence, and qualitative depiction of character and setting components
<b>Character development</b>	Scores are based on the acknowledgement of characters and their significance throughout the story
<b>Mental states</b>	Narratives are evaluated based on the vocabulary used to convey character emotions and thought processes. The frequency as well as the diversity of mental state words is considered
<b>Referencing</b>	Scores are given according to the consistent and accurate use of antecedents and clarifiers throughout the story
<b>Conflict resolution</b>	Scores are based on the presence/absence of conflicts and resolutions required to express the story as well as how thoroughly each is described
<b>Cohesion</b>	The sequencing of, details given to, and transitions between each event are examined
<b>Conclusion</b>	A score is based on the conclusion of the final event as well as the wrap-up of the entire story

the story grammars approach called the Narrative Scoring Scheme<sup>1</sup> Miller, 2000 p. 288. Table 7.5 (Source: SALT Guide) shows the seven categories of analysis assessed under NSS to evaluate story retellings.

NSS is scored by assigning a value between 0 and 5 point to each of the previous seven categories. The allocation of points for each of the seven coding criteria is:

- 5 proficient use;
- 3 emerging or inconsistent;
- 1 immature or minimal;
- 2 and 4 are given for intermediate performance.

The scores for each characteristic can be considered individually or combined into a total composite score (SALT Guide p. 113).

<sup>1</sup>The Narrative Scoring Scheme was developed by Dr. Jon Miller and the Bilingual Language and Literacy Project staff for the grants HD39521 Oracy/Literacy Development of Spanish-speaking Children and R305U010001 Biological and Behavioral Variation in the Language Development of Spanish-speaking Children, funded by the NICHD and IES, David Francis, P.I., Aquiles Iglesias, Co-P.I., and Jon Miller, Co-P.I. It is based on an earlier version, Rubric for Completing a Story Grammar Analysis, developed by the Madison Metropolitan School District SALT working group, 1998, to create an objective narrative structure scoring system following the work of Stein and Glenn, 1979; 1982 (SALT Guide p. 112-115).

All the children's retellings were transcribed, studied against the original story transcriptions, and given a score following the NSS criteria.

*Validity of retelling scores.* The transcriptions were given to three reviewers (See 3.9) along with the NSS criteria for independent scoring. The reviewers were not informed of the sequence of the transcriptions, that is, the week when each of the retellings was collected. This avoided the bias that could have occurred by comparing story transcriptions side by side, trying to find progressive improvements or changes in the retellings. This I thought to be important if I wanted to have the transcriptions scored on their own independent merits and not biased by what could be expected from the children after being in the course one, two or three weeks.

After having received the scores from the reviewers and added my own evaluation, I conducted an analysis of all scores with the purpose of: (1) studying children's use of story grammar elements week by week and (2) calculating the score that reflected what the children had produced in their retellings as evaluated by four reviewers.

Changes in story grammar elements were calculated by comparing the reviewers' scores per NSS criteria and per story. In order to reach a common NSS criteria score among all reviewers, I calculated the mode and hence selected the score most frequently assigned by the scorers. The mode was chosen over the average because of the size of data samples. Four scores do not provide enough numerical evidence to justify the use of the average function in order to understand the behaviour of the data. The mode provided an accurate consensus figure for how the reviewers had evaluated each retelling and hence it was the statistical function used to summarise the scores. The mode was calculated taking the four scores for each of the seven NSS criteria, and produced a total score per criterion and a global score per retelling. The global score was calculated by adding the summarised seven criteria of the NSS scores and hence it provided an overall evaluation of the retellings produced by the children. An example of these calculations is shown in Figure 7.11.

The summary of the global scores for all of the participant children is shown in Figure 7.6. These scores were then graphed by criterion and story in order to look into the use of story grammar for the whole class. Summarising retelling scores in this way simplified their representation and subsequent interpretation. For example, it is possible to see how scores of each criterion changed along the weeks and across stories. A detailed explanation of the results obtained after the analysis of the retellings is provided in Chapters 8 and 9.

The reason for conducting a quantitative analysis of the retellings was to observe children's narratives from an objective perspective. A score that can be confirmed and/or

FIGURE 7.11: Summarising reviewers scores

		<b>Introduction</b>				
Enrique		<b>Scorer 1</b>	<b>Scorer 2</b>	<b>Scorer 3</b>	<b>Scorer 4</b>	<b>Mode</b>
	<i>G3Bs</i>	0	1	1	1	1
	<i>TGM</i>	0	1	1	2	1
	<i>3BGG</i>	0	1	1	1	1

		<b>CharacterDevelopment</b>				
		<b>Scorer 1</b>	<b>Scorer 2</b>	<b>Scorer 3</b>	<b>Scorer 4</b>	<b>Mode</b>
	<i>G3Bs</i>	1	1	1	1	1
	<i>TGM</i>	1	2	1	3	1
	<i>3BGG</i>	0	1	1	1	1

TABLE 7.6: Summary of scores for each retelling under the NSS

<i>Child/Story</i>	<b>Goldilocks and the Three Bears</b>	<b>The Ginger- bread Man</b>	<b>Three Billy Goats Gruff</b>
Enrique	9	10	7
Elena*	11	20	NC
Manuel	NC	9	0
Angel	0	8	7
Diego	1	NC	6
Ana	7	7	11
Isolda	9	4	9
Pablo	6	7	NC

\* Left the last week of the course

NC Data not collected due to absence

replicated by others enhanced validity of the data. As such, the use of a scoring scheme that has been used in analyzing Spanish/English transcriptions of children's narratives was highly valuable for the results obtained through this study.

It must be noted that at the time of conducting the fieldwork of my research NSS had been used in several projects but not with children as young as 3- and 4- years old. In 2007, however, they added to the SALT project a database containing narratives of bilingual Spanish-speaking children on the age range of my participants. Considering this, I followed the criteria provided by the authors to score the transcripts, but I also discussed the narratives with a PhD Spanish-speaking student experienced in working with very young children. These discussions allowed me to resolve scoring dilemmas such as how many points to assign to the cohesion marker, given that children of the age of my participants are still constructing the lexical base in L1 required to meet such criteria. Results shown in Table 7.6 cannot provide a whole picture of the activities that the

TABLE 7.7: Story grammar elements in Goldilocks

<b>Setting</b>	Where does the story take place? A forest. In the Bears' house. Who are the main characters? Goldilocks, Papa Bear, Mama Bear, Baby Bear.
<b>Catalyst/ Initiating Event</b>	What happens at the beginning of the story? Goldilocks enters the house of the Bears. What does Goldilocks do? Goldilocks goes to the house of the Bears and tries the porridge. She sits in Baby Bear's chair and breaks it. She sleeps in the Bears' beds. What does Mama Bear do? Mama Bear makes porridge but it's too hot. What do the Bears do? They go out for a walk while the porridge cools.
<b>Internal response</b>	How does Goldilocks feel? Scared. She felt curious. How do the Bears feel? Surprised, upset.
<b>Consequence</b>	What happens when the Bears return home? The bears return to find things eaten and broken and to find Goldilocks in baby's bed.
<b>Problem resolution</b>	What happens to Goldilocks at the end? Goldilocks jumped out of bed and ran right out of the house! And she kept on running, as fast as she could, all the way home!

Story grammar elements from the story Goldilocks and the Three Bears (*Inside Stories*, 2003), classified by myself under the model of Stein and Glenn (1979).

children completed everyday in the classroom and other events connected to children's understanding and construction of the retellings. Therefore, I conducted a qualitative analysis of the transcriptions to complement and illustrate the scores and provide a picture of the events that occurred during the English course which surrounded the construction of the children's retellings.

*Qualitative approach to analysis of story retellings.* This second part of analysis had the purpose of finding signs of increased understanding and construction of the stories used throughout the course, taking into consideration qualitative data coming from field notes. Children's retellings were evaluated using the original transcription of the story and they are not given a score, but they are presented as a story told by a child. By adding the interpretations that the children had of the stories as I could observe during the retelling task and as I described and wrote down as field notes, I attempt to provide a picture of the linguistic richness of the retelling task through data that may explain how the children made sense of the stories.

The qualitative analysis of the children's retellings started by classifying the text of

their stories according to the story grammar model of Stein and Glenn (1979). Consequently, the narratives produced by the children during the retelling/sequencing tasks were categorised into the following elements:

- **Setting.** Introduction of main characters, time and place for the story action.
- **Catalyst/Initiating Event.** An action that sets up a problem or dilemma for the story.
- **Internal Response:** The protagonist's reactions to the initiating event.
- **Consequence:** The result of the protagonist's actions.
- **Problem Resolution/Reaction:** A response by the protagonist to the consequence.

In order to gain understanding of the episodes that constructed each of the stories, which would then lead to the deconstruction of the stories into story grammar elements, the transcriptions of the stories that were used in the lessons (See Appendix I) were analysed following a matrix strategy as discussed by Hoey (2001), who had used the story of Goldilocks and the Three Bears to exemplify this strategy of discourse analysis (See Appendix J for the matrix analyses of the stories). The matrix analysis led to create a "story grammar template", in which questions per element were raised. The story grammar templates of the stories used during the English course are presented in tables as follows: Table 7.7 presents the story of Goldilocks and the Three Bears, Table 7.8 the one of The Gingerbread Man and Table 7.9 categorises the Three Billy Goats Gruff. Children's retellings were analysed using the story grammar template. Those sentences from the retellings which responded to the questions and hence fit into a story grammar element, produced the tables shown in Chapter 8 (See pp. 140, 146, 153 and 159) (which presents the stories of four participant children). The matrix analysis of the retellings, which was complemented with a rich description of the children from my field notes, constituted the qualitative analysis of the retellings.

## 7.7 Summary

This chapter has covered the procedures followed in the analysis of the data pertaining to Phase II of my research, namely data gathered through classroom observations, interviews, children's rating scale survey, lesson materials and transcriptions of retellings. The following chapters present the findings that stemmed from the analysis of these data. Findings are described in two separate chapters. Chapter 8 presents the individual progress throughout the course of 4 participant children: Enrique, Isolda, Ana and

TABLE 7.8: Story grammar elements in *The Gingerbread Man* (based on the model of Stein and Glenn (1979))

<b>Setting</b>	Where does the story take place? In a kitchen where a Man and a Woman are baking gingerbread
<b>Catalyst/ Initiating Event</b>	What happens when the gingerbread is ready? The gingerbread man jumped out and ran away. The man and the woman ran after the gingerbread man
<b>Internal response</b>	What is the Gingerbread Man reaction after being chased? He makes fun of the other characters singing "Run, run, as fast as you can. You can't catch me - I'm the gingerbread man." How do the characters feel?
<b>Consequence</b>	What happens when the Gingerbread Man came to a river? He stopped and stared. He realised that he cannot cross. What does the Fox offer to do for the Gingerbread Man? He offers to carry the Gingerbread Man across.
<b>Problem resolution</b>	What happens to the Gingerbread Man? He is eaten by the Fox

Story grammar elements from the story *The Gingerbread Man* (*Inside Stories*, 2003), classified by myself under the model of Stein and Glenn (1979).

TABLE 7.9: Story grammar elements in *Three Billy Goats Gruff* (based on the model of Stein and Glenn (1979))

<b>Setting</b>	Where does the story take place? In a mountain, near a bridge. What is happening at the beginning? Three goats want to cross a bridge because the grass is greener on the other side but the dangerous Troll who guards the bridge stops them
<b>Catalyst/ Initiating Event</b>	What do the goats do to get across? They thought of a plan to get across the bridge and reach the greener grass
<b>Internal response</b>	How does the Troll feel after the Little Billy Goat and the Middle-sized Billy Goat talk to him? He likes the idea of getting a bigger goat. How do the characters feel?
<b>Consequence</b>	What happens when the Troll tries to eat the Big Billy Goat? He is chased and thrown out of the bridge.
<b>Problem resolution</b>	What happens at the end of the story? The goats crossed the bridge, reached the fresh grass and finally had dinner. What happens to the Troll? He landed in the river and never tried to stop the goats again

Story grammar elements from the story *Three Billy Goats Gruff* (*Inside Stories*, 2003), classified by myself under the model of Stein and Glenn (1979).

Angel. Chapter 9 presents the findings looking at the lesson, the use of ICT and how the children as a group responded to the work scheme lessons and the ICT-enhanced stories. Lastly, results are interpreted and discussed in Chapter 10 where I analyse the findings from the perspective of the literature reviewed in Chapter 2.

## Chapter 8

# The stories of Enrique, Isolda, Ana and Angel

### 8.1 Overview

In this chapter, I present results of the study of four participant children. Each independent account contributes to answering research question 2 of the study as seen from the findings for each child. The chapter starts with the underlying reasons for the choice of children's cases that I decided to explore. This is then followed by a detailed description of the results for each child. The ways in which the findings contribute to the research questions are presented in Chapter 10, along with the discussion of the findings of the study related to all four research questions.

### 8.2 Deconstructing children's stories

The sections that follow describe four of the children who participated in the study. They include a brief account of children's observed character traits and the findings that relate to RQ2 and RQ3 of this study. Presenting the results as separate "stories" (not actual case studies hence the use of the word "stories") has two purposes (1) To explore the diverse development of children's emergent literacy skills throughout the course and (2) To detail the results of an in-depth assessment of a child's attitude towards the English lessons based on ICT-stories. The aspects that compose each story are as follows:

1. Description of children's observed personality traits
2. Children's development of emergent literacy skills

### 3. Children's behaviour and attitude towards the work scheme lessons

The first component of the cases is the description of the children's observed personality traits. This description provides background information that help to construct a picture of the classroom context under study. The sources for these accounts were the field notes from the classroom observations, descriptions provided by Isabel and Teresa and sporadic, informal observations that happened while the children were in the playground. It must be noted that this description is subjective and I do not intend to make an objective judgement of the children's behaviour or personality.

The second component, related to emergent literacy skills, was based on the story retellings. This section is illustrated with a graph that shows the seven Narrative Scoring Scheme (NSS) criteria scores that the reviewers (See Section 3.9) assigned to the children's retellings (detailed earlier in section 7.6 of Chapter 7). It also presents the retellings of the children analysed under the story grammar approach. One aspect of children's retellings that must be noted is the absence of the name of the character or a pronoun in many of the sentences that construct the stories. This can be seen in Tables 8.1, 8.2, 8.3 and 8.4 where I added in brackets the subject of the sentences in order to present the translations of the retellings properly and correctly in English. I have to explain that for Spanish speakers, this occurrence is not indicative of poor quality of retelling -quality seen in terms of language production. Children's omissions of the subject in their utterances are due to a feature of Spanish, which allows subjects in sentences to be dropped out since they are marked in the verb morphology and because they can be inferred from previous reference (Fiestas & Peña, 2004). Interestingly, due to their age and their L1 on-going development, children made use of this linguistic feature of Spanish but not consistently. In all retellings, the verb morphology always marked the subjects, however, the omitted subject had not been previously referenced in every case. The advantage of having asked native Spanish speakers to evaluate the retellings was that this aspect was evident and hence considered in scoring the criterion of Character development throughout the children's stories. Understanding when it is correct to omit a subject allowed for an accurate evaluation of how and if the children's descriptions of the story characters between retellings actually improved. In other words, whether the omission of a subject was properly referenced and marked or if it happened because the children started their stories impromptu, without making references to the characters, as could be typical in stories told by 3- 4-year old children.

The third aspect covered in the cases was constructed with data coming from field notes, teacher's interviews and children's evaluation of lesson's tasks gathered through the rating scale. It was illustrated with images from the survey and extracts from the

field notes (labeled FN). These findings are supported with data extracts and a scanned image of the children's rating scale form.

*Criteria for case selection.*

As has been mentioned previously, in Chapter 6, my evaluation of emergent literacy development was based on the children's use of story grammar components in story retellings. My evaluation of their use was determined by a comparison of the scores given to the children's story retellings calculated by the reviewers and the text analysis of the transcriptions. The scores represent the quantitative portion of the results while the text analysis represents the qualitative component. The stories presented in this chapter were chosen because they represented different patterns of change found across the whole group. The title that I gave to each story portrays a distinctive behaviour or well-known phrase of the children while working with the stories.

For identification purposes, the three weeks where the implementation of the work scheme lessons took place were labelled Wk1, Wk2 and Wk3. Retelling scores were compared between Wk1 and Wk2 and a second time between Wk2 and Wk3. The resulting pattern of change became the criteria for the selection of cases. For instance, the first case presents the results of a child who showed positive changes in the use of story grammars between Wk1 and Wk2 (represented by 2+) but whose scores decreased between Wk2 and Wk3 (represented by 3-). The change pattern is represented as 2+, 3-. The other cases selected presented a different change pattern, including a pattern where no changes were detected. For those scores that remained unaffected, a sign of = was used. The stories selected describe:

- Enrique, who improved from Wk1 to 2 but whose scores decreased Wk3: 2+, 3-
- Isolda, whose scores in Wk2 were lower than Wk1 but then increased in Wk3: 2-, 3+
- Ana, whose scores increased in Wk 3 only: 2=, 3+
- Angel, whose scores increased in Wk2 and remained almost unchanged in Wk 3: 2+, 3≈

The sections that follow present the details of each case. When transcriptions are used to illustrate the findings, quotes beginning with letter "R" are excerpts from the researcher. Other letters represent the children as follows: "E" for Enrique, "I" for Isolda, "An" for Ana and "Ang" for Angel. Extracts from field notes used to illustrate the findings are labelled FN: date.

### 8.3 Enrique: *Y después . . . el Pastelito. "And then . . . the little cupcake man."*

#### 8.3.1 A sketch of Enrique

Enrique is a tall, rather quiet boy aged 4-years 3-months at the time of the trial English course. He gets along well with the other children and is generally calm, hard working and well behaved. He shows a strong determination to do things his own way in some of the tasks. On two occasions when Teresa asked him to participate in role-play tasks to represent the stories of the lesson, he immediately chose a character. Since other children wanted to play also the same character, Teresa tried to persuade Enrique to change his mind and it was interesting to see that Enrique could not be persuaded. While other children agreed to play a different character, Enrique would frown and repeat again and again that he wanted to be the Gingerbread Man or the Big Billy Goat until he got to play the characters that he wanted.

The first time we worked together, he did not speak much. I invited him to work with me on the computer and he accepted in a rather reluctant way. Teresa had to call his name several times before he joined me in the classroom area where I had set up the computer. That first instance of working together on the story tasks, Enrique remained in silence most of the time and I had to ask many questions to get him to speak. However, this behaviour changed soon. As the course went on, he started showing more and more interest in the computer tasks. By the second week of the implementation lessons, it was difficult for me to stop him from working on the computer or start retelling the stories spontaneously. It was necessary to try three or four times to persuade him to join the rest of the class and allow another child to work on the computer. This was an interesting piece of behaviour as it showed Enrique's confidence in the work he was doing on the computer. It was also a sign of his ability to adapt to new teaching circumstances and of how Enrique got used to my presence in the classroom. An example of his changed behaviour could be observed during the last retelling task. Enrique joined me on the computer, sat down and immediately started telling the story of the Three Billy Goats without waiting for my instructions. He just started:

E que estaba el otro día que pasó el hombre . . .

*E that was the other day that the man [the troll] passed [crossed the bridge]*

Enrique's development of emergent literacy skills seemed to be related to the story that he liked the most: The Gingerbread Man. Based on the results for Enrique in the

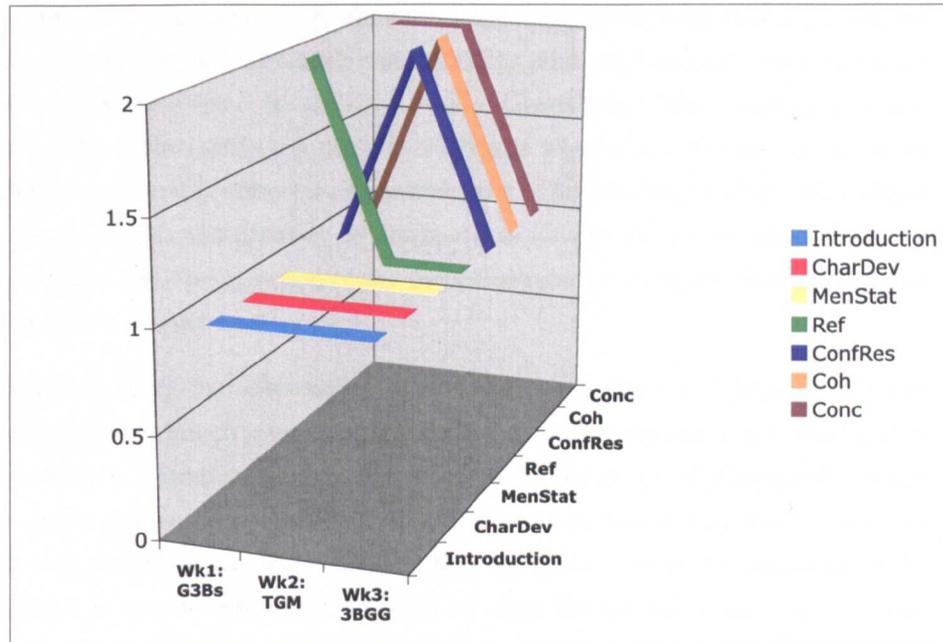
aspects analysed in here, it is possible to say that he enjoyed the lessons, interacting with ICT and the stories.

### 8.3.2 Development of emergent literacy skills

*NSS quantitative perspective.* An analysis of Enrique's transcriptions showed changes in some of the elements he used to tell the stories, although these changes were not consistent throughout the course. Enrique's pattern of change in the use of story grammars revealed that his scores for the criteria of conflict resolution and cohesion increased in Wk2 but decreased in Wk3. Figure 8.1 shows the behaviour of the story grammar elements amongst retellings. The conclusion criterion was scored 2 points in Wk1 and it remained the same in Wk2, but decreased in Wk3. Referencing was lower in Wk2 than Wk1 and remained low in Wk3. Introduction, character development and mental states were scored 1 point during the three weeks of the English course. These results show development in story grammar elements related to reaching a solution for the conflict of the story and the cohesive structure of the retelling. Introductory elements that situate the story remained unchanged in Wk2 and Wk3.

*Qualitative perspective of story grammars.* The title of Enrique's story came from my field notes where I wrote entries about how Enrique was the child who named the character of the Gingerbread Man *El Pastelito*. His naming of the character was so successful that all the children and Teresa referred to this character as "El Pastelito" for the rest of the week. Gingerbread biscuits are not common in Spain and so the children imagined the character made of a type of bread familiar to them, such as that of cupcake, hence the name "El Pastelito". Enrique enjoyed this story very much and his enjoyment was reflected on the retelling that he made of the story. The five story grammar elements, namely setting, catalyst, internal response, consequence, problem resolution (described earlier in Table 7.8 on p. 131) were used by Enrique in the retelling of *The Gingerbread Man*. Additionally, the element of Internal Response has two entries: "and then he couldn't run" and "the fox had to eat it". These two entries describe an action of a character that is not completely explicit in the story. For instance, the Gingerbread Man could not run because he reached the edge of a pond. Enrique did not explain why the Gingerbread Man could not run. In the story, the Gingerbread Man could not keep escaping because he could not swim, therefore he was unable to cross the pond. The inability of the Gingerbread Man to swim, it being a biscuit that cannot get wet, is implied and this is why the extract from the retelling was categorised as internal response. In the second entry I looked into the action "had to eat it" and wondered why did the Fox "have to" eat the *The Gingerbread Man*. This implication that Enrique made perhaps originated in his difficulty to see the Fox as a bad character,

FIGURE 8.1: Enrique: Story grammar pattern of change



hence the use of the phrase “had to”. This extract can also be explored with why questions regarding the motives of the characters, consequently I also treated it as an internal response element. Table 8.1 (p. 140) shows excerpts from the transcriptions of Enrique’s retellings. The retellings of Goldilocks and Three Billy Goats did not show as many details in comparison to the retelling of The Gingerbread Man. For instance, his retelling of Goldilocks did not have elements related to the setting of the story or the internal response of Goldilocks when she entered the house and ate the Little Bear’s porridge. The retelling of Three Billy Goats did not show elements for the resolution of the conflict initiated by the goats attempting to cross the bridge. However, it had an internal response component: “he believed that the Goat was bad”. “Believing” is a verb that attributes inner processes to a character and like in The Gingerbread Man story, it can be explored with “why” questions such as: why did the Goat believe the Troll to be bad? Internal responses identified in Enrique’s retelling also exemplify cognitive and emotional responses of the character, such as the case of “had to eat it” and “believed it was bad” respectively. Finally, internal responses in the story grammar approach cause actions that have consequences. In Enrique’s retellings the actions of the Gingerbread

Man accepting the Fox's help and the goats plotting against the Troll resulted in the Gingerbread Man being eaten and the Troll being thrown into the water.

In Enrique's Goldilocks retelling, elements indicating place or time were not produced and so this element is null. The other two retellings contained accounts that described the story's initiating event. In the case of The Gingerbread Man retelling this was indicated by the phrase *and then she was making it* where the Old Lady is preparing the Gingerbread Man initiating the character's race. The retelling of Three Billy Goats shows a more complex construction as Enrique was able to set a time when the story takes place and the initiating action of one main character by using the phrases *the other day* and *the man crossed*.

Enrique's retellings had elements of resolution in the stories of Goldilocks and The Gingerbread Man, although interestingly his story of Goldilocks saw a girl running into the street and not a forest or garden. The story of the Gingerbread Man finishes when "the Fox came and he had to eat it". I did not find in Three Billy Goats an event that indicated the resolution of the problem that the goats have at the beginning of the story, which was to cross the bridge in order to reach the greener grass. For Enrique, the story ended when the Goat threw the Troll out of the bridge and into the water, but this does not relate to the Catalyst event of why the goats wanted to cross the bridge. Consequently, I judged that the component of Problem resolution was absent in this retelling.

Enrique completed the retelling tasks of Goldilocks and The Gingerbread Man after three viewings of the story and the Three Billy Goats retelling was conducted after the second viewing.

### 8.3.3 Enrique's behaviour and attitude towards the work scheme lessons

Enrique participated in the lessons eagerly. He approached the tasks with interest and completed them without problems. He took part in the representation of the stories in short plays, he worked with puppets and clay and completed the tasks on the computer successfully. In the conversations that I had with Teresa after the lessons, she mentioned that Enrique was highly interested in the stories and the lessons in general. He particularly enjoyed the story of The Gingerbread Man and he showed this by telling the story to other children during play time.

Enrique's response to whole-class storytelling sessions and ICT-stories was of interest. Even on those occasions when other children were arguing for various reasons, Enrique remained quiet and calm in his place, waiting for the stories to start, listening

TABLE 8.1: Qualitative analysis of story grammar in Enrique's retellings

	Setting	Catalyst	Internal response	Consequence	Problem resolution
Goldilocks		and then she was sleeping		that the bear arrived to his house and	and then she woke up then it happened that the girl ran away to the street
The Gingerbread Man	and then she was making it [the Gingerbread Man]	and then well he stood up and left running	and then he <i>couldn't</i> run -and the Fox had to eat it	and then the mother was running and then the girl and the boy got there	and then the Fox came and he had to eat it [the Gingerbread Man]
Three Billy Goats	that the other day that the man [the Troll] crossed and then	he [the Goat] wanted to cross that he wanted that his friend was over there [pointing at the other side of the bridge]	he [the Goat] believed that the purple Man, the Troll was bad	and then he threw him in the water	

to Teresa or completing his work. Data extracts from field notes exemplify Enrique's reactions in relation to the storytelling sessions, the ICT-stories and the tasks.

A comparison of Enrique's behaviour pre and post work scheme lessons showed changes throughout the course from a more passive to an active and less distracted behaviour. In the pre-implementation storytelling session, I noticed that Enrique was distracted during the activities and asked for permission to leave the classroom twice in a period of 45 minutes. In the pre-implementation English lesson he was rolling on the floor while drawing the parts of the body on his piece of paper. He also kept saying that he could not label the parts of the body and Teresa had to keep encouraging him to finish his work. Once the work scheme lessons started, I noticed that attitude of Enrique towards the tasks only the first time that we worked together and after one of the lessons, Teresa also made comments about Enrique's behaviour. Enrique developed an interest for the stories and tasks. Enrique was for instance one of the children who tried hard to work with the mouse by himself during the ICT-sequencing tasks. On the day that he managed to drag the picture without my help I recorded his reaction:

*Enrique smiled a HUGE smile when he was able to drag the picture to the desired square on his own. FN:25.07.06:Wk5*

When Enrique was able to handle the mouse and drag an object on the screen, he felt pleased and demonstrated it with gestures. He wanted to be able to control the device well and interact with the software independently, accordingly he felt very pleased when the task was accomplished. Enrique's perseverance could be read as sign of interest and intrinsic motivation in completing the mouse handling tasks correctly, as has been observed in research that looks at children interacting with this device (Donker & Reitsma, 2007). Enrique's work with the contents of the story also showed his involvement in the tasks. He participated in the whole-class storytelling sessions, responding to Teresa's questions correctly.

*Teresa: What happened to the Gingerbread Man?*

*Enrique: ... he was running ...*

*FN:17.07.06:Wk1*

This version of The Gingerbread Man story does not show when the Fox eats the Gingerbread Man and Enrique was the boy who deduced what had happened to this character making use of the animations as support to meaning construction. It is worth noticing that Enrique observed this animation during the second viewing.

*When the story finished, Enrique showed a face of surprise and turned to look at the others. He looked at the other children and said "Oh! He ate it!" When Teresa asked about that, Elena said: "The Fox ate the Gingerbread Man!" Angel said, Yes! Ana said: It ate the Pastelito and Enrique said "Yes because he went like [at this point, Enrique made a gesture of licking his lips, copying the animation of the Fox at the end of the story]." FN:18.07.06:Wk4*

During a non-ICT task led by Teresa, Enrique also demonstrated his interest through constant participation. The task had the purpose of practicing the target vocabulary of The Gingerbread Man story. Teresa placed paper puppets of the story on the board and the children had to recognize the word that Teresa said. For example, she said out loud "Fox" and the first child to say "Zorro!" could stand up and take the puppet from the board. The children could also stand up and run towards the puppet after Teresa had spoken, if the child selected the right picture he could take the puppet.

*The children enjoyed this activity and were happy to have a puppet of the story. They also discussed a bit about who they really wanted to be, in case*

*they did not get the Gingerbread Man character which all of the children (boys) wanted, especially Enrique. FN:18.07.06:Wk4*

Enrique's reactions towards the story on the screen were also positive. In addition to participating in the tasks, his facial expressions showed interest and happiness.

*Isolda, Ana and Enrique smile when looking at the Gingerbread Man run. FN:18.07.06:Wk4*

*This was the first time they watched Three Billy Goats and even before the story started Enrique and Pablo were already discussing who they wanted to choose from the story characters. FN:24.07.06:Wk5*

Enrique chose the story of The Gingerbread Man as his favourite. This choice was followed by Goldilocks and Three Billy Goats. The behaviour of his Gingerbread Man retelling interestingly agrees with his choice of best story, that is, his best retelling was the one of his preferred story. Figure 8.2 shows a scanned image of Enrique's story ratings.

FIGURE 8.2: Enrique: Choice of stories

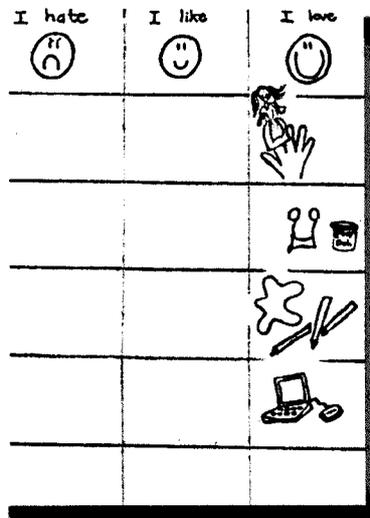


Results from the survey about how Enrique felt about the lesson's tasks show the positive view he had of them. Enrique placed all tasks under the "I Love" header as shown in Figure 8.3.

#### *Summary of findings for Enrique*

- The tasks conducted on the computer (during retelling, sequencing of stories and drawing of characters) were strong motivators for Enrique during the English lessons. He showed interest and participated willingly in the tasks, demonstrating an increased motivation towards the lessons from the second week of the course. He showed delight in sharing his "discovery" that the Gingerbread Man was eaten by the Fox with the group;

FIGURE 8.3: Enrique: Evaluation of lesson tasks



- It is plausible to relate Enrique's NSS (Narrative Scoring Scheme) retelling scores with his preference for stories. He clearly showed great interest in the story of the Gingerbread Man and his retelling of this story got the highest scores from the three retellings;
- Enrique participated actively during the whole-class storytelling sessions. He made use of the animations in the story of the Gingerbread Man to construct the meaning of this story. Repetition of the story supported the story comprehension (namely, that in the second viewing he understood that the Gingerbread Man was eaten); and
- According to Teresa, Enrique behaved better during the computer work than during other tasks.

## 8.4 Isolda: *A mi no me gusta el Inglés. "I don't like English."*

### 8.4.1 A sketch of Isolda

Isolda is a very confident girl with a soft voice and a joyful personality. When field work took place she was 4-years 11-months old. She is always in the company of Ana and has a strong influence on her. She tells Ana what to do and Ana constantly follows. They always sit together, ask to work on the same tasks and spend their play time together. This is relevant considering that the girls' behaviour was sometimes problematic because

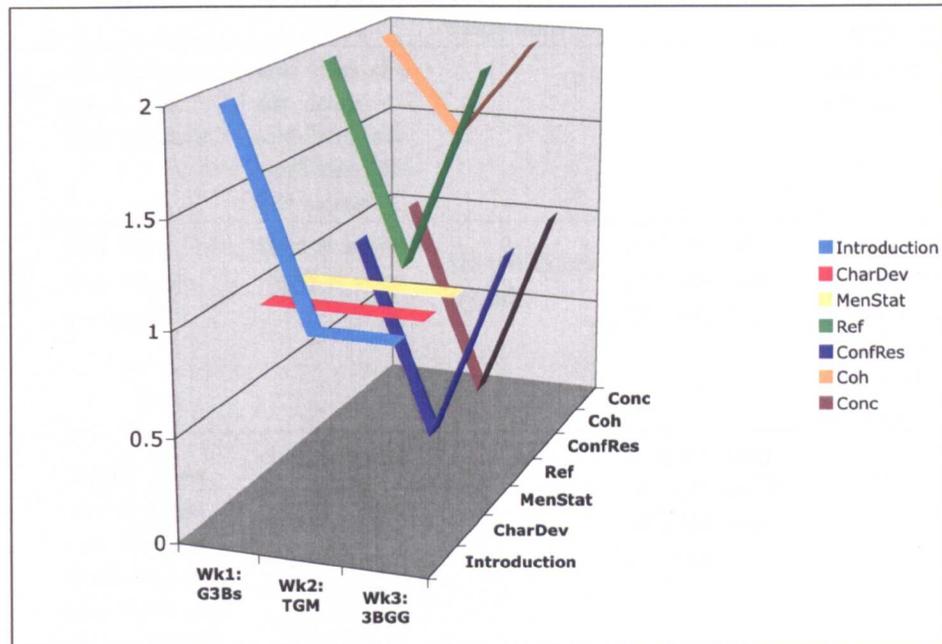
of their insistence on being together. Isolda can get easily distracted and disrupt the lesson because of her conversations with Ana. However, she can behave very well if she is interested in a task. She is very confident and was one of the first children to invite me to sit with them while watching the computer stories. Also, around Wk2 she spontaneously started greeting me in English. Every time she saw me in the classroom or outside in the playground, she would say: "Hello!". Isolda had been in the previous year's summer course in Isabel's class. This fact became useful on the first day of the implementation of the work scheme lessons implementation when Isolda suddenly said: "I don't like English." Isabel explained to me that Isolda's attitude towards English in last year's course was similar, and that this behaviour was not uncommon in the Spanish context. She added that hearing English in Spain is not customary and because of this, some people see learning it unnecessary, regarding activities such as outdoor games or learning Spanish properly before starting to learn another language to be more significant. This way of thinking reflected on children having a negative image of the English language at a very young age. Isolda enjoyed working on the computer and during one of the ICT tasks she showed knowledge of letters and the spelling of her name. She had a greater interest in the story of the Three Billy Goats.

#### 8.4.2 Development of emergent literacy skills

*NSS quantitative perspective.* An analysis of Isolda's transcriptions showed changes in the number of elements she used to tell the story of the Three Billy Goats. Isolda's scores on story grammars declined in Wk2 with the story of The Gingerbread Man and improved in Wk3. Figure 8.4 shows the behaviour of the story grammar elements across retellings. Referencing, conflict resolution, cohesion and conclusion were the NSS criteria that showed higher scores for the last retelling in comparison to those of Wk2. Isolda's scores were never higher than those of Wk1 for the retelling of Goldilocks.

*Qualitative perspective of story grammars.* When I heard Isolda express her dislike of English, I anticipated that she might not feel motivated to participate in the tasks of the lesson, including the ICT-related activities such as the retelling. This however was not the case. Isolda showed interest in the stories and her first retelling of Goldilocks presented the story grammar elements under evaluation. She was willing to tell the story and the structure of her retelling reflected this willingness. I base this assertion on the comparison of her retelling with other children's. When a child was not interested in the task, as in the case of Angel who is described below, he would not retell a story or would do so without providing rich details of it. Isolda's use of story elements showed an improvement in the second story compared to Goldilocks. The inclusion of an internal response element indicated her attempt at comprehending the story. To her, the Fox

FIGURE 8.4: Isolda: Story grammar pattern of change



and the Gingerbread Man became friends and the Fox did not eat (could not have eaten) the Gingerbread Man. This reaction was interesting because during the second viewing of the story, in the whole-class session, Enrique realised that the Fox had eaten the Gingerbread Man and told everybody out loud. Isolda's version of the story however, does not reflect what Enrique had said. She decided that the characters were friends and she expressed this thought. Isolda's coherent construction in the retelling of the Three Billy Goats can be observed in the sequence of the Catalyst element. She said: "*first goes the Little Goat then the Medium-sized Goat then the Big Goat*". The number of descriptors used to situate the story was larger in comparison to the other two retellings. In Isolda's case, the problem resolution was also not clear since she did not mention that the goats were able to cross the bridge after having got rid of the Troll. In spite of the omission of the Resolution element, there is an important aspect in her retelling. Images from the story showed a castle in the background on the green grass side of the bridge. In the beginning of her retelling, Isolda described a castle and I situated this excerpt under Setting since it indicates a place from the story. In a conversation that I had with Isolda during playtime, she talked to me about the story and said that the goats wanted

TABLE 8.2: Qualitative analysis of story grammar in Isolda's retellings

	Setting	Catalyst	Internal response	Consequence	Problem resolution
Goldilocks	she went into the Little Bear's house	and then she sat down - and [she] ate -and then she fell asleep			and then she got up
The Gingerbread Man	well that they make a puppet	then it leaves -then it runs	they become friends	and then it goes towards the water	eh mmh that mmh they become friends [who?] the Fox with the puppet
Three Billy Goats	yellow grass -green grass -sky -a shepherd -eh mmh and there was also well mmh a a aaa castle -eeh a bridge -and a river	eh first goes the Little Goat -then the Medium-sized Goat -then the Mediu(m) the Big Goat		it threw him -that threw it into the water pum!	

to cross the bridge to get to the castle on the other side. Although her comment cannot be used to analyse her retelling, as it was made outside the task, it exemplifies another of Isolda's attempts to construct meaning from the story; also, it indicates the reason why she used "castle" as an introductory element in her retelling; and it indicates that she had in mind a resolution of the story, even if she did not mention it during the retelling task. A possible explanation for Isolda's idea of the goats' intentions is her friendship with Ana. As described below, Ana also believed that the goats wanted to get to the castle. The idea shared by both friends might be indicative of the conversations that they had about the story. Thinking of Isolda's personality I am inclined to believe that it was Isolda's influence on Ana which led the girls to conclude the goats' intentions. However, it was Ana who included this notion as the Resolution of her retelling as can be seen in her results below.

Isolda completed the retelling task of Goldilocks and The Gingerbread Man after three viewings of the story and the retelling of the Three Billy Goats was conducted after one viewing. The extracts from her retellings categorised under their corresponding story grammar elements are shown in Table 8.2.

### 8.4.3 Isolda's behaviour and attitude towards the work scheme lessons

At the end of the course, Isolda was showing a positive attitude towards the lesson tasks. She concentrated during the storytelling sessions and participated in all the activities with a smile on her face. However, as I described in Isolda's profile, this behaviour was not as positive at the beginning of the course. In terms of the objectives of the study, changes in Isolda's response towards the class could be an indicator of the importance of approaching young language learners with methods that are engaging and motivating for them. Isolda changed her attitude from negative to positive without changing the context or the foreign language being taught.

Entries from the field notes that provide data regarding Isolda's attitude further support the above hypothesis.

Isolda's interest in ICT was observed during the task involving the song and during the whole-class storytelling sessions. Isabel and Teresa decided not to give the children the lyrics to the songs. While they were playing, Teresa gestured and represented the lyrics with gestures. Isolda's interest in this task was evident.

*Isolda, the girl who in the first class said: "I don't like English" asked to listen to the song 2 times and repeated the movements that Teresa did while trying to repeat the song. FN:12.07.06:Wk3*

Isolda's interest in ICT was also observed during whole-class storytelling sessions. In the viewing of the story of Three Billy Goats, she preferred to look at the pictures of the story on the computer screen instead of listening to details of the story from Teresa.

*Angel, Enrique, Isolda and Ana all stood in front of the computer while Teresa was explaining details of the story to the other children. FN:25.07.06:Wk5*

The facial expressions of Isolda when looking at the stories indicate enjoyment of the stories, as for instance The Gingerbread Man.

*Isolda, Ana, and Enrique smile when looking at the Gingerbread Man run. FN:18.07.06:Wk4*

Isolda started using English during the lessons and outside the classroom. This spontaneous behaviour was marked considering her feelings towards English expressed in the first lesson.

*Children seem to start being responsive to English as can be seen in Isolda's greeting me in English every time she comes to work on the computer and in the playground. FN:25.07.06:Wk5*

In addition, her remarks regarding how she enjoyed the English lessons so much illustrate her change of attitude. In my notes I recorded:

*Isolda seems to be enjoying the lesson more. She invited me to sit next to her to view the story and when I did, she made a comment about her liking English very much. FN:26.07.06:Wk5*

An interesting finding related to the work with Isolda resulted from the ICT-task of drawing a story character. Through her drawing I was able to see how children may be more aware of the written text than we know. This is the account of the interaction with Isolda. After finishing a drawing of one of the bears from the story of Goldilocks I asked the children to write their names on the screen using the mouse (I observed Teresa asking the children to write their names on their work and thought it to be an interesting task). I offered assistance with the handling of the mouse to simplify the task. When Isolda and I wrote her name, the word "Isolda" was displayed on the screen.<sup>1</sup> She looked at the word carefully and said that the word was not her name. She repeated her name very slowly, so I assumed that she thought I had missed a letter. I tried once more spelling out her name and still she said it was wrong. She then grabbed my pencil and on my notebook she wrote her name in capitals, *ISOLDA*, and said: "This is my name." This interaction showed me that a child as young as Isolda could have clear notions of written text and hence found that limiting the opportunities of the children to interact with written text in the foreign language might not be necessary. The potential gain that children can obtain by looking at the text would be limited if during the lesson language is controlled on the basis of the undeveloped literacy skills of the children in Spanish.

Figure 8.5 shows the story choices for Isolda. Her favourite story was Goldilocks, a tale familiar to her. From the qualitative perspective, her retelling of this story was not the most detailed of the three. Quantitatively, she scored high in this retelling and interestingly, her second best retelling under this perspective was her choice of second best story.

Results from the survey about how Isolda felt about the lesson's tasks show the positive view she had of the tasks. Isolda placed all tasks under the "I Love" header as shown in Figure 8.6.

---

<sup>1</sup>This is not the girl's real name and although presenting here the scanned image of her real writing would have been highly useful to illustrate my argument, this was not possible for confidentiality reasons.

FIGURE 8.5: Isolda: Choice of stories



FIGURE 8.6: Isolda: Evaluation of lesson tasks

I hate	I like	I love
		
		
		
		
		

### *Summary of findings for Isolda*

- The tasks conducted on the computer raised Isolda's interest in the English lessons. Her overall attitude towards learning English, as was observed on different occasions, changed from Weeks 3 to 5 (see the remarks that showed her disposition towards learning English in 8.4.3);
- During the task of drawing the character for the story of Goldilocks and the Three Bears, she showed early knowledge of written language through the spelling of her name. Isolda recognised her name written in capital letters and judged the name written in lower case letters as "incorrect" (See 8.4.3). She showed this by asking for a pencil and writing her name on my notebook without any assistance, after I had failed twice to write her name in a way that she could recognise;
- Isolda's retellings followed a pattern of decreased scores in Week 2 and an improvement in Week 3. It could be hypothesised that this was due to her familiarity with

the story of Goldilocks (initial scores), and her going through a process of understanding how to make sense of a story viewed on the computer (decreased scores) and finally a better retelling once the process of understanding ICT-stories had been experienced; and

- The interest that Isolda showed during the whole-class storytelling session was moderate. She, however, showed interest towards doing the various individual tasks on the computer.

## 8.5 *Ana: Que querían llegar al castillo. “That they wanted to get to the castle.”*

### 8.5.1 A sketch of Ana

Ana is a quiet girl and according to Teresa, slightly shy. At the time of the English course, she was 4 years 7 months old. She does not talk much and her speech in Spanish is still developing, as can be noticed in the pronunciation of some phonemes. Sometimes it is necessary to ask for clarification in order to understand her. Based on comparisons with children’s craft work, Teresa reported that she found Ana’s motor skills to be less developed than the rest of the class. After the first week of fieldwork, I got used to her speech and was able to understand her without problems. Her drawings and work with clay reflect a slower rate of development of fine motor skills compared to that of her classmates.

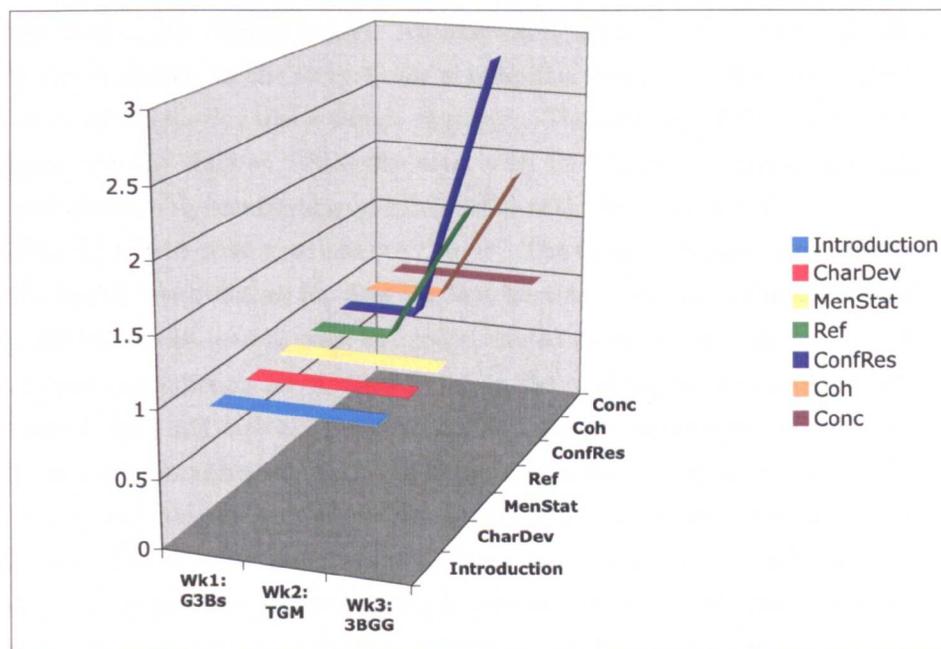
Ana is usually well behaved. She is always with Isolda and the times that she is not able to sit next to her she is really unhappy, to the point that she does not want to start any work until she sits next to Isolda. On one occasion however, Teresa was able to convince her to sit away from Isolda in order to solve a seating problem involving other children.

Ana can go off task easily but once you get her attention, she shows interest and completes her work. I observed that Ana showed interest in the three stories of the course, but she was not particularly inclined to any of them. The same can be said about the lesson tasks. I observed Ana working with mild interest on all of the tasks. For instance, she did not ask to be any character during the role-play or ask to work with clay or watch the stories again. She was content completing the task in turn and moving on to the next task as willingly as going for water games when the lesson was over.

### 8.5.2 Development of emergent literacy skills

*NSS quantitative perspective.* An analysis of Ana's transcriptions showed changes in the number of elements she used to tell the stories. Patterns of change in the use of story grammars show that her scores improved in Wk3. Figure 8.7 shows the behaviour of the story grammar elements amongst retellings. Referencing, conflict resolution and cohesion were the NSS criteria that showed higher scores for her last retelling.

FIGURE 8.7: Ana: Story grammar pattern of change



*Qualitative perspective of story grammars.* Ana's retellings show consistent improvement throughout. As can be seen in Table 8.3 (p. 153), Ana increased the number and improved the quality of the story grammar elements that she used. For the story of Goldilocks, she referred to the main character as *the Bear*. She then said that *it wanted food* thus indicating the Catalyst of the story, the event that initiated the Conflict. Then Ana indicated that Goldilocks *wanted-felt* to sleep representing with this an Internal intention from the main character. The parents came and the father woke *him* up. The Resolution to the conflict of this story by Goldilocks, represented in the moment that Goldilocks leaves the Bears' house, was absent in this retelling. The next two retellings

improved in the number of details provided, and even if the retelling of The Gingerbread Man does not have elements of Internal response, there is a clear notion of the story. First, *[the Woman] was making the Pancake* then the Catalyst event begins when the Gingerbread Man *was running*. The Consequence of the Gingerbread Man running is that he *went to the lake* and the Resolution of the story was that he got eaten by the Wolf, expressed by Ana in the excerpt *it ate it* translated from the Spanish phrase “se lo comió.” The retelling presents elements that provide a more complete story schema than the retelling of Goldilocks. In the last retelling, elements from Setting can be identified when Ana presents the main characters of the story *the Little One* from Spanish “la pequeña”, *the Mom* which represented in Ana’s story the medium-sized Goat and *the Soldier* (the Troll in the original story). An interesting aspect in Ana’s retelling with relation to the characters of the story is her assumption that the medium-sized Goat, as in the story of Goldilocks, was a female character. The meaning of “billy goat” was not discussed with the children during the work with the Three Billy Goats story. As a result, and presumably establishing a relationship with the story of Goldilocks, Ana assumed that the middle-sized goat was the “Mum”. The Catalyst begins with the goats crossing the bridge, even though for Ana the first goat to cross was the medium-sized one. Ana interprets the reasons why the goats wanted to cross the bridge as hunger and wish to get to a different place, represented in the retelling by the extracts of *it’s that they were hungry* and *they wanted to get to the fountain* respectively. A connection between hunger and fountain can be made because in a fountain goats would be able to drink water, and considering that feeling hungry may encompass eating as well as drinking, it would follow that the goats want to go to the fountain to drink water because they are hungry. This type of mental connections may exemplify Ana’s attempts to connect the events in the story in a logical manner. The Consequence for the story’s Catalyst event takes place when *the Father fell the Soldier into the water* and finally, in Ana’s story the goats managed to *get to the castle*, this wish being a second reason for the goats to cross the bridge to get to the fountain and to the castle.

Ana completed the retelling task of Goldilocks and The Gingerbread Man after three viewings of the story and the Three Billy Goats retelling was conducted after the first viewing.

### 8.5.3 Ana’s behaviour and attitude towards the work scheme lessons

Ana showed moderate interest towards all of the lesson tasks. Apart from the tasks where she could work with Isolda, she did not express or show particular interest for the work with clay, drama, the stories on the computer or the retellings. She paid attention to the stories but could get distracted easily because of her sitting next to

TABLE 8.3: Qualitative analysis of story grammar in Ana's retellings

	Setting	Catalyst	Internal response	Consequence	Problem resolution
Goldilocks	the Bear	it [the Bear] wanted it wanted food	that that all of the ... [the girl] <i>wanted-felt</i> like sleeping	that the Parents came -the Father woke him up	
The Gingerbread Man	[the Woman] was making the Pancake and the other when it was the [inaudible] he stayed	- it was running - the Boy and the Girl have seen a puppet		the Puppet went to the lake	it ate it
Three Billy Goats	the Little One - the Mom - the Soldier	first the mom crossed	- and so it happened that [...] it's that they were hungry - they <i>wanted</i> to get to the fountain	that the Father <i>fell</i> the Soldier into the water	that they got to the castle here

Isolda. For example, during the story of *The Gingerbread Man*, I recorded in my field notes a question that Ana asked which could be interpreted as a lack of understanding derived from low interest on the story.

*Teresa asked: "What happened to the Gingerbread Man?" (looking at Enrique). Enrique responded "...he was running ..." and then Ana asked "...and the bear?" (making references to the characters of Goldilocks. In response to Ana's question Teresa replied "There are no bears in this story.")*  
 FN:17.07.06:Wk4

Since this was the first time for the children to work with *The Gingerbread Man* after having viewed *Goldilocks* four times, I interpreted Ana's reference to the bear as confusion. I have to recognise that it might have been confusion of story or confusion in the naming of the characters of *The Gingerbread Man* as there is a cat and a dog, and there is the Fox. Ultimately, it showed Ana's sense of distraction.

There were also occasions where Ana paid attention to the stories and tasks, and her participation provided evidence for this notion. My field notes record examples of this attitude:

*When the story finished, Enrique showed a face of surprise and turned to look at the others. He looked at the other children and said "Oh! He ate it!" When Teresa asked about that, Elena said: The fox ate the Gingerbread Man! Angel said, Yes! Ana said: "It ate the Pastelito" and in her face I could observe her understanding of the story. FN:18.07.06:Wk4*

*Ana and Elena replied correctly to Teresa's questions about where Goldilocks slept. FN:13.07.06:Wk3*

Figure 8.8 shows the story choices for Ana, which place Goldilocks as her favourite story followed by The Gingerbread Man and the Three Billy Goats. Interestingly her scale of stories was not the same as Isolda's, and considering Ana's closeness to her, these results show her individuality as her responses were not influenced by those of Isolda. Quantitative results of Ana's retellings showed an increase in three NSS criteria for the story of The Gingerbread Man, which was Ana's second choice for best story. In spite of being her favourite, her retelling of Goldilocks did not present all of the story grammar elements found in the other two retellings. I found Ana's case to be more inconclusive than others in terms of the results from her retellings set against her story choices. However, she produced interesting elements for the Resolution of the Three Billy Goats story even though she placed this story as her last choice of preference.

FIGURE 8.8: Ana: Choice of stories



Results from the survey about how Ana felt about the lesson tasks show her positive views on them. Ana placed all tasks under the "I Love" header as shown in Figure 8.9.

FIGURE 8.9: Ana: Evaluation of lesson tasks

I hate	I like	I love
		
		
		
		
		

#### *Summary of findings for Ana*

- Ana's interest in the lesson tasks, whole-class storytelling session and individual computer tasks, based on my observations, was mild, even though she rated all of the lesson tasks under the "I love" header. It could be said that her attention was more focused on her friendship with Isolda than on the English lessons (See 8.5.1). Amongst the child participants, she was the girl whose language and motor skills were the least developed (Teresa discussed this aspect with me after comparing Ana's work with play-doh with the work of the other children in the class. I was able to observe this in Ana's speech) (See 8.5.1);
- Ana showed understanding of the stories during the storytelling sessions through gestures and comments;
- Ana was a child who improved the scores for her retellings only until Week 3. Her retelling of Three Billy Goats Gruff included elements for all the components of the story grammar model of Stein and Glenn (1979). She provided reasons for the goats to cross the bridge that can be connected to early understandings of cause-effect relationships (namely that they were hungry and that they wanted to get to the fountain) (See 8.5.2). Finally, she gave to the characters of the goats the same family relationship that the three bears of the story of Goldilocks have, and so she talked about Father Goat, Mother Goat and the Little Son, making probable use of intertextual connections between the stories; and
- Even though the best retelling score for Ana was for the story of the Three Billy Goats, in her choice of stories, this was her least favourite of the three. Her

favourite story was Goldilocks and I hypothetise, although without evidence, that this might have been related to her being a girl and the story having a female protagonist.

## 8.6 Angel: *Es que no me la se. "It's that I don't know it [the story]."*

### 8.6.1 A sketch of Angel

Angel is a very active boy aged 4-years 3-months when field work took place. He runs around the classroom whenever he has a chance. His behaviour is usually disruptive and Teresa calls him to attention often. He usually works hastily and does not give much care to the tasks that he has to complete. On one occasion, before the trial of the work scheme lessons started, Teresa asked the children to draw their faces on a large piece of paper and label the parts of the face on their drawings (eyes, mouth, nose and ears). Angel started his work but the outcome was a torn piece of paper. The problems that he has are connected to his continuous playing with Pablo. At the same time, he listens attentively when you talk to him and look at him directly into his eyes. In my opinion, he uses his energy to move and play. Teresa thinks that he likes to play too much but that he follows instructions better than Pablo.

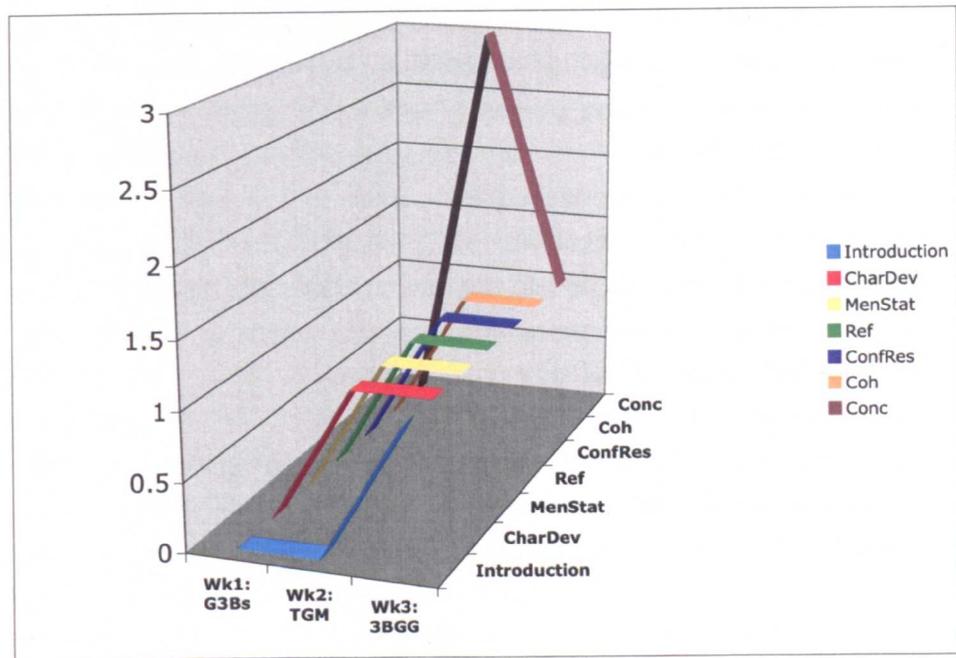
Despite the problems with Angel's behaviour, he is able to work properly if the activity interests him. It is difficult to determine which story Angel liked the most. From what I observed, he was more interested in the Three Billy Goats, but he also talked with interest about The Gingerbread Man. The story that seemed to least interest him was Goldilocks. Although there was no evidence which indicated that his preference was related to the fact that Goldilocks has a female protagonist, there may be a relation between gender and story preferences. Such a relation may be drawn from the choices of favourite stories made by the children in the class. As can be seen in Figure 7.4 (section 7.4 of Chapter 7), only one boy, Manuel, chose Goldilocks as his favourite story while the other 4 boys in the class selected the Gingerbread Man or the Three Billy Goats as their preferred choice of story.

### 8.6.2 Development of emergent literacy skills

*NSS quantitative perspective.* An analysis of Angel's transcriptions showed changes in the number of elements he used to tell the stories of The Gingerbread Man and the Three Billy Goats. Angel's pattern of change in the use of story grammars revealed

that his scores increased in Wk2 and remained almost the same in Wk3. Figure 8.10 shows the behaviour of the story grammar elements amongst retellings. Introduction and his conclusion were two elements that differed from the other five. His introductions improved until Wk3 and conclusion, in spite of having increased three points in Wk2 decreased two points in Wk3. It is worth noting that even after the decreased scores, the conclusion remained higher than in Wk1, which indicates that Angel provided an ending to the story of the Three Billy Goats in his third retelling when he had not done so in the first retelling. The scores for the criteria of character development, mental states, referencing, conflict resolution, and cohesion increased in Wk2 and remained at this level in Wk3.

FIGURE 8.10: Angel: Story grammar pattern of change



*Qualitative perspective of story grammars.* Table 8.4 shows extracts from Angel's retellings. On the Goldilocks story Angel did not want to continue telling the story after the first sentence where he said that there was a bear in it. I decided to use this piece of data because of Angel's response. He did not say that he did not remember the story. His response after I asked him to retell the story was "I don't know the story". This remark is not consistent with what I observed in the classroom when Teresa asked

the children whether they knew the story of Goldilocks and all the children responded affirmatively. Angel's response could have been related to an unwillingness to participate or to being unfamiliar to the task of retelling a story. Regardless of the reason, the next two retellings were an improvement to this attitude and his retellings showed this by presenting a range of story grammar elements.

In the story of The Gingerbread Man, Angel recognised the main character and produced the Catalyst element by indicating that the Gingerbread Man *runs*. In the other excerpts categorised as Catalysts, Angel mentioned that the grandparents and the cat chase the Gingerbread Man, noting two more characters of the story. I did not recognise them as Setting elements because they were not mentioned in isolation or at the beginning of the story. They were part of a sentence that represented what was happening, and not where it was happening or when, which would have been an indicator of proper use of elements that describe the setting of the story. The Consequence of the Gingerbread Man's attempt to escape was indicated by Angel in the phrases *it crosses the water* and *it gets wet*. Angel's Resolution to the story presents an alternative ending to it. In Angel's understanding of the story, the Gingerbread Man *melts* and, as a result, it is absent in the last images of the story. I found Angel's attempt at comprehension interesting, because he followed the logic of what could happen to a biscuit if you bathed it. Moreover, I conducted this retelling task with him on the third viewing and from my field notes, there is an entry of Angel understanding that the Fox had eaten the Gingerbread Man after Enrique realised that this is what had happened. Perhaps Angel also understood this fact, but it was better to believe that the Gingerbread Man had "melted" before recognising that it had been eaten. Angel's retelling of Three Billy Goats presents a Setting element *that a goat came* following the same notion of his two previous retellings, that is, including the description of one main character. The Catalyst to the story was indicated by the phrase *that it didn't let it cross* and this action led to the Consequence of the story when *the big Goat throws it into the water*. In a very simple story line, Angel reconstructed the plot of Three Billy Goats.

Angel completed the retelling task of Goldilocks after the fourth viewing and The Gingerbread Man after the third. The Three Billy Goats retelling was conducted after the first viewing.

### 8.6.3 Angel's behaviour and attitude towards the work scheme lessons

Angel was an interesting participant in my study. When I observed him, he was usually distracted and the teachers found his behaviour difficult to manage. He usually paired with Pablo to talk or run around the classroom and Teresa repeatedly called them to

TABLE 8.4: Qualitative analysis of story grammar in Angel's retellings

	Setting	Catalyst	Internal response	Consequence	Problem resolution
Goldilocks	there was a bear	I don't know the story			
The Gingerbread Man	the Gingerbread Man	it runs [the Gingerbread Man]-the grandparents chase it - the cat chases it		it crosses the <i>water</i> - it gets wet	it melts
Three Billy Goats	that a goat came	that it didn't let it cross [the Troll didn't let the Goat cross the bridge]		the big Goat throws it into the water	

order. One of the times that he came to work with me his hands and both legs were covered in pictures and words in pen that he had drawn during the previous activity. His interest in the tasks varied from attentive to disinterested and I observed this on different occasions, such as the following:

*Most of the children were attentive to the story. They were listening to it intently as their gazes were fixed on the screen. Three children are distracted and Pablo and Angel are two of them. Teresa is usually calling Pablo and Angel to behave. I have observed this and Teresa has made comments about this as well. Because of their behaviour, Teresa was repeatedly calling the two names of the children like "Pablo and Angel." This occurred so frequently, that on one occasion, Teresa called Pablo to participate in one task and just called his name "Pablo." Isolda then finished for Teresa the phrase that she was used to hear, so she said out loud: "...and Angel" using the same voice intonation as Teresa. FN:10.07.06:Wk3*

*Teresa asked them questions about the story of Goldilocks and Angel, usually distracted with Pablo in some way, got interested and responded. FN:13.07.06:Wk3*

Angel's retellings were not very detailed; however, as the course progressed, he showed interest during the viewing of the stories, imitating the actions of the characters or anticipating the episodes of the stories, acting them out in front of the class, as seen in the following incident:

*Everybody was really attentive to the story and Angel, before the Goat threw the Troll, stood up and started showing and telling the others how the goat was going to use his head to throw the Troll over the bridge. FN:25.07.06:Wk5*

Angel's choice of stories used in the course differed from the choices made by the other children, except for one. The story choices of Pablo and Angel were the same. Angel chose the Three Billy Goats as his favourite story, followed by Goldilocks and the The Gingerbread Man, as shown in Figure 8.11.

FIGURE 8.11: Angel: Choice of stories

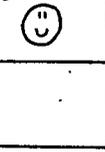


In Angel's case, his choice of stories is not consistent with the scores of his retellings, that is, his best retelling is not the one for the story of the Three Billy Goats. On the contrary, the only retelling where Angel produced a Resolution element was for the story of The Gingerbread Man, the last story in his list of favourite choices. With the exception of the Introduction and Conclusion NSS criteria, which showed an increase in Wk3 and Wk2 respectively, Angel's scores remained constant in the last two weeks. In spite of these results, there are interesting elements in his retellings such as his efforts to construct meaning from the ending of The Gingerbread Man.

An interesting event that I recorded in my field notes took place at the time of Angel responding to his survey. Teresa encouraged Angel to evaluate the stories without listening to Pablo's preferences. She observed Angel trying to look at how Pablo was evaluating the tasks, so, at the moment of asking Angel for his choice of stories, she asked him to select those stories that "he" liked best. When Angel made his own choices with respect to stories, Teresa congratulated him.

Angel was one of the two children who placed all tasks but one under the "I Hate" header as shown in Figure 8.12, Pablo being the other boy. Like Pablo, Angel did not evaluate the computer task negatively. I found these results from the survey to mirror Angel's behaviour during the lessons. Angel participated in the lesson but got easily

FIGURE 8.12: Angel: Evaluation of lesson tasks

I hate	I like	I love
		
		
		

distracted, except on the computer tasks where he could stay sitting in his chair listening and participating throughout.

#### *Summary of findings for Angel*

- Angel's behaviours during the lessons improved, as observed by Teresa, when the work scheme lessons were introduced. He showed interest during the whole-class storytelling session, sometimes laughing and, others, imitating the characters of the story;
- Retelling scores for Angel improved in Week 2 and remained constant in Week 3. The first improvement was not related to a better retelling, but to the fact that he was willing to provide a retelling at all, given that in the first retelling task, Angel said he was not familiar with the story of Goldilocks and therefore did not provide a retelling (See 8.3). Angel's comment was interesting as my field notes indicated that Teresa asked the children on the first day of the English course whether they knew the story and they all, including Angel, reported being familiar with it (See 9.2). Interestingly enough, his scores did not decrease between Week 2 and Week 3, which could indicate a level of interest over the stories that might have influenced his willingness to participate in the lesson tasks and, in particular, in the story retellings. Finally, Angel's explanation of the Gingerbread Man melting in the lake to justify its absence at the end of the story showed a degree of originality since none of the other children in the class made this deduction. This showed how Angel made use of previous knowledge to construct meaning from a story;

- Angel's best choice of stories contained male protagonists, suggesting that he probably identified with male characters. His unwillingness to retell the story of Goldilocks might have been more related to the fact that the story had a female protagonist than to his remembering the story or his understanding of the retelling task itself; and
- It was interesting to see that Angel responded to his survey independently from Pablo, an attitude that Teresa found to be positive given the strong relationship of the two boys. She congratulated him for expressing his views regardless of Pablo's opinions (See 8.6.3).

## Chapter 9

# Aggregated findings

### 9.1 Overview

The purpose of this chapter is to provide an account of the findings of the study, taking into consideration all the participant children, the teachers and the data collected from all the research methods used during the implementation of the work scheme. The term “aggregated” in the title comes from the notion of looking at all the participants working together during the lessons and presenting the findings from the whole class and from the views provided by the teachers. I considered that presenting an overall idea of the results was valuable to the findings of the study based on the notion that in the practice of education, it is necessary to study learners as individuals as well as part of a group. The chapter presents first the views of the participant teachers and head teacher on the implementation and success of the work scheme. This is followed by the effects that using ICT-stories in the teaching of English had on the group of participant children as observed during the whole-class storytelling sessions and during individual ICT tasks.

### 9.2 Assessing the effectiveness of the work scheme lessons

Findings from the interviews conducted with the participant teachers revealed that it was possible to develop and implement work scheme lessons if certain aspects of provision were considered and resolved. These aspects included a careful selection of stories and materials, the possibility of adapting TBL as a language teaching approach, the teacher’s professional development, and the provision of technical support provided by schools in the preparation and implementation of ICT-related projects. Findings from the interviews illustrate how the participant teachers brought up these issues. Data from interviews are presented in theme-based summary tables from the analytical framework

TABLE 9.1: ICT linked to learning and development

	Isabel	Teresa	Cristina
Advantages of the use of ICT with young learners	Creation of learning opportunities	Children's attraction to technology	Stimulates imagination; Children need it
Disadvantages of the use of ICT with young learners	None identified	Proper use of the equipment	Not discussed
ICT as enhancer of learning environment	Motivation; Impact on learning	Motivation	Technology promotes learning

of the interview data (See Chapter 7 on p. 117). For presentation purposes, findings shown in the tables are summarised by means of labels which represent the overall idea of the translated excerpts from the interviews.

*Transcription conventions.* The letters "T", "I" and "C" in the excerpts stand for Teresa, Isabel and Cristina respectively. Ellipses in the middle of a sentence indicate pauses from the participants during the interview. Because of the characteristic of Spanish as a pro-drop language resulting in subject omissions, there are sentences that would not be properly understood in English if the conversation had been translated literally. Hence in those cases, I added in brackets the subject that the participant was referring to. I must note that every effort has been made to ensure that the translations were accurate and detailed (See p. 73 in Chapter 3.9). The original interview transcriptions in Spanish corresponding to the excerpts used in this chapter are found in Appendix E, labeled "E" followed by a sequential reference number.

#### *Learning and development*

Table 9.1 presents the summarised aspects that the teachers interviewed thought to be relevant when ICT was used with young children. I first explored their opinions on the role that technology played as enhancer of learning contexts. Isabel, Teresa and Cristina agreed that the use of technology offered advantages for the education of young children. This is illustrated in Isabel's statement:

*I: Audio devices? that play ... they give an opportunity to mmmhhh ... that children hear different voices and emphases mmhhh ... well accents, I don't know, different [accents] other types of songs ... then there is the audiovisual subject the television right? then they have the ability ... the power to attract [children's] attention with the images that are always attractive to children.*

*And then we've got to talk about computers. Well it's really broad right? The computers have the advantage of adding audio to images, the child interacts, can act, can touch can mmhhh ... manipulate right? (E1).*

Similar advantages were identified by Teresa in the following quotes:

*T: Well I think that the language itself what it is to listen to the foreign language directly because I can speak a foreign language but I don't speak in the same way that those who speak the language [native speakers] what you hear the sound in the cassettes or videos, which is English directly.*

*T: when I teach I have the blackboard, and the blackboard. There's just the blackboard. Then, of course, many times because they are young children you cannot take any moment to stop and write on the board because in a second everything goes crazy.*

*T: Well, advantages I see ehh young children's curiosity is sparked by new technologies (E2).*

When asked about the disadvantages derived from the use of ICT with young learners, Isabel and Cristina did not find the technology to be negative for the children. On this respect, Isabel commented:

*I: Problem? no ... on the contrary. I think it's good for the development of children especially in these times, right? because you have to offer them ... comprehensive training and encompass new technologies [technologies] are ... part of that comprehensive training right? (E3).*

However, Teresa pointed out challenges brought up by the inclusion of technology in formal educational contexts. She raised concerns related to the cost of technology and emphasised the need to have more than one teacher working simultaneously with young learners. The following interview extracts illustrate her concerns.

*T: classroom conditions concerning power points, right? Electricity, tables layout, that there is enough space to arrange the computers.*

*T: that nothing happens to the device.*

*T: there are schools with insufficient technological resources to provide for all the children ...*

*T: to be aware at the time of restricting, do not leave the computers and say [to the students] there they are [the computers] browse the Internet that*

TABLE 9.2: ICT and professional development

	Isabel	Teresa	Cristina
Planning	Time consuming	Time availability	Not applicable
School support	Lack of strategies	Unknown	Training requirements
ICT-use expectations	Expected without support	Unknown	Expected

*cannot be done because besides the many important things in there, there are also web pages that must be restricted when working with children, young or adolescents.*

*T: I think it would be very difficult in a school course for example, a teacher with a group of children, 3 and 4 years old. Here for instance we have 10-11 children, right? But when you are in school you have a larger group of children because in this situation it was the both of us but I think two people would be required or plan it in a way that it could work I don't know more teachers, more computers (E4).*

Cristina used her own experience as learner to exemplify the advantages of using a computer in the English lesson. She argued that technology could make learning languages meaningful for the children, allowing them opportunities to learn it incidentally and naturally. This is apparent in the following quote:

*C: Well the truth is that the use of the computer for English is a way to foster children to like it like something new. That idea of the verb to be ohh that was hoorr... but horrible horrible horrible, but that is over. It can be a way for children to like it [English]. You have everything and you learn. It could be how to write it, or how to weave words, wow it is something else. And I see it as very practical like when the children are learning to read. It is not the same to teach m and ma than to teach your child various things and ways to make words and before you realize it the child knows how to read. Well in English it's the same, through stories, through the computer, I see that children start using many words and they by themselves start using phrases and that they do not have to say well I was using the present or the past or [the] can Horrible. The way I learned English was horrible (E5).*

#### *ICT and professional development*

Table 9.2 presents the teachers' views on what they think would be required if they worked with ICT in their classrooms. The three of them agreed on the need to receive

formal training on the ways to exploit technology to support their teaching practice. Isabel described being aware of government's provision of equipment in ICT-centres, however, unclear strategies for their use seemed to create confusion and as a result, in her view, these resources were not being exploited in full. They also recognised that government strategies to use ICT in the classroom have not been clearly established and as a result the mechanisms for the inclusion of technology in the early learner classroom are unclear. On these matters, Isabel commented:

*I: Now for example mmhh also the Ministry of Education is being ... is putting forward, I mean projects related with technology are being rewarded. People who create educational materials to work with students mmhhh ... with computers. Because it happens, that mmhh ... they're providing the centres with plenty of computers, and many more things.*

*Mmmhh ... The problem is precisely that there are no defined strategies of any kind. The ... let's see, here in Spain right now [the country] is somehow trying to promote the use of computers, ICT centres are being created and centres DIC I do not know if you have heard of these. There are the ICT centres and well I confuse both of them. Some are ... I believe that the ICT are ehhhh ... mmhh the basic feature is that they must have two computers ... a computer for every two students, yes that's it. And the DIC centres are those that ... do not focus so much on the computer I mean in the ICT centres children would not have textbooks, all would come from the computer right? And with the DIC centres what happens is that everything is, it's like everything's very audio-visual right? the staff room there is perhaps a large plasma screen eh not ... to be able to make presentations everything very digital right? What is happening is that, I think that there is investment, because there is investment but in some centres, but then, on the one hand teacher training fails to take place right? because I for example in the centre there is not ... for example in the centre where I work this year there is no idea ... Computer ... it is very complicated ... to implement a programme that includes eh, makes use of computers (E6).*

With respect to training requirements Teresa was of the opinion that student teachers needed to have formal preparation on ways to use ICT. She said that there are teachers who are not keen to use ICT due to having taught for years without technology, and so student teachers should receive compulsory ICT training. She said:

*T: I believe so yes. I think that the people who are now working in education should already have it [ICT training]. Because there's the controversy of*

TABLE 9.3: Current use of ICT in the classroom

	Isabel	Teresa
School support	Importance of technical support	Flexible classroom layout; requirements of staff and provision of technical support
Experience in the classroom	Webquests, CD-ROMs	CD-ROMs

*teachers who have taught for years in traditional ways and who are against making use of the new technologies ... who refuse to put into their curriculum new technologies. But of course, they perhaps have the excuse that they have been their traditional way of teaching their lessons that have everything already worked out so they are not willing ... they refuse to let new technologies enter [the curriculum] ... but those of us who are in training who are being trained we should already have preparation in technology you know? we have now, we are now even should have. You know? Because we want to force these ideas to those who have their minds set [on the use of technology] ... but if we don't give in a little now that we are just beginning [teaching], well it'll be much harder with the others ... I think (E7).*

#### *Current use of ICT in the classroom*

The participant teachers' experience working with ICT was varied. Isabel was the person who had experience of using materials from the Internet to support her lessons. She had set up a project of WebQuests and was keen on using other technologies including CD-ROMs and DVD-ROMs. Her experience with ICT in classroom projects was both positive and negative, however, this did not deter her from trying out other projects. The negative experience that she had with projects involving technology, which took place when she had prepared a song for her students and the speakers of the computer failed to work, made her value the importance of having access to technical support within the school and with an alternative traditional (non-ICT) teaching plan, that might be used instead. Table 9.3 shows the experiences of Isabel and Teresa regarding this aspect.

#### *The work scheme within the school*

Aspects related to how the teachers viewed the use of the work scheme in the school are summarised in Table 9.4. The teachers used reactions observed in the children to illustrate their points. Again, there was agreement about the advantages of teaching

TABLE 9.4: The work scheme within the school

	Isabel	Teresa	Cristina
Use of ICT-enhanced stories	Highly appropriate to children's needs; requires careful evaluation of contents for graphics design and text use	Useful; fun; appropriate to children's development; importance of repetition; interface design	Increased children's interest towards the English lesson
Use of TBL	Children work in ways that suit them	Improved organisation of the lesson	Methods that suit children's needs
Children's learning of English	Raised interest	Spontaneous use of story vocabulary	Advantages of combining ICT and English learning
Children's attitude towards the lesson	Positive changes	Enhanced motivation	Raised interest

English by means of ICT-stories. Isabel however had more restrictive criteria at the time of deciding what constituted appropriate content in the stories. For her, choosing the stories, sequencing the tasks, and exposing the children to text were aspects that needed careful consideration (see Chapter 5 p. 92). Teresa on the other hand did not raise specific concerns about those matters. She said that the use of the stories had given the course a focus and had helped to increase children's participation. Teresa's suggestion regarding the stories was directed towards the number of times that the stories were played. In her view, four viewings were sufficient for the children. I must note that Isabel was the teacher with more experience of work with very young children.

Teresa's comments on the stories selected were relevant to the notion that children understood the stories that were not familiar to them. In addition, she made an observation on the amount of language used during the story and referred to them as "short explanations." In her opinion, these short passages helped the children to understand and at the same time attracted their attention. The following extract presents Teresa's observations:

*T: In addition they have understood them [the stories] very well. Because the Goldilocks one [the story] for example that one they knew. The idea of three Little Bears and Goldilocks were familiar to them to stories that they had heard before but not the other two they knew nothing [about them] and I think they have had to pay attention to the story and the short explanations to understand what is the story about or what is the plot of the story (E8).*

On the reasons why using ICT as the medium to tell stories had advantages over telling the stories in the oral tradition, she said:

*T: Better than told [the stories] viewed on screen.*

*T: I think that when you tell the stories they [the children] get lost [in the plot]. They can lose the thread of what follows in the story. And however, when viewed on the computer, images stay. Children love animations very much, the drawings, the colours (E9).*

### 9.3 Summary of findings from the interviews

The following points summarise the participant teachers' views on how ICT may be linked to children's learning and development, how professional development relates to ICT use in the classroom, the teachers' experience in the use of ICT and finally their views on the implementation of the ICT-based work scheme in the school.

- Regarding ICT as support for learning and development
  - Participant teachers believe that it is positive to use ICT in the English lesson. ICT has the potential to create learning opportunities in language lessons. Taking advantage of children's natural attraction to technology, ICT might be used to motivate children to learn languages and stimulate their imagination;
  - The major obstacle for using ICT with very young children was cost of the equipment. Teresa believes that young children should not be left alone with technological devices and this condition raises the need that another teacher work with the children while they for instance work with a computer (as was the case of the course implemented for my research where Teresa worked with the children whilst I was working with them on the computer). This obstacle might present administrative issues to the school regarding staff provision and budget.
- Regarding ICT use and professional development
  - Isabel and Teresa believed that the extent of use of ICT in young learner classrooms was related to the availability of time since planning projects that involved the use of technology in the classroom was time-consuming;
  - Isabel identified the lack of strategies for the use of ICT to be a major reason for its low exploitation in formal education contexts. At the same time, she

believed that teachers were expected to use ICT but there was little support to that end. Cristina, in her role as head teacher of the school where the field work was conducted, also perceived that the use of ICT was expected from teachers and schools in general. She, however, believed that there was a need for teachers to develop their technological skills. In addition, Teresa was of the opinion that student teachers should be prepared for the use of technology from the time of their professional training;

- Both Isabel and Teresa believed that technical support was an important element for the use of ICT in the classroom. Teresa in addition thought that in order to facilitate the use of technology, a classroom needed to be physically equipped with, for example, electrical equipment and appropriate furniture.
- Regarding the implementation of the work scheme
  - According to Teresa, the attitude of the children towards the English lessons improved after the implementation of the work scheme lessons, as evidenced by the children's increased interest on the tasks and their spontaneous use of vocabulary from the stories and their story retellings during playtime;
  - The use of tasks in the English lessons provided a structure to the lesson that Teresa found to be beneficial for the children;
  - Teresa found the children making spontaneous use of vocabulary from the stories during completion of non-ICT tasks;
  - Isabel found the use of stories to be highly appropriate for meeting the children's learning needs, while Teresa described their use as fun and appropriate for children, considering their developmental needs;
  - Teresa found the animations in the story to be supportive to children's understanding of stories. She also found that the repeated viewings of the stories helped the children to understand more details of the stories.

The following section presents findings from my field notes related to the storytelling session. Findings are organised around the three major themes from the notes: the storytelling session, the teacher and the children.

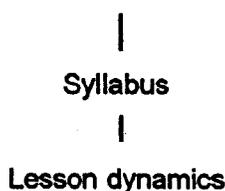
#### 9.4 Whole-class storytelling session

The work scheme English lessons included four stages, as have been described earlier in Chapter 6 (p. 108). These stages are as follows: (1) a song related to the story played at the beginning of the lesson (2) a whole-class storytelling session (3) a whole-class

vocabulary task and (4) two tasks running in parallel: a whole-class story-related task after the storytelling (vocabulary, drama, cutting/pasting, drawing) and an ICT-task that I conducted with the children on the computer corner.

During the English course, I observed and recorded how the work scheme English lessons developed, paying special attention to the storytelling session regarding how children worked with the stories and how the teacher exploited the stories on the computer. The categories of field notes resulting from the field notes observations (described previously in Chapter 7 p. 114) were organised in a diagram which is used here to present the findings from this data source. The first part of the diagram presents the elements that I observed from the lesson, namely the syllabus and how the lesson developed (Figure 9.1). The syllabus element of the diagram indicates how the lesson developed after having introduced the use of tasks. The element of dynamics is used to illustrate how the teacher and the children reacted towards the stories on the computer and how the lesson developed after the introduction of the computer.

FIGURE 9.1: Whole-class storytelling session  
ICT-story based lesson for young learners of English



*Syllabus: organization of lessons into tasks.* During the interview conducted at the end of the English course, Teresa said that she had found the use of tasks in the lesson as positive for the children because they developed a clear idea of “what was happening”. Teresa had originally prepared an English course based on general topics such as parts of the body, food or hobbies. My field notes before the implementation of the work scheme lessons indicate that the children’s attention was not focused on the tasks and there were some problems with behaviour, as it is likely to occur with very young children. The problems were not serious and in fact the lesson was fun and the children enjoyed their time, but according to Teresa, the objectives for the lesson were not always covered as planned because of the time that she had to spend asking the children to listen and work.

The first observation regarding the work scheme lessons and the children’s reactions to them comes from Isabel, during the conversations that we exchanged after every lesson in the first week of implementation. I recorded the following ideas from Isabel:

*Isabel sees the implementation of the lessons based on the work scheme as "a slow process with signs of success." In addition she indicated that the stories on the computer worked "better than she had expected." The new approach of using English in the lesson (in the stories) has just started. Results will be visible in time. Regarding the use of stories Isabel said that they provide cohesion to the activities being done. They provide the children with a fictitious reality to which they can link the actions being performed in class. Children are always pretending to be the characters of stories. Using this in class makes sense to them. They learn in a purposeful way. Given that children don't get bored when listening to the same story several times, each listening gives them the opportunity to learn something new. This is the third day for them to watch the movie and they were eager to look at it before the class started. Stories also provide an order in the chaos of teaching very young children. FN:12.07.06:Wk1*

Comparing previous English lessons with the lessons after the implementation of the work scheme showed the children's interest in the lesson increasing. Teresa on her part found ways to organise the lesson that were positive for her and the children. In the second week of implementation I recorded the following:

*The structure of the sessions is decided because Teresa considered that it worked best for her: first story as a whole class session; this activity would be followed by a vocabulary task (colouring, games, paper puppets); finally, there would be another small group or whole class manual activity. Teresa would work with the children then and she would be sending one child to work on the computer with me. The reason for this was discussed with Teresa after the lessons. She thought this structure worked because it gave children some input (story) before working with vocabulary. Interestingly, this style differed from Isabel's who prefers to have vocabulary tasks before the story. FN:17.07.06:Wk2*

*Dynamics of the storytelling session with the computer as the delivery medium. I was able to observe how the children understood the dynamics of the lesson based on the stories quickly. The second day after having viewed the story once, they saw the arrangement of chairs and the computer and immediately Isolda asked if they were watching "another movie." By the third day they entered the classroom and knew where to sit for the viewing of the story and where to go to afterwards. The children got interested in the stories and they seemed to be a strong motivator even to control*

class behaviour. On one occasion, Pablo was very upset because he could not find a seat next to Angel and kept crying all throughout the song, however when the story started, he stopped. I recorded this event in my field notes in the following way:

*Today the children sang the song but Pablo kept crying over his seat and so didn't sing . . . As soon as the story started, Pablo stopped crying after having been asked several times to calm down without success. The story caught his attention, so he forgot about the seat and watched the story and paid attention to it without asking him to. FN:18.07.06:Wk1*

Another time, Diego asked Pablo to stop talking because his talk would not let Diego hear the story. Even though the story was in English, Diego wished to listen to the narration and not only look at the animation on the screen, obviously showing a great level of interest on the story.

Children's attention to the stories was encouraged through short sessions of questions during which Teresa asked the children whether they had enjoyed the story and what had happened in it. She did not do this activity after every viewing, but on those occasions when she did I recorded the reactions of the children. Examples of the exchange of ideas during one of these comprehension question sessions follow:

*English was used to ask the comprehension questions about the story. About this, Isabel felt happy and commented how young children are able to understand when the language spoken is supported by other elements, such as gestures, mimic, body language in general. Children's response to being talked to in English was positive as could be seen in their facial expressions. Also, this approach got answers in English from some of the children and in Spanish from some others. FN:12.07.06:Wk1*

The first time that the children viewed the Gingerbread Man, Teresa asked after the story:

*What happens in the story when the woman bakes the Gingerbread Man? Responses: "Estaba corriendo [It was running]"; "Se lo comió un perro [A dog ate it]"; "Se lo comió un gato [A cat ate it]." The fact that the Gingerbread Man was eaten by the fox was not understood. However, neither a translation of the story nor an explanation in Spanish of what happened to the Gingerbread Man was provided. FN:17.07.06:Wk1*

Children responded positively to the stories and did not show signs of boredom for using them three continuous weeks. The third week of field work, I noted down the following reaction of Enrique and Pablo after the first viewing of *The Three Billy Goats*:

*This was the first time they watched 3BGG and even before the story started already Enrique and Pablo were discussing who they wanted to be from the story characters. They had just watched the story once and they were so interested that they immediately wanted to play one of the characters during the lesson games. FN:24.07.06:Wk3*

During the viewing of the *Three Billy Goats*, Adriana made an interesting comment about the sounds of the story, which provided indication of how she understood that the troll had fallen into the water. In my field notes I wrote:

*The sound features of the story scaffolded understanding. Adriana realised that there was a river under the bridge because of the sound of water splashing. There is not an image in the story of the Troll falling into the water and after the big goat threw the troll the only sound that is heard is water splashing. Adriana imitated the "Splash!" sound and said "It threw the troll into the water!" FN:24.07.06:Wk3*

During the exchange of questions after the story that Teresa had with the children on the second viewing, I observed:

*Everybody was really attentive to the story of the 3BGG. While the story was playing Angel (before the episode where the goat throws the troll into the water) stood up and started telling the others how the goat was going to use his head to throw the troll off the bridge. Adriana, on the reasons why the goats wanted to cross the bridge (responding to Teresa's question) said: "Un lado del puente tiene hierba y el otro tiene arboles [One side of the bridge has grass and the other has trees]." When Teresa explained to them that there were two types of grass Adriana said "Claro! [Of course]." Pablo, Enrique, Isolda and Ana all stood in front of the computer looking at the images on the screen while Teresa was explaining these details of the story to the other children. FN:25.07.06:Wk3*

It was interesting to observe how the children scaffolded their peers' story comprehension during a whole-class viewing of a story. If one child understands something

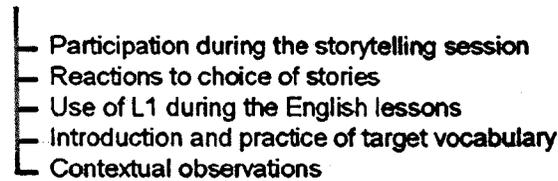
from the story and shares with others, a rich exchange of ideas takes place. This shows how the computer as a means to deliver the story does not limit the opportunities for learning or for fun that storytelling brings to the children. If the children are allowed to interact with each other during the story or after it the opportunities for learning and gaining from the story will be created. The following exchange illustrates this notion.

*When the story finished, Enrique showed a surprised face and turned to look at the others. He looked at the other children and said "Oh! Se lo ha comido! [Oh! He's eaten it!]" When Teresa asked about that, Elena said: "El zorro se ha comido al Gingerbread Man [The fox has eaten the Gingerbread Man!]" Angel said, "Si! [Yes!]" Ana said: "Se ha comido al Pastelito" [It's eaten the Little Cupcake Man!]" and Enrique said "Si, porque el ... [Yes because he ...]" (at this point, Enrique made a gesture of licking his lips, copying the animation of the fox at the end of the story). FN:18.07.06:Wk2*

The second component of the diagram presents my observations about the teachers. Figure 9.2 shows the subthemes belonging to this category of data. The subthemes are explained through excerpts from my field notes.

FIGURE 9.2: The teachers during the whole-class storytelling session

#### Teacher



*Teachers' participation during the storytelling session.* During the storytelling time, Teresa allowed the children to watch the story from beginning to end without making comments or explaining anything to the children. She told me that asking the children questions about the story after it was over was important, to let the children talk about what they had viewed and review understanding. She expressed this in the following way:

*Teresa reflects after the lesson about the importance of having a "story-circle" time where questions about the story can be asked and children get a time to discuss it. FN:18.07.06:Wk2*

Isabel on the use of stories, believed that computer features give the children the opportunity to listen to native speakers of English and so was also willing to play them as provided in the software. I wrote her observations:

*Because the children in Spain do not listen to any English anywhere else but the classroom, Isabel considers information technology as very useful because it allows children to listen to “native English” and the natural rhythm of the songs in English. FN:10.07.06:Wk1*

*Use of L1 during the English lessons.* Most of the time the English lesson was conducted in Spanish and to this respect Isabel commented:

*Isabel considers that it is necessary to use a certain amount of English during the lesson. At least during the vocabulary learning targets set for the lesson English should be used. FN:11.07.06:Wk1*

The amount of English used during the lesson, as I was able to observe, would be a decision of the teacher. While Isabel thought that more English from the teacher is required, Teresa did not express such aspect as important to teach young learners.

*Introduction and practice of target vocabulary.* Teresa used games to introduce and practice target vocabulary of the stories with the children. During the story of the Gingerbread Man she did the following:

*The words that Teresa worked with were: dog, man, cat, woman, girl, gingerbread man, fox. Paper puppets of the story characters were placed on the board and children had to recognize the word that Teresa said. For example, she would say “Fox” and the first child to say “Zorro!” would stand up and take the paper puppet of the fox from the board. Also, if the child just stood up and chose the correct picture, even if s/he did not say the word, could take the puppet. Children enjoyed this activity and were happy to have a puppet character of the story. They also discussed a bit about who they really wanted to be, in case they didn’t get the Gingerbread Man character which all of the children (boys) wanted, especially Enrique. Teresa told them that if they wanted a character in particular, they would have to pay attention and move or respond quickly. FN:18.07.06:Wk2*

At the time of the vocabulary tasks, Teresa would encourage the children to use English. Spontaneous use of English by the children was seen at different moments. For instance:

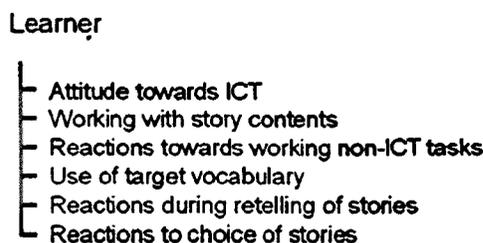
*Adriana, after hearing the story beginning with “Once upon a time” immediately said “Erase una vez” (translating the phrase). FN:25.07.06:Wk3*

*Contextual observations.* This last category for the field notes was added after the exercise of validation conducted with two external coders. It is not related to how the work scheme lessons developed but to how on occasion children's views towards learning English can be influenced by their context, the culture of the place where they live. I recorded Isabel's perception on this matter in the following way:

*Isabel believes that children can show a non-positive attitude towards learning English due to influence of family, like parents or grandparents. She said this based on her experience and quotes a remark made by Isolda: "I do not like the English" to explain this to me. Isabel has known Isolda for two years and has been the girl's English teacher since Isolda was 3, because of this she knows that the girl's grandmother does not support the learning of English much. Isabel explained to me that children in Spain are not used to hearing English, and for the elderly, learning this language can be viewed as unnecessary for the education of children. Hence children as young as Isolda make comments like the one above. Isabel thinks that these somewhat negative attitude have something to do with the success (or not) of the English lessons in Spain. FN:10.07.06:Wk1*

The last element in the diagram that resulted from the analysis of the field notes is related to the children. All of the subthemes that emerged from the analysis of this data are shown in Figure 9.3. Excerpts from field notes illustrate each subtheme.

FIGURE 9.3: The children during the whole-class storytelling session



*Children's attitude towards ICT.* Regarded as positive by the participant teachers during the interviews, I recorded children's reactions towards the stories in the following way:

*Before the class starts, some children approach the computer and take the CD case. They start talking about the story and choosing which character they want to be. Some of them want to be the Gingerbread Man. FN:18.07.06:Wk2*

*Enrique saw the fox coming out of the tree -in the presentation of the CD- and told the others. Pablo told the other children that the Gingerbread Man was reading when seeing the same screen. This is just children's interest in the whole computer concept and the materials presented through it. Pablo asked several times about game on the computer and Elena at least twice. They were all interested in the painting program too. FN:20.07.06:2*

*Working with story contents.* During the storytelling sessions, the children made comments about the stories that showed how they thought about the contents of a story by trying to make sense of the actions followed by the characters. Pablo for instance, while viewing Goldilocks and the Three Bears, asked why Goldilocks did not hide under the bed when the bears came. Another case is when Enrique suggested, after the first viewing of The Gingerbread Man, that a duck had eaten the Gingerbread Man. He said this to explain the absence of the Gingerbread Man at the end of the story when Teresa asked the children what had happened to the Gingerbread Man. Enrique might have used previous knowledge that ducks live in ponds and ducks eat bread to reach this conclusion. I must note that Teresa did not explain to the children what had really happened to the character, because we had agreed on this matter before the lessons. It was important for me to see how the children interpreted the stories, hence, we accepted all the answers provided by the children.

The children got involved in the stories and used familiar vocabulary for them when referring to the story character of the Gingerbread Man, showing how they took a foreign story and made it part of their culture.

*Even though Teresa and I had talked about the Gingerbread Man without providing any form of translation to it, children came up with a Spanish name for this character: "El Pastelito." Throughout the week, the children used this name most of the time to refer to this character. FN:17.07.06:Wk2*

*Reactions towards working non-ICT tasks.* The children enjoyed all the lesson tasks, as can be seen in the responses of the survey conducted at the end of the course (see Chapter 7 p. 122). Records that I kept about their reactions to a drama task and a vocabulary game exemplify their enjoyment of a non-ICT task.

*All children were interested and show great enthusiasm when role playing the story of 3BGG on the floor using the desks as bridge (one of the children was the bridge after Teresa told them how to do it) all the children are baaing like sheep (take note that they mentioned sheep instead of goats a few times).*

*After the lesson Teresa told me that Pablo kept saying that he wanted to be the troll (el pastor [the shepherd]) but later, he changed his mind and said "No, I want to be the big goat best because he throws the troll into the water."  
FN:25.07.06:Wk3*

*When Teresa started asking the children about the names of the characters of the story G3Bs, Pablo replied Papa Bear pointing to the puppet that Teresa was holding. After Pablo's answer, all the other children started to say the names of the other characters when asked. FN:11.07.06:Wk1*

Diego always showed moderate interest in all the computer activities except on two occasions. One when we drew the Gingerbread man and the second was when Adriana, the girl who joined the course in the last week, was asking about the stories being in English. The following extract shows the exchange between Adriana and Diego:

Adriana: "it's in English" [listening to the ICT-story of the 3BGG for the first time and realising it was in English]

Diego: "of course! I like English.

FN:24.07.06:Wk3"

Diego's tone of voice in his response was proud and eloquent, as if trying to show Adriana how interesting the story in English was. In the subsequent days I observed that Diego looked for Adriana quite a lot and tried to work with her and sit next to her in the classroom activities.

*Use of target vocabulary.* The children used the vocabulary of the story mainly in vocabulary tasks. Teresa also told me of some occasions in which the children used English during playtime while telling the stories of the lesson to their friends. An interesting aspect of the children's attempts to use English however, took place when children used English (not necessarily vocabulary from the stories) outside the tasks like for example, Isolda greeting me in English. During one of the sessions I recorded Pablo attempting to copy the Troll threatening the goats with the phrase "I'm going to eat you up." After the Troll, Pablo chanted words following the intonation pattern of the phrase in English. He was not able to repeat the phrase properly, but his attempt illustrates how the children picked up the sounds from the computer stories and spontaneously used them. I recorded this event in my field notes as follows:

*Pablo, after the troll told the Big BG I'm going to eat you up tried to imitate the sound saying something like ta ta tat a tat a (which in Spanish would go along the syllabic division that is used to teach children to speak and read).*

Another example of the children trying to imitate the sounds in English took place with the songs. I wrote:

*Two children, Elena and Pablo, started to move their lips to the rhythm of the song imitating the sounds from the lyrics. The words of the song haven't been taught to the children. FN:11.07.06:Wk1*

*Reactions during retelling of stories.* The children participated in the retellings well and as expected some were more enthusiastic than others to tell me their stories. In the previous chapter I presented the stories of children who provided original retellings of the stories. Here, I want to talk about other children and their reactions during retelling tasks.

In spite of having successfully completed the sequencing task for the The Gingerbread Man story, Manuel insisted that he could not remember the story. He did the same thing with the Three Billy Goats story, and on this occasion I did not ask him questions trying to encourage him to tell me the story. On that day he had arrived to school with a bad bump on his eye and I thought it best to make him feel comfortable. He did not say he felt bad or anything similar, but I thought it was best not to upset him. Angel also said that he did not know the story when we were working with Goldilocks. I consider Angel and Manuel's responses to be an indication of a different meaning for phrases such as *I don't remember the story*" and *I don't know the story*". In the case of Manuel, it meant that he did not want to retell the story, and that had to be respected. Angel's response was related to being unfamiliar to working on the computer and working with me during the English lesson. A relationship of trust has to be built with children and that takes time.

I found the topic of the conversation to be influential on the child's reactions and the amount of language produced during the retelling tasks. The following conversation that I had with Diego exemplifies this idea.

D Diego

R Researcher

Story Three Billy Goats

Date 25.07.06

Excerpt from story retelling transcription task

D the greener grass  
R and they do like that one?  
D nods  
R very good Diego!  
R Excellent  
D today is Raquel's birthday  
D and besides she's turning four just like me  
R very good have you congratulated her?  
D nods  
R very good and who is Raquel do I know her?  
R is she in another school? Another 'Cole'?  
D she is my mother!  
R oh that's great!

Just like Diego, Adriana made a sudden change of subject during the retelling task of the Three Billy Goats. It seems that for her as well as Diego, other topics of conversation were more important than the task at hand, and even though there is a goal and a task to complete, I felt it was reasonable to respect their choices and let them talk about what they wanted to, even if only for a short time. In the case of Adriana, the attempts I made to ask her to tell me the recently heard story of the Three Billy Goats led to a different one.

**Ad Adriana**

**R Researcher**

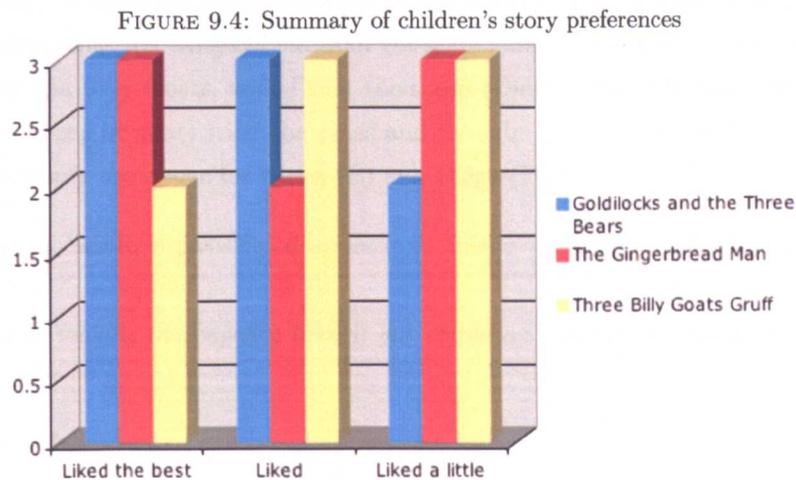
**Date 27.07.06**

**Excerpt from computer animation viewing session**

R which story did you like best? the one we watched earlier or this one?  
R do you remember what was the other one about?  
Ad of of of some little goats that wanted to pass over the bridge because cause : do you know that I'm going to the movies tomorrow? This afternoon!  
R oh! What movie are you going to see?  
Ad Cars  
R we both laugh

During the same task after having watched the computer animation, Diego was talking about it when suddenly the name of a bird made him remember a story he had at home and from this topic he started talking about his brothers and the conversations they had after school. He got very interested in these topics and drifted away from the story he had just watched.

*Reactions to choice of stories.* Children showed different levels of interest in the stories. This can be observed in the choices they made to evaluate which stories they liked best. Goldilocks and the Three Bears and The Gingerbread Man were the preferred stories for three children each. Three children evaluated The Gingerbread Man as their least favourite story along with Three Billy Goats Gruff, turning The Gingerbread Man into both the most liked and the least liked of the stories. The story of the Three Billy Goats was the least popular as only two children saw it as their favourite and three saw it as their least favourite. Figure 9.4 shows these results in graph form.



## 9.5 Children's development of storytelling skills

Looking at the results from the analysis of retellings of the whole class, it can be seen that two out of eight of the participant children improved their scores in the elements of introduction, character development and mental states, which account to three of the seven elements of the NSS criteria during their retellings. Three children improved referencing and conclusion criteria. Additionally, five children in the class improved their retellings in the cohesion and conflict resolution elements. These improvements could be interpreted as emergent literacy development because of the changes in retellings' construction observed over time (Talley, 1994). These changes are reflected in the way that the characters were presented, how the children justified the protagonists' actions

and the endings of the stories. For instance, whereas Pablo's retelling of Goldilocks did not contain any reference to the characters of the story, his story of the Gingerbread contained the introduction to at least the story's main character. Pablo started his story of Goldilocks with the phrase "Esta cogiendo tomates" "[She] is picking tomatoes" making reference to a part of the story where Goldilocks is shown in the forest near some rose bushes. As can be observed, in the sentence in Spanish the subject is omitted and although grammatically this is correct, there was no previous reference to the character of Goldilocks. Hence this retelling yielded the lowest score in the NSS criteria of character development. In contrast, Pablo started the Gingerbread Man making a full reference to the main character in the sentence "El Pastelito se fue" "*The Cupcake Man left*" making use of the full name of the character in the introductory sentence of the story.

Diego and Elena included in their second or third retellings elements related to characters' feelings or emotions, accounting for the criterion of Mental states. For example, Elena explained that the Gingerbread Man got scared and that is why he started to run. Diego, about the Billy Goats, added that the sheep (Diego referred to the characters in this story as sheep or goat) tried the grass and thought it was tasteless. The following extracts exemplify the above for Elena (E) and Diego (D):

E que estaba haciendo el pastelito después le da miedo y y después salió corriendo a la calle

*E that [it] was making the cupcake then it got scared and and then it went out running into the street*

D la oveja mediana se comió la oveja me que me se comió la hierba amarilla y no le gustó

*D the middle sheep ate the sheep that ate the yellow grass and [it] did not like it*

Diego and Elena also concluded their stories with more elements in their second and third retelling. Elena was one child who understood that the Fox had eaten the Gingerbread Man, using the animations as support. When reaching the end of the story she was laughing and enjoying the end. Her account of how the story finished is shown in the following extract:

El y después llegó llegó a aquí se lo encontraron iba corriendo todavía y y y después vino el zorro y se ponió [puso] encima del zorro y y y se lo comió el zorro y se see se lo comió y decía slurp! [Elena licked her lips while saying slurp]

*El and then it got it got h here [they] found him [it] was running still and and and then [it] "putted" [climbed] on top of the Fox and and and [it] the Fox ate it and it ate it and [it] said slurp!*

In general, all children scored higher in the cohesion criterion because their retellings were better constructed from the second week of the course. Children included connectives and made references to sequenced actions in the stories of Wk2 and Wk3. Many conditions might have influenced this result, including the time it took the children to get used to work with ICT-stories, with the computer and with me. However, I must emphasise that under the emergent literacy approach such adaptation is part of developing literacy-oriented behaviours, which was ultimately the main goal of this study, that is, to see whether children immersed in a course using ICT-stories would develop skills related to understanding and construction of stories. It follows then that if the improvements in retellings were due to the children *getting used to* the work scheme and the work with stories, their use influenced the development of literacy skills.

Development however does not occur at the same pace nor does it follow the same pattern for all children. This can be observed in Figure 7.6 (p. 128), where the NSS scores that children were given for their retellings were different for each one of the participant children. An interesting behaviour is that all of the children showed changes in their scores perhaps responding to the use of stories in their lesson, however it is also interesting to note that there were positive as well as negative changes. Behaviour of the children's scores for their stories shows that in general, scores were not consistent (See Figure 9.5 on p. 186). Nevertheless, it is interesting to see that for the criteria of character development, mental states, conflict resolution and cohesion, there were more children getting improved scores in comparison to decreased ones. Introduction and referencing had equal number of improved and decreased scores and noticeably, the criterion of conclusion had four children with decreased scores and only three with improved ones (See summary of changes in scores in Figure 9.6).

FIGURE 9.5: Changes in NSS scores for participant children

	Introduction		Character Development		Mental States		Referencing		Conflict Resolution		Cohesion		Conclusion	
	WL1: G3Bs	WL2: TGM	WL1: G3Bs	WL2: TGM	WL1: G3Bs	WL2: TGM	WL1: G3Bs	WL2: TGM	WL1: G3Bs	WL2: TGM	WL1: G3Bs	WL2: TGM	WL1: G3Bs	WL2: TGM
Enrique	1	1	1	1	1	1	2	1	1	2	1	2	1	2
Isolda	1	1	1	1	1	2	2	1	1	0	1	2	0	1
Ana	1	1	1	1	1	2	1	1	3	1	2	1	1	1
Angel	0	0	1	1	0	1	0	1	1	0	1	1	1	3
Pablo	0	1	1	1	1	1	1	1	1	1	1	1	1	1
Manuel	NC	1	0	0	NC	0	NC	3	0	NC	0	NC	2	0
Diego	0	NC	1	1	0	1	1	NC	0	0	NC	0	NC	1
Elena	1	0	1	3	0	3	4	4	1	3	NC	2	3	NC

FIGURE 9.6: Comparison of changes in NSS scores of children's retellings between weeks

	Introduction		Character Development		Mental States		Referencing		Conflict Resolution		Cohesion		Conclusion	
	WL1: G3Bs	WL2: TGM	WL1: G3Bs	WL2: TGM	WL1: G3Bs	WL2: TGM	WL1: G3Bs	WL2: TGM	WL1: G3Bs	WL2: TGM	WL1: G3Bs	WL2: TGM	WL1: G3Bs	WL2: TGM
Improved	1	1	2	0	2	0	1	2	3	2	3	2	2	1
Decreased	1	1	0	1	0	0	2	1	1	1	1	2	1	3

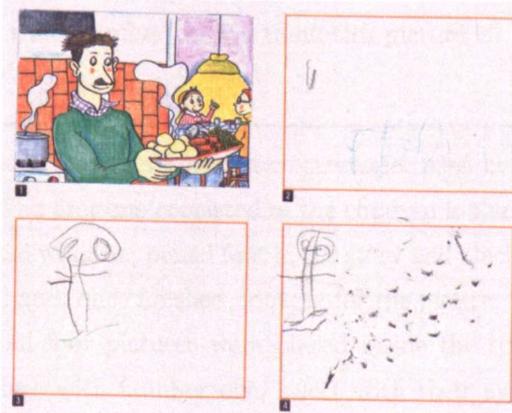
## 9.6 Peripheral findings

Although these findings were related to the research questions only indirectly, they were sufficiently interesting to complement the study's findings in relation to the children's interaction with ICT. The presentation of these findings follows a variety of themes that emerged *in-vivo* from the analysis of field note data from the ICT story sequencing.

*Sequencing a story task: paper and ICT.* Drawing episodes from the story on paper in the order that they occurred proved to be a difficult task for the children. None of them was able to draw a sequence for a story, in spite of Teresa's guidance and ideas that she was providing to the children with respect to the pictures that they could draw. The children did however draw pictures of the Gingerbread Man and other characters in the spaces provided. Diego was the only child whose drawings show an attempt to draw a sequence of events. Diego drew the Gingerbread Man in the lower left corner and in the space to the right he drew the Gingerbread Man (Figure 9.7) next to a group of spots, which might be a representation of the riverbank. Although this image does not represent the end of the story, Diego attempted to present a sequence in his drawings, from the Gingerbread Man by itself while running from everybody, to the part of the story where he can no longer escape.

The sequencing task on the computer, as opposed to the sequence on paper, provided images from the story and so the children did not have to remember the episodes and draw them in the order that they occurred within the story. This task was also difficult for the children as not all of them were able to complete it successfully. Seven children were able to sequence the task correctly in the story of the Gingerbread Man and the Three Billy Goats Gruff combined, from a total of 24 opportunities counting one sequencing per child in each of the three stories.

FIGURE 9.7: Diego: sequencing-on-paper of The Gingerbread Man



During the sequencing task of the story of the Three Billy Goats on the computer, I was able to see how ordering story pictures using numbers as guide did not facilitate the sequencing task for the children. In order to complete the task, the children had to order the pictures following a left to right and top to bottom direction, filling squares labelled with numbers 1 and 2 (horizontally) followed by a second row of squares labelled with numbers 3 and 4. (See Figure 9.8). Even providing the pictures, this task in the way it was designed was difficult. All the children were more inclined to follow a top to bottom direction filling the squares vertically. The children actually disregarded the numbers inside the squares during the completion of this task. The excerpt provided in here illustrates the dialogue between Angel and myself when trying to sequence the pictures for the story of the Three Billy Goats.

Ang Angel

R Researcher

Date 24.07.06

**Sequencing task with Angel trying to match beginning of the story with number 1 and ending with 4**

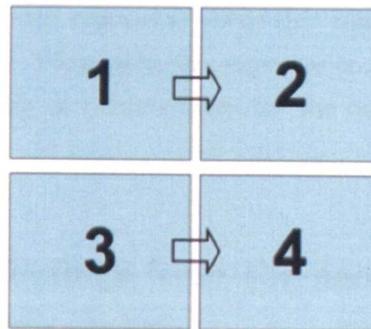
R	tell me what's happening in this picture
R	what's happening here?
Ang	that the goat is crossing over [the bridge]
R	ok and what happens to the Troll?
Ang	that he fell into the water
R	ok that happens at the beginning or at the end of the story?
Ang	at the end of the story
R	at the end of the story ok
R	so then what number do you think this picture is?
Ang	number one

*Story sequencing strategies.* I observed two strategies used by the children to order a sequence of events. The first one consisted of the children looking for the picture that they thought represented what happened first in the story and placing it inside the square labelled with number 1 and, once finished, looking for the picture that represented what happened next, until all four pictures were placed inside the spaces provided. They would look at the square with number one, select with their eyes a picture from the options and then either ask me to drag it to the numbered square or attempt to drag it for themselves. One child, Enrique, followed a second strategy. On the three occasions when we worked on the sequencing tasks, he looked at the display of pictures first,

observed them in silence for a few seconds and started describing the actions taking place in the picture. After that, he picked the first picture from the options available and placed it inside the square labelled with number 3. He would take the second picture displayed and placed it inside square number 1. He continued and finished the story in the same way. Interestingly, Enrique followed the same ordering strategy in the three sequencing tasks that we completed. He would point at the picture from the options area and tell me “this goes in number 4”, “this goes in number 1”, and so on.

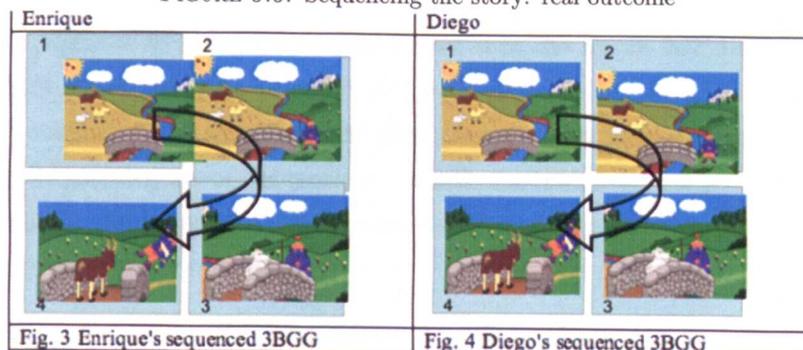
*Directionality in story sequencing.* A last interesting aspect that I observed in Enrique and Diego was that they followed a “clockwise” direction in the squares provided to sequence the pictures. This is, they did not order the pictures in the way that the software was designed as exemplified in Figure 9.8. Instead, they followed the order shown in Figure 9.9.

FIGURE 9.8: Sequencing the story: expected outcome



Diego followed the strategy just like the other children. He looked at the pictures, selected the one he decided was to be put in the square and either moved it or pointed at it so that I could help him move it. However, he also used the clockwise directionality to organize the pictures of the story.

FIGURE 9.9: Sequencing the story: real outcome



*ICT-task: a puzzle via comprehension questions.* I have presented the results of what Isabel thought about the children interacting with written text through the games included in the story software. During the second week of the course there was one occasion in which at the children's vehement insistence, I allowed Pablo and Elena to play a game included in the Gingerbread Man story. Both children, working together, completed a puzzle task in which they had to answer comprehension questions regarding the Gingerbread Man. In this activity, the questions to be answered were both displayed on the screen and played by the software narrator. Both children used the audio described questions to select their answers, disregarding the text on the screen and completed the task successfully by finishing the puzzle. These results indicate that children can be exposed to text and complete tasks containing words without asking them to focus on text. As claimed by emergent literacy theorists (Teale & Sulzby, 1986) such exposure would create situations where children could start to develop an understanding of text behaviour, that is, that text represents words that can be read out loud and carry meaning such as instructions. Ultimately, this exposure could present opportunities for incidental vocabulary learning or reinforcement for the noticing or learning of target vocabulary.

## 9.7 Summary of findings from the analysis of the whole-class storytelling session

- Children developed their retellings in heterogeneous ways. Interestingly, all of them showed changes in their NSS scores, indicating that the use of stories had effects on the children, even though they were varied and not consistent over time in that they sometimes regressed and that the children did not improve at the same pace;
- An analysis of the lesson dynamics shows that the use of ICT brings numerous changes to the lessons, compared to those lessons taught without technology. In this research, the changes brought about the use of ICT-stories were positive because of the attitude of the teachers towards the use of technology, how they integrated the computer into the language lesson and how they involved the children in the use of the computer;
- Children as young as the participants of my research are able to provide retellings of stories rich in content and highly informative of their development of storytelling skills (See Chapter 8). As young research participants, they, however, have to be treated with great respect and their willingness to participate should be taken into consideration during the conduct of such tasks, for instance the retelling task;

- Sequencing a story using four squares and a top to bottom and left to right order was a task of high cognitive demand for the child participants. When numbers were involved, the children also had difficulties understanding how to complete the task;
- There were two strategies used by the children to sequence the story: choosing a picture and placing it in its corresponding empty space (labelled with numbers from 1 to 4) or selecting a numbered space and finding, from the pool of pictures, the one corresponding to the selected space. Enrique was the only child who selected the picture first and placed it in the space that he considered to be the correct one; his first choice could have been the image corresponding to the space labelled 4 for instance (See 9.6).

## Chapter 10

# Discussion: revisiting the research questions

### 10.1 Overview

The aims of this thesis were as follows: (1) to design a set of guidelines that could be followed by an English teacher in the preparation of lessons for young learners based on ICT-stories and communicative tasks and explore the implementation of the lessons, (2) to explore the effects of using the work scheme lessons on children's development of story-related emergent literacy skills, (3) to explore children's reactions to the use of ICT in the English lesson and (4) to explore teachers' views on the use of ICT with young children for the purpose of language teaching.

For the first two aims, the process involved in the preparation and implementation of the trial lessons was analysed in order to learn the teachers' views on preparing an ICT-based English course for young children. Participant teachers showed predisposition for the use of technology and they expressed their views on the potential of ICT to enhance children's learning environments. The needs that arose because of the use of technology were also discussed by the teachers.

The second aim made use of children's story retellings to explore the effects of the trial lessons on the children's development of emergent literacy skills. The results of the study showed great variation in the results relating to the development of skills as observed in the children's use of story grammar elements in their retellings. Results, on average, indicated that the children produced more coherent retellings as the course advanced and started to develop more complex retellings by adding elements of characters, settings and conclusions.

The third aim, which was explored through observations, interviews and children's evaluation of lesson tasks, showed that the child participants reacted positively to the use of ICT-stories. An observation that I was able to make was that the use of stories had an effect on the children's motivation to participate in the English lessons, providing structure and meaning to the language tasks. The interaction of the children in the storytelling session showed how the children made use of animations to construct meaning from the computer stories. Further gains from the interaction were observed in the occasions when children scaffolded their peers' story understanding while sharing their reactions to the stories with the class.

The fourth aim, explored through teachers' interviews, showed the positive views that teachers had for the inclusion of ICT in the young learner classroom.

With the research aims in mind, this chapter discusses the findings of the study presented in Chapters 5, 8 and 9. The chapter is organised around the research questions that guided the aims of my study. When appropriate, participants' contributions are used to illustrate the discussion.

## 10.2 Research question 1: Creating and implementing the work scheme

The first research question of the study, which is about the design of an ICT story-based work scheme for the teaching English to young learners, is as follows:

Q1. What pedagogical and technical aspects are involved in the design and implementation of a work scheme based on ICT-enhanced stories to teach English to young children?

Based on the data from the research diary and interviews with the participant teachers, Isabel and Teresa (see Section 5.4 on p. 92), I will discuss, in this section, the findings in relation to the creation of the work scheme (summarised earlier in Chapter 5.5), followed by a discussion of the findings related to its implementation (presented earlier in Chapter 9.2). It is worth noting that discussions regarding the design of the work scheme lessons have been generated from the views of Isabel only, since she was the teacher in charge of the development of the work scheme lessons. The main findings regarding the design of the work scheme were:

- TBL methodology was adapted by Isabel to accommodate explicit teaching of target vocabulary selected from the story;

- Isabel, as a teacher of very young children, was careful to use materials written for native-speaker children of English with children who are still developing Spanish as their first language; and
- During the development of the lessons and the selection of the materials to use, Isabel felt that the story-related tasks included in the software were too challenging for the children. She believed that exposing young children to written text was not a positive experience because the children were not “ready” to work with written texts;

The other key findings relating to implementation of the work scheme were as follows:

- The use of tasks in the English lessons provided a structure to the lesson that Teresa found to be beneficial for the children;
- The storytelling approach in the teaching of English was evaluated throughout as a very useful and highly appropriate method to teach young children; Isabel found the use of stories to be highly appropriate for meeting the children’s needs, while Teresa described their use as fun and appropriate for children, considering their developmental needs;
- Teresa found the animations in the story to be supportive to children’s understanding of stories. She also found that the repeated viewings of the stories helped the children to understand more details of the stories;
- The inclusion of the computer brought numerous changes to the lessons, compared to those lessons taught without technology. In this research, the changes brought about the use of ICT-stories were positive because of the attitude of the teachers towards the use of technology, how they integrated the computer into the language lesson and how they involved the children in the use of the computer.

These findings are now discussed in greater detail.

#### **Regarding lesson design.**

*Adapting TBL for the young learner classroom.* It has been mentioned that the TBL approach had to be adapted to meet the needs of young learners. Evidence of this adaptation was observable in the predominance of Spanish as the language of instruction during the lessons (See Section 9.4). The literature on TBL seems to be a little divided about the use of the children’s native language during tasks (D. Willis & Willis, 2007;

Carless, 2003). Whilst the use of L1 had been regarded as negative, it is now recognised that beginner learners could feel discouraged if they are asked to use English only during their language lessons (D. Willis & Willis, 2007). The experience of language teachers in foreign language contexts has indicated that the use of L1 in the English lessons could be beneficial for the young learners. In my research, Isabel went through a process of increasing her appreciation of the benefits of using Spanish during the language lessons. Before the implementation stage, Isabel had the view that it was not necessary to use Spanish during the English lessons. After observing Teresa, Isabel, however, found that using Spanish had an advantage for the teacher, as the latter could corroborate that the children had understood the instructions being given for the completion of tasks.

Despite recognising the advantage of using Spanish, Isabel still believed that using it throughout the whole of the English lesson was not recommendable. She explained that the exposure to English that children in foreign language contexts had was limited to the classroom, and, therefore, a minimal use of English was likely to have an effect on children's development of the target language. This comment from Isabel arose from her experience of the implementation of the work scheme. During the English course, apart from the ICT-stories, the songs, and the interaction of the children with me during ICT-tasks, children were listening to Spanish throughout their lessons. It must be noted that the children responded positively to being talked to in English during the ICT-tasks and, as has been described in the results chapters, Isolda, one of the child participants, started to greet me in English a few days after I started working in her school (See 8.4.1). With young learners, finding the balance between the use of Spanish and English might not be as easy for the teachers as would be the case when dealing with older or more advanced learners, but seeing the children's positive reactions and response towards the use of English, which, for instance, might have encouraged their spontaneous greetings in English, showed some of the effects of using English more frequently during lessons.

A second way in which Isabel adapted the approach of TBL to meet the needs of young language learners was her use of explicit vocabulary pre-tasks. Literature on TBL suggests the use of pre-tasks to help students focus on the target vocabulary (D. Willis & Willis, 2007). However, the approach suggests that the practice of target vocabulary should take place through games or activities in English that use the target vocabulary incidentally. Isabel, however, visualised a pre-task which involved the explicit teaching of vocabulary using Spanish, as she believed that the children needed this linguistic support to understand the story. She based her assumptions on her previous work experience in the context of the school. Isabel insisted upon the use of puppets to introduce vocabulary found in the story, specifically vocabulary related to the characters. As a result, the work scheme lessons originally included a vocabulary pre-task which was planned to take place at the beginning of the lesson. Isabel was familiar with TBL

and she indicated her awareness of not needing to explicitly teach vocabulary using Spanish when learning a language using this approach. She, however, emphasised that the participant children were still developing their language abilities. According to her, they needed to be provided with a linguistic base that allowed them to participate in the lessons and gradually build the new linguistic structures. In other words, in her view, the participant children's vocabulary repertoire was limited due to their fledging first language skills. Hence in order to increase the children's interest and build their confidence in the use of English, they needed to be taught vocabulary overtly. It is worth noticing that the original work scheme lessons were later modified by Teresa who decided to start the lesson with a song instead of a vocabulary pre-task. Teresa reported that having the children sing and mimic a song related to the story before the viewing could provide sufficient support in the activation of the children's story schemata. In her lessons, she decided to have the vocabulary tasks after the storytelling session. In the last interview, Teresa commented that the children worked well with the story when it was viewed immediately after the song, and vocabulary tasks, for instance games to label the characters of the story, were completed by the children in the middle of the lessons. She reached this conclusion based on her comparison of what happened in the first week of implementing the work scheme, when she followed the original plan, with what happened in the other two weeks.

Throughout the phase of lesson planning, Isabel discussed with me on several occasions how important it was for her to design tasks in which children could play, sing and move around the classroom. She related her concerns to her perceptions about the characteristics of young children as language learners. The opinions expressed by Isabel about the type of tasks that she thought to be appropriate for the language lesson suggested how teachers seem to be aware of the needs that young children have as language learners, something which is emphasized in the literature (Moon, 2005; Donaldson, 1987; Cameron, 2001; Wells, 1987). Isabel insisted on letting the children have fun with language through meaningful tasks as, in her view, it was in this way that the children would remember the contents of the lesson. For these reasons, Isabel determined that the use of TBL as a teaching approach, which revolves around the principle of making language learning meaningful through tasks that are relevant to the learner, and stories, which have the power to give meaning to a learning situation for the children, were highly appropriate when planning the English lessons.

One aspect of planning the lessons that I found to be especially important for Isabel was the selection of the stories to be used in the English course. She was concerned about whether the children could understand them because she considered that understanding the stories would be challenging for them. In this respect, I was able to see how the results of a piloting exercise helped her to feel more confident about my research. Informing

Isabel of the results of the pilot session reassured her of the appropriateness of the story software for the children. Through her reaction, I was able to see the importance and value of piloting methods and instruments, especially if the participants were as young as the participants in this study. In addition to the pilot exercise, the stories selected for this thesis had been evaluated by pre-school teachers who had used them with their students in formal learning contexts<sup>1</sup>. The information that they provided was highly useful as their account of how the stories were used in classroom settings strengthened Isabel's confidence about the appropriateness of the materials. Isabel's response to the views from other teachers suggests the usefulness of having a place where teachers share ideas and experiences about their practice. A network of teachers exchanging ideas on how to implement ICT-related projects may encourage the use of technology and spread practices that have worked well in other contexts. It may also provide ideas on how to solve potential problems that others have found.

*On the children's exposure to the written text.* During development of the lessons and the selection of the materials to use, Isabel felt that the story-related tasks included in the software were too challenging for the children (See 5.3). She believed that exposing young children to the written text was not a positive experience due to their developing language skills in Spanish. Isabel's concerns were related to the planning of tasks where children had to interact with text, such as the games included in the story software. She was inclined to base her lessons on stories with simple language (See p. 32) or on stories without text. Isabel's reluctance to expose children to written text in a foreign language reflects the suggestions from the literature which highlight the importance of not teaching literacy of the foreign language to the young learner (Pinter, 2006). It would seem that some practitioners believe that the teaching of literacy in the foreign language, even if this means exposing children to its written system, has to be excluded or delayed in the young learner curriculum on the basis of the fledging development of children's first language. Isabel insisted on this point as evidenced by various remarks where she asked my views on the use of text with young learners (See 5.4). Interestingly, Teresa did not express such concerns and on the contrary, she encouraged the children to write, as for example when they were working on the task of labelling the parts of the face or when she asked them to write their names on their work.

It could be said that the views of Isabel on the importance of exposing the children to the written text seemed to be related to the notion of "reading readiness" that was prevalent in the past, before approaches such as emergent literacy gained strength. It is important to note that under the emergent literacy approach, children who are exposed to the written text may have more opportunities to develop the behaviours and skills

<sup>1</sup>One of the reviews is available on the Internet at: <http://www.mcgraw-hill.co.uk/kingscourt/reviewcentre/insidestories.html>

that they will require to become successful readers. It is also important to recognise that during the English lessons, the children in my study were not exposed to text written in Spanish. This is a relevant consideration because, in Spain, the children learn English as a foreign language and, thus, developing their skills in the language of the community (Spanish) should be given a higher priority than developing their skills in English. However, it is suggested that those children who express an interest or show signs of interest in the written system of the foreign language should be allowed to explore it freely. In this way, they will be given the opportunity to develop the behaviours to become competent readers not only in one language but in two.

In summary, Isabel emphasised the different aspects that, in her view, had to be compulsory for lesson tasks if ICT-stories were to be used within the TBL approach with young learners. In her view, they were as follows:

- Adapt the TBL methodology to language teaching by starting the lesson with an explicit vocabulary pre-task, preferably conducted in the learners' first language;
- Use material that has a connection with the children's immediate reality, namely stories;
- Maintain a low level of difficulty in ICT-tasks by minimising interaction with the written text; and
- Support the use of ICT-stories with fun, engaging and active non-ICT tasks.

#### **Regarding implementation.**

The second part of the first research question explored the issues related to the implementation of lessons based on the work scheme. In this regard, the most relevant aspects highlighted by the participant teachers and from the field notes were related to the children's change of attitude towards the English lessons, the structure of the lessons, the advantages created by the use of stories and the power of animations in stories written in English for the native-speaker child.

*The use of tasks in the English lessons provided a structure to the lessons that Teresa found to be beneficial for the children.* One of the first salient aspects drawn from the findings of this study is concerned with the positive views of teachers on the use of ICT-stories. They found that the children's motivation for participating in class increased throughout the course. The stories, in particular, offered the teachers alternatives to work in a variety of tasks within the lessons. For Teresa, these alternatives (for instance songs or puppets) provided the lessons with a structure that helped the children to follow the lesson contents and learning objectives. According to Teresa, such structure

had an impact on the children's behaviour, which ultimately allowed the children to take more advantage of the lesson contents. She found that the children's awareness of the structure of a lesson in terms of small tasks and their knowledge of where the tasks took place, made the children clear about what to do and what was expected of them. According to her, the understanding of the structure of the lesson had an effect on the overall behaviour of the class. Teresa observed the children moving around the classroom with confidence from the computer corner to the drama area and to the desks where colouring and cutting/pasting were done.

*On the use of the storytelling approach to teach English to young children.* As has been discussed in Chapter 2 of this thesis, children feel a natural attraction to stories. During the English course, the children got engaged with the stories of the lessons, sang songs about them, made posters about the characters and stories and role played the stories using furniture in the classroom. All these engaging tasks created the environment in which children played, sang and moved. Isabel's concerns about the type of task that children needed were met and the involvement of the children in the lesson, observed by Isabel and Teresa, who even reported having heard the children tell the stories to friends during playtime (See 9.4), showed the advantages of using stories in the English course. The children also provided direct evidence of their positive reaction to the lesson through their evaluation of the lesson tasks (See p. 122). Their behaviour during the storytelling session (See p. 171), presented a picture of how they interacted with the stories. Teresa did not need to explain to them how to understand the stories or convince the children to pay attention to them. The children listened to the stories, laughed with them, felt surprised and even justified the characters' actions. This level of engagement helped to raise an interest for the English lessons which occurred indirectly, that is, without having to promote the learning of the language.

An interesting point about the storytelling session was that they were always guided. Teresa did not play the story on the computer and left the children to watch it by themselves (See p. 47). She sat among the children, watched the stories with them and led the short session of comprehension questions after the viewing. Research regarding ICT and young children has concluded that the presence of an adult during children's interaction with technology enhances the opportunities for learning that ICT has the potential to offer. The attitude of Teresa supports these conclusions, as the children's responses to her comprehension questions, even though she never corrected them or changed the views that the children expressed of the plots of the story (See 9.4), created an opportunity for dialogue that might have influenced their construction of meaning from the stories, thus, supporting their learning.

*Isabel found the use of stories to be highly appropriate to children's needs while Teresa described them as fun and appropriate for children, given their developmental needs.* Stories played on the computer were welcome by the teachers. After looking at the children responding to the stories and the lesson tasks during the first work scheme lessons, Isabel's concerns regarding the low exposure to written text that she wanted to maintain was reduced. Isabel talked about the children's response to the stories heard in English only, saying that it was better than she had anticipated (See 9.4). During the viewing of the stories, there were no instances in which the children said that they could not understand the story because they did not know how to read. There were, however, opportunities for learning for the children who demonstrated interest in words or in games that involved the use of words. Such opportunities took place when I allowed the children to interact with the written text, as in the case of Isolda, who showed signs of knowing how to spell her name (See section 8.4.2) or Elena and Pablo when they were working with the puzzle game (See section 9.6). It would seem that the children's interest in the stories was stronger than the barrier that the written text could pose. It is valid to consider the level of exposure that children would have to written text in the foreign language, but since the results of the study showed that children were not discouraged by the presence of text, it is also valid to consider its use. Perhaps looking at theory put into practice created the opportunity for Isabel to see the possibilities of ICT and the support it could provide to children so that tasks that otherwise would be too challenging could be completed.

Teresa's opinion that animations helped the children to remember details from the story (See 9.2) encouraged me to analyse the way in which the children made use of animations to understand the stories in the course. I present here my reflections on this matter.

Although the results of the study show how the children relied on the animation of the Fox licking its lips to understand the story ending of the Gingerbread Man (See section 8.3.3), not all of the animations included in the stories provided the same level of support. It must be noted that given that the children did not exploit the ICT-story software individually, aspects of how conducive the software interface on story comprehension were not studied in depth. For instance, the study did not look at whether hotspots in the stories or incongruent animations (terms used by Labbo, L., undated. Source: materials from a conference presentation held at Leiden University) supported or distracted children from the understanding of the story. However, there was some evidence of how the children made use of the animations offered in the story for the construction of meaning. I must note that Goldilocks is not considered in this discussion because the children were already familiar with the story. For instance, animations of the stories led to an understanding of the plot in the case of The Gingerbread Man's

story but were not as supportive in the story *Three Billy Goats*. The children were able to understand what happened to the *Gingerbread Man* but could not comprehend the plan that the goats made to cross the bridge and reach the land with greener grass (See 8.3.1). In spite of the repetitious structure of the story of the *Three Billy Goats*, the children were not able to figure out that the goats crossed the bridge in the fashion they did because of their plan to scare the Troll away. The animation in which the goats plot against the Troll shows the three goats talking together and the narration talking about the plan (for the transcription of this episode in the story see p. 131). It seems that the children needed a greater vocabulary repertoire or a lengthier explanation from their teacher to have a clear understanding of the goats' plan. Animations in this case did not provide sufficient support for the children's comprehension of the story. A further misinterpretation of this story was observed in Ana, who thought that the goats were the father, the mother and the child (See 8.5.2). This was due to the lack of an animation or image that indicated the listener that "billy goat" was a term used to represent male goats. In sum, the confusion of the children's interpretation of the *Three Billy Goats* story (because of the lack of animations) and their clear understanding of the *Gingerbread Man's* fate (because of the presence of a supportive animation) shows the potential of story software to scaffold meaning construction from stories when the language used in the narration is beyond the grasp of the listener.

The fact that children used animations and not language to construct meaning for the stories could question the benefits of the audio of the story, especially if the children mainly focused on the animated images during the viewing. Verbal language, however, was not disregarded. When Pablo spontaneously imitated the voice of the Troll saying "I'm going to eat you up" following the same intonation pattern (See 9.4), he was inadvertently practising the phonological system of English which could lead to one recognised benefit for very young children learning foreign languages: near native speaker pronunciation (Lightbown & Spada, 2006). Furthermore, Pablo's recognition of auditory information supports the findings of Verhoellen and colleagues (2006) about the fact that children do not necessarily neglect sounds when they mainly focus their attention on non-verbal information provided by animations.

Changes brought to the lessons after the inclusion of technology were viewed as positive by Teresa and, in my view, such an outcome might have been influenced by her attitude towards the project. From her interview, it was possible to see her willingness to try the stories with the children. The reorganisation that she had to make on her schedule from teaching English twice a week to four times a week (See p. 104) was not problematic because she wanted to participate in the project. Her enthusiasm was evidenced in her offer to move the chairs in the classroom before each lesson to prepare the computer corner. Within the lessons themselves, she organised a session for questions

after each story viewing because she felt that the children needed it (See 9.4). She made changes to Isabel's lesson plans in terms of the sequence of the tasks, but accepted the use of the songs and the materials that had been prepared. She also got involved in the work that I was doing on the computer and so brought the worksheets to sequence a story on paper because she thought that the children would benefit from drawing the story as well as working with it on the screen. Her positive attitude towards the use of technology to teach English to the children helped to ensure the success that the work scheme lessons had on the children.

It could be said that the creation of the work scheme in this study represents a form of innovation in the young learners' English curriculum in Spain. It suggests a way of working with the young learner that is not usual in the context of the school, which makes use of technology within the lesson not as an activity that takes place if there is time, and of material designed for native speakers of English that has not been modified. Prahbu's (1987) report of a five-year longitudinal study of curriculum reform, which was designed according to the theoretical framework of TBT (Task-based Teaching) raises the issue of teachers' adoption of curriculum innovation. He claims that the factors influencing the development of a "sense of plausibility" (p.105) that leads practitioners to adopt changes are training, actual classroom experience and current theories-in use. In line with Prahbu's conclusions, although training in my research was not provided for the teachers as I was in charge of the ICT tasks, classroom experience allowed Isabel to witness the results of using unabridged versions of ICT-stories, providing her with teaching ideas that she previously viewed as being too demanding for the children. This appreciation of the plausibility of the theory, it seems, is likely to occur if practitioners are offered guidance on how to use such types of stories.

In this study, the guidance provided by the work scheme resulted in the successful creation of and putting into practice the lessons based on stories written for native speakers. The assessment that the implementation of the work scheme is successful was based on the teachers' and the children's opinions about the English course and the results relating to the increased coherence of their retellings. In my view, the support that ICT can provide to learners, however, is being somehow minimised. A remark of Isabel's after the first week of implementation allowed me to see how she found that the stories "raised children's interest" and that children reacted "very positively" to the stories (Personal communication with Isabel: 12.07.06). Her view seems to support the notion that ICT has a potential that can be better witnessed in practice. For Isabel, like the teachers in Prahbu's project, real classroom experience helped her to see plausible ways to use unmodified ICT-stories with children as young as the participants.

Based on the results of the study, it could be argued that the design of an ICT-based English learning programme can be successfully implemented when teachers are given the opportunity to participate in its design and shown ways in which it can be adopted. The participation of the teachers can provide highly useful input on what is achievable in a determined setting regarding the work with ICT devices, making it possible to plan realistic goals appropriate to the learners' abilities and interests and conducive to learning. Further, results relating the successful implementation of the lessons (See p. 171 and p. 122) indicate the advantages of using language methodologies that suit the needs of the learners. In this study, the needs of young children as language learners have been catered to in terms of both the form of the lessons, TBL, and their content, ICT-stories.

### 10.3 Research question 2: Emergent literacy development

Results from the analysis of the retellings formed the basis of my response to the second research question of the study, which is as follows:

Q2. Can some form of change in children's skills associated with emergent literacy development, specifically in story grammar elements incorporated into children's story retellings, be observed throughout the lessons prepared with the work scheme?

Q2a. If yes, what type of development?

Q2b. What were the indicators of the observed development?

In this section I will first discuss why there is a need to take a conservative stance with regards to the results relevant for addressing the second research question of my thesis. This is followed by a discussion of key findings from the children's stories (See Chapter 8).

I start this section emphasising that the responses to this research question must be appreciated with some caution. The short duration of the English course, the autonomy granted to the children to decide whether to participate in the retelling tasks and the implementation conditions, such as the variation in the number of times that the children listened to the stories, are aspects that influenced the results and my interpretations of what constitutes emergent literacy development (see Section 7.6 on p. 125). Before discussing the results I should explain that I would not have changed these conditions, even if I had the opportunity, because they formed the essence of the project. I designed the project to occur in a short period of time in order to minimise the influence of the environment outside the classroom on the children's development of story-related skills. I also wanted the children to have the choice of "withdrawal" from some tasks, namely

whether they wanted to participate in the retelling tasks. Since their consent to be part of this research was granted via gatekeepers (See p. 61) I wanted to give them, inasmuch as was possible, the freedom to choose whether they wanted to participate in one of the tasks that was relevant to the study, that is, the retelling task. Hence, on the occasions that I invited the children to retell the story, if their responses were "I don't remember" or "I don't know the story", I accepted them and did not pursue the task further. Finally, the number of times that the children viewed the story before the retelling varied for two reasons: (1) Teresa was the person who chose the children who worked with me on the computer and (2) time constraints. I made the decision to let Teresa decide who would work in the computer corner in order to make explicit my recognition that she was the one who had authority over the lessons and that I respected her decisions as the teacher in charge of the children. Time was an issue because the work that I was able to do with the children had to take place during the lessons and, hence, retelling tasks or any other work<sup>e</sup> related to my research that involved the children could not be extended beyond the lessons (See p. 61). These conditions limited the possibilities for the children to view the stories the same number of times hence the difference in the number of viewings.

### 10.3.1 Effects of work scheme lessons on four child participants

Despite all of the above cautionary notes, the results of my research concerning literacy development are encouraging with regards to the changes that could be observed in the children's construction of stories (See p. 77). Results from the retellings showed the children's behaviour towards stories changing throughout the course. Such changes could indicate the development of emergent literacy skills based on the most basic definition of "development". In this study, this basic definition, derived from the retellings by the child participants, is related to the changes in comprehension and the construction of stories over a period of time. Observable developmental changes were particularly seen in the following areas: (a) the structure of the child participants' retellings, which showed improvements in the quality and quantity of story grammars included in them and (b) the strategies used to construct meaning from the stories. The discussion that follows presents the development of the four children whose stories were described earlier in Chapter 8: Enrique, Isolda, Ana and Angel.

#### *Enrique.*

I shall start this discussion by presenting the summary of findings for Enrique.

- The tasks conducted on the computer (during retelling, sequencing of stories and drawing of characters) were strong motivators for Enrique during the English lessons;
- It is plausible to relate Enrique's NSS (Narrative Scoring Scheme) retelling scores with his preference for stories;
- Enrique participated actively during the whole-class storytelling sessions. He made use of the animations in the story of the Gingerbread Man to construct the meaning of this story; and
- According to Teresa, Enrique behaved better during the computer work than during other tasks.

Literature on the use of ICT with young children shows how technology has the potential to motivate children (See 2.2.1). In the case of Enrique, this was visible. He changed his behaviour during the English lesson and became more participative and attentive. According to Teresa, Enrique even behaved better during the computer work than with her during the completion of other lesson tasks (See 8.3.3).

Enrique was a child whose interest on the computer tasks and the stories led him to improve his retelling of the story in the second week of the course. This improvement was observed in an increased use of the number of story grammar elements in the retelling of the Gingerbread Man. In the analysis of his three retellings, it could be seen that they contained 3, 4 or 5 elements (Goldilocks, Three Billy Goats and the Gingerbread Man respectively) of the story grammar model of Stein and Glenn (1979) (See 8.1). NSS scores of his retellings reflected the results obtained through the qualitative analysis, that is, under NSS, the retelling of the Gingerbread Man was the one with the highest score. However, the difference of NSS scores is less marked between the retelling of Goldilocks and the Gingerbread Man (9 and 10 respectively) than in the qualitative analysis results (3 elements for the former and 5 for the latter) (See 7.6). Qualitative analysis of the Three Billy Goats show that Enrique's retelling contained language belonging to 4 out of the 5 story grammar elements of the model, but the quality of the language scored low under NSS, resulting in a score of 7 for this retelling. These results might be related to how NSS scores assign value to a retelling. The model of Stein and Glenn (1979) becomes more restrictive since the categories are more global and not all language of a story can fit easily into one of the five elements. As a result, not all the language of the retellings could be categorised according to the framework of the model. In NSS that was not the case, since the 7 categories which comprise the NSS criteria allow for more language to be categorised using the model, affecting the score and the overall results of analysis. Overall, Enrique produced a better retelling in Week 2 and the decreased

scores and quality of his retelling in Week 3 might be an indication of a decreased interest in the last story, thus raising an important issue: the role of the teacher during storytelling sessions. It is to be expected that not all the stories would generate the same amount of interest in all the children. So teachers must be prepared to provide the children with additional support to create the interest. Three Billy Goats might be a story that needs more work from the teacher because it is more difficult for the young children to identify with the characters, settings or understand the plot.

Enrique participated actively during the whole-class storytelling sessions. He made use of the animations in the story of the Gingerbread Man to construct the meaning of this story. It was possible to observe how viewing the same story more than once supported the children's story comprehension. As pointed out earlier, Enrique understood that the Gingerbread Man was eaten on the second viewing.

#### *Isolda*

The summary of the findings for Isolda are as follows:

- The tasks conducted on the computer raised Isolda's interest in the English lessons;
- During the task of drawing the character for the story of Goldilocks and the Three Bears, she showed early knowledge of written language through the spelling of her name;
- Isolda's retellings followed a pattern of decreased scores in Week 2 and an improvement in Week 3; and
- Isolda showed interest towards working the various individual tasks on the computer.

Isolda's interest in the ICT tasks was noticed by Teresa. I also observed her interest in the technology, although perhaps somewhat moderate in comparison to other children. I found Isolda attentive and engaged in the stories, especially when she got interested in the ICT-task in which she drew one of the characters of the story of Goldilocks. For that task, in particular, she was eager to participate and asked for more opportunities to draw story characters on the computer.

Isolda showed interest in all the stories and so provided retellings with at least three out of five story grammar elements. Her retelling of Goldilocks, for instance, had language that could be categorised under four of the five elements of the story grammar model. Interestingly, even though her retelling of the Three Billy Goats had the least number of elements (3), the language that she used in this retelling was more complex

than that of her other retellings (See 8.2). In the retelling of Goldilocks there was great predominance of the phrase “and then” at the beginning of each sentence. For the last story, she started using vocabulary to present more details of the settings of the story, she introduced more story characters and also used onomatopoeia to describe an event in the story. Previous research has related listening to and telling of stories with children’s use of more complex language (Ryokai et al., 2003). Isolda’s retelling could be used to exemplify growth of this type of language. Her NSS scores (9,4,9) also showed a decline in her second retelling (for the story of the Gingerbread Man) which, in spite of having language belonging to each of the five elements of the model by Stein and Glenn (1979), did not merit high NSS scores. The change between the second week and the third then becomes relevant, as a process of learning might have occurred after three weeks of the course.

### *Ana*

From the story of Ana, the following findings were drawn:

- Ana’s interest in the lesson tasks, whole-class storytelling session and individual computer tasks was mild;
- Ana showed understanding of the stories during the storytelling sessions through gestures and comments;
- Ana was a child who improved the scores for her retellings only until Week 3;
- Ana gave to the characters of the goats in the last story of the course the same family-relationship that the three bears of the story of Goldilocks have, and so she talked about Father Goat, Mother Goat and the Little Son, making probable use of intertextual connections between the stories; and
- Even though the best retelling score for Ana was for the story of the Three Billy Goats, in her choice of stories, this was her least favourite of the three.

It was interesting to see how Ana extrapolated the relationship of the bears to the goats because it allows us to see how children make use of previous knowledge and experiences to them to understand a story. The relationship between the goats that Ana made up would not have been possible if Teresa had explained to the children that the goats were only male characters but as I have explained earlier, Teresa did not correct the children in their assumptions or conclusions from the story after the story viewings. She guided the question sessions in such a way as to encourage the children to talk freely, without indicating to them that there was a “correct” way to interpret

the stories. In my view, Teresa's approach encouraged the children to share their ideas without creating a feeling of fear about answering the questions incorrectly and, as a result, the question sessions promoted talk that was conducive to learning. Hence, Ana's interpretation should not be considered as wrong but as creative, especially if we take into consideration the effort of Ana to use the story of Goldilocks to understand the other, more complex one, of the Three Billy Goats.

It was interesting to observe Ana's choice of stories because of the mismatch between "best retelling" and "least favourite story." Mismatch occurs because one would expect that the best retelling would come from a favoured story (like the case of Enrique) but in her case, the best retelling came from her least favourite story. Given that the survey of the children was conducted on the last day of the English course, it was not possible to explore the reasons that the children had for the choices that they made with respect to how they rated the stories they viewed and as a result the reasons why Ana found the Three Billy Goats as her least favourite story are unknown. In spite of her choice, her retelling of this story was evaluated with high scores. Are these results a suggestion of the effect that working with stories have on children's construction of stories? In spite of not having loved the story, Ana produced a retelling which included characters and the reasons for their actions, which is a difficult task for a 4-year-old child (Toolan, 2001).

The mild interest that Ana showed towards the work in general provides useful information for the English teaching practice regarding the proclivity of children towards learning a foreign language or the use of technology. It is possible to suggest that not all children would be naturally attracted to either learn a language or work with technology. Taking into considering Ana's developing motor skills, which when compared to the other children seemed to be less developed, it could be suggested that Ana found the work on the computer too challenging and, therefore, she might have felt a little discouraged about her abilities to complete it. Perhaps Ana simply did not feel motivated to learn English, even though she showed interest in the stories. There is, however, not enough information to draw conclusions regarding these matters and, thus, these are speculations. Nevertheless, Ana was a child with whom I would have loved to spend more time with in order to understand her personality, behaviour and reactions in more depth.

#### *Angel*

A summary of the findings of the story of Angel are as follows:

- Angel's behaviour during the lessons improved, as observed by Teresa, when the work scheme lessons were introduced;

- Retelling scores for Angel improved in Week 2 and remained constant in Week 3;
- Angel's best choice of stories contained male protagonists, suggesting that he probably identified with male characters; and
- It was interesting to see that Angel responded to his survey independently from Pablo, an attitude that Teresa found to be positive given the strong relationship of the two boys.

Research on the use of ICT with young learners suggests that children may benefit from the use of technology in their lessons. The case of Angel exemplifies such a view because he got engaged in the trial lessons implemented during the study and, in comparison to the week before their implementation when I observed him in class, his behaviour improved. The scores obtained for his three retellings (0, 8, 7) do not, however, suggest much as they showed that Angel provided only basic elements for each of the seven NSS criteria. Nevertheless, as I have explained earlier (See 7.6), the numeric evaluation of his retellings is only one part of the results. The changes in his behaviour were more noticeable from the qualitative analysis of his retellings (See p. 157), it can be said that they were noticeable.

One of the focuses of research on emergent literacy has been on children at-risk of developing literacy (See 2.6.1). In the case of Angel, his behaviour might be a factor that in school could complicate the development of the skills that he requires to become a reader, given that he is not keen to pay attention to one activity for long periods of time, putting him at-risk. Considering this potential problem for Angel, the effects that the stories had on him were worth considering because he changed his attitude and accepted to retell the stories. In the development of his skills related to literacy, this first step was important. A second important result was his original interpretation of the second story which might suggest that he got involved in the story and the activities that were taking place in the lessons.

Unlike the other children who were interested in the computer tasks from the second day of implementation, changes in the behaviour of Angel took place at a slower pace. This leads me to believe that Angel, just like Ana, would have benefited from a longer course. Indeed, on the last day of the field work, Teresa made a very positive remark about Angel when he responded his survey independently, which suggested the overall change in him.

### 10.3.2 Effects of the use of stories on the group

The main findings regarding the effects that the use of stories had on the children as a group were as follows:

- Children developed their retellings in heterogeneous ways. Interestingly, all of them showed changes in their NSS scores, indicating that the use of stories had effects on the children;
- Children as young as the participants of my research are able to provide retellings of stories rich in content and highly informative of their development of storytelling skills;
- Sequencing a story using four squares and a top to bottom and left to right order was a task of high cognitive demand for the child participants; and
- There were two strategies used by the children to sequence the story: choosing a picture and placing it in its corresponding empty space or selecting a numbered space and finding, from the pool of pictures, the one corresponding to the selected space.

*Strategies used to construct meaning from stories.* It was important to understand how the children constructed meaning from the stories, given that the stories were told in English, a translation was not provided and that the children were not familiar with two of them. The results of the study regarding how much the children could understand from a story might be considered an indication of children's development of literacy skills. Through children's retellings and interactions with the stories, it was possible to see that the children understood the stories to varying degrees, that is, some children's understanding was closer to the story plot than others. The explanations provided by the children regarding the events in the story that were developing on the screen indicated their constant efforts to understand the story.

A child's construction of the meaning of stories is influenced by many social and linguistic factors. Previous experiences, home environment, amount and quality of encounters with books, personal preferences, and the level of language development, which in young children varies greatly, are all elements that play a role in how children make sense of a story. The heterogeneous results regarding story-skill development (See Chapter 8) obtained in my study might have been influenced by such factors.

According to the results of the study, the children's understanding of stories was influenced predominantly by the non-linguistic elements (for instance sound and animations See 9.2, 8.3.3 and 9.5) provided by the multimedia features of the computer.

Studies that have looked at how a story presented with images and sound could promote story understanding have concluded the influence of multimedia on this aspect (Verhallen et al., 2006; Irlen, 2003; Talley, 1994). Results of those studies indicate the importance of software design, the advantages of ICT-stories over printed books and the potential of using such material, even if designed for native speakers of any language, for foreign language learning. I must emphasise that this argument is partly a hypothesis due to a limitation of my study, which was the lack of a control group that looked at the same stories on printed books. Given this limitation, I could not argue with certainty that the children's improvement is because of the story software, although the students seemed to have benefitted from it. Further studies with a design that involves a control group could address this limitation.

There are different aspects of the stories that could not have been understood had animations not been present. The features of the story present in the software enhanced the storytelling sessions and, as a result, scaffolded comprehension of the stories. In this sense, ICT directly fostered the development of emergent literacy skills because delivering a story with sounds and visual effects promotes understanding. It seems that had the child participants looked at the stories on printed books, understanding would not have been as strongly supported due to the lack of animations.

The outcomes of this study seem to be consistent with previous research regarding the use of ICT-stories with preschool-aged children and its effects on emergent literacy skills development (de Jong & Bus, 2004; Bus, de Jong & Verhallen, 2006; Korat & Shamir, 2008). As de Jong and colleagues point out:

*CD-ROM stories foster children's comprehension and focus their attention on relevant aspects of the plot because digital storybooks are by nature dynamic entities easily capable of being adapted to the needs and wishes of individual readers. Animations that augment text may help youngsters understand a character's state of mind, point of view or motives (de Jong & Bus, 2004, p. 130).*

The children's use of images and animations to understand implicit story elements could be observed on different occasions. Enrique's imitation of the Fox licking its lips gave a clear indication of the children's reliance on visual cues to interpret this story. In the story of the Billy Goats, Adriana observed the difference in grass colour and she later explained that the goats wanted to cross the bridge to eat the fresh grass. Additionally, taking into account that the image of the Troll in the water was not present in the story, Adriana used the onomatopoeia of splashing water to deduct that the Troll had fallen into the river after being thrown off the bridge (See 9.4).

The lack of animations to present implicit elements in the story of the Billy Goats might also have influenced the children's understanding. In this story, an animation showing the differences in the colour of grass was not present and, interestingly, the children offered a variety of reasons to explain the goats' need to cross the bridge (See Chapter 8). For instance, Ana and Isolda said that the goats wanted to cross the bridge to see what was on the other side and talked about a fountain and a castle while Enrique said that they wanted to cross the bridge to meet their friends.

Other factors that influenced the children's comprehension of the stories seem to be the children's choice of words to translate the names of the main characters and knowledge of the foreign culture. For instance, lack of knowledge of literary elements influenced the children's understanding of the story of the Billy Goats (See 9.4). This was seen in how the children understood the character of the Troll in the story. Since the children in the study were not familiar with the notion of "Troll" (apparent from their choice for names given to the character, like "purple man"), they perhaps used the Spanish term "pastor" (shepherd) to name the character of the Troll to inform their understanding of this character. The findings about their confusion of the role of the Troll seem to suggest that the children could not find the reason why a "shepherd" would not let the goats cross the bridge. In this story, the goats are not able to cross the bridge because the Troll does not allow it, and given that Trolls are generally bad characters, the plan of the goats to get rid of the Troll makes sense. However, when the children used the term shepherd to name the Troll, they altered the nature of the story as they understand that shepherds look after the herds and, therefore, are generally good-nature characters. In order to understand the message of the story with an ill-natured Troll, it was necessary to understand the word Troll. Had children chosen a term such as "ogro" (ogre) or "monstruo" (monster), they might have found it easier to construct a reason for the Troll's behaviour in the story. This speculation is based on children's understanding of the story of the Gingerbread Man, even after having translated the name for the main character. In this case, the children's choice of words (The Little Cupcake Man) (See 6.3.2), did not change the character's nature or the physical constitution of "El Pastelito", which remained as fragile in the water as the gingerbread. Children seemed able to understand that "El Pastelito" was eaten or had melted and so they offered an explanation of why this character disappeared at the end of the story. The children who did not understand the Gingerbread disappearing at the end of the story were Isolda and Ana, who insisted that the Fox and the Gingerbread Man became friends (See 8.4.2). Comprehension of the story was not reflected in their retellings in spite of having heard Enrique say that the Fox had eaten the Gingerbread Man during the storytelling session. In my view, it would be interesting to study the underlying reasons for children's modification of the ending of stories since it would be

possible to understand how very young children explain their world and how they make sense of it. Children are active constructors of the world around them (See Section 2.3) and stories provide one means of constructing their world. Perhaps the ending of a story does not match their view of the world and, hence, they decided that there should be an ending to the story that makes more sense, according to their experience or previous knowledge.

Arguably, the story plots were not understood accurately by all the children. This, however, with respect to the aims of the study, did not present a negative effect on the use of stories as the experience of storytelling was as rich as the children engaged in it. The young children were allowed to explore different possible actions of the characters in the stories, as well as different versions of the stories. It seems that allowing the children to retell the stories in the language of their choice ensured that the children did not feel one language being more important than the other.

*Discussion about the three-moment repetition pattern in the stories.* Results from the analysis of children's retellings provide evidence with relation to how they made use of the three-moment repetition pattern of the stories. There was indication of the children using such pattern in two moments: to introduce the characters of the story and to tell the actions performed by the main characters (See 8.3 and 8.1). These results could be an indication of a positive effect derived from the use of stories constructed with such repetition pattern, as it allowed the children to construct an introduction or an episode of their retellings.

Findings from the whole class storytelling sessions did not provide indication of the children making use of the pattern to predict episodes of the stories or the characters actions. For instance, in the story of the Gingerbread Man, the characters of the boy and the girl run after the Gingerbread Man after the episode where the man and the woman started to chase this character. The participant children, however, did not ask questions regarding who might be the next character chasing the Gingerbread Man. It must be noted that, given that the stories were played continuously, the children were not given opportunities to voice their predictions if they indeed had them.

Another aspect regarding repetition patterns which was observed in my study is related to how the children make use of repetition in context to learn how to recognise a phrase that appeared in a story in similar events, such as the Gingerbread Man's trademark phrase: "Run, run as fast as you can, you can catch me, I'm the Gingerbread Man." Unlike the study conducted by Darnton (See Section 2.4), the children participant were not asked to read the stories, therefore, it was not possible to explore whether they would have been able to pretend to read words or phrases that appear in different contexts with little variations. It was interesting to see, however, how Pablo seemed to

have been attracted to the repetitive phrase spoken by the Troll every time that a goat tried to cross the bridge “Im going to eat you up.” It would seem that the repetition of the phrase had an effect on Pablo, even if this did not take place through readings but through listening.

### 10.3.3 Complexity growth in retellings: Fledging cause-effect elements in stories of four-year-old children

Research regarding children and their capacity to tell a story indicates that four-year-old children are able to tell pieces of a story without including cause-effect details (which are left as understood) (Toolan, 2001). In this thesis, drawing a link between the NSS criteria of conflict resolution and conclusion with referencing and mental states, the study finds that the contents in the children’s retellings that might be viewed as an incipient development of using cause-effect relationships in a story. A small number of child participants, such as Ana and Enrique, could indicate some understanding of cause-effect relationships between events. In her retelling of the Billy Goats story, Ana included reasons for the goats wishing to cross the bridge. Because they wanted to go to the fountain (referencing element) and they were hungry (referencing element), and so the goats crossed the bridge (conflict resolution). Enrique, in his explanation of the Troll being thrown off the bridge (See 8.3), provided a cause-effect tone to his retelling. According to him, the Goat thought that the *shepherd* was bad (mental state element), and so he threw it off the bridge (conflict resolution element) (See 8.3). However, in general, it seems that the children were unaware of cause-effect relationships. I base this interpretation based on the lack of connectors in the children’s retellings (See Chapter 8). Perhaps the children did not fully understand that one event could trigger another. Nevertheless, the inclusion of such elements used by Enrique and Ana, which try to explain the motives of the characters, could be an indication of the children’s first attempts to explain cause-effects events in a story. The reasons why children might make use of cause-effect elements in the retelling the stories might be related to how much detail the stories provide or the complexity of the story schema. For instance, it was necessary to understand why the goats wanted to cross the bridge, as the whole story revolved around this particular fact (See 7.9). Also, it was important for them to understand what happened to the Gingerbread Man, given that his character disappeared from the story without a visual explanation. The story of Goldilocks presented a different situation because the children did not question why the little girl sat on the Little Bear’s chair. There was however, Ana, a child who offered a reason for Goldilocks to try the bears’ beds when she said that “She [Goldilocks] felt-wanted to sleep”.

Findings from the interaction that children had during the storytelling sessions (See p. 171), showed the children providing alternative endings for the stories. The endings they provided suggested their involvement with the stories and the dynamic relations that they established with the texts. They created their own versions of the stories creatively. They also played an active role in understanding and evaluating the stories through their interpretations and deductions.

*Story sequencing.* The story sequencing task in which the children were asked to arrange pictures from the story proved to be too challenging for the children. The results suggested that for this type of task to be completed by very young children, closer guidance from the teacher and certain modifications to how the task is designed are required. Modifications may be made in the number of spaces to draw or place pictures in and the arrangement of the spaces should be made horizontally only instead of vertically in addition to horizontally. This suggestion is based on the strategies that the children used to sequence the stories in the ICT-task (See 9.6).

The number of instructions involved in the completion of the task was also problematic. In order to complete the paper version of the task, the children had to think of the story, break it into separate episodes, give it a sequence and finally draw a picture related to the story. Taking into account the children's fledging motor skills development, drawing alone may be too challenging for some. In the computer version of the story the children had to remember specific details and moments of the story, understand the graphic representation of the numbers written inside the empty spaces, remember the sequence of numbers, select a picture, think of a place to move it to and finally drag the image. The number of instructions was far too great for the children to complete the task.

A final interesting finding was related to the strategies that the children used to sequence the story (See section 9.6). Findings with reference to the completion of this task raised numerous questions, including the following:

- Is it just natural to just follow a clockwise directionality in sequencing images?
- What cognitive processes are involved in the selection and positioning of images in given spaces?
- Is it different to look at an empty space and try to find an image that fits the space than to look at an image and find the space where it fits?
- Does the latter indicate a stronger sense of the story sequence, in the way that it was so clear what happened first, second, later and last and that it was just a

matter of seeing the picture and moving it to its place or does looking at blank spaces and trying to find an image that fits indicate a stronger guessing strategy?

- How could these matters be studied?

All these questions are worth exploring in future studies of young learners' interaction with software interfaces, as they might inform the design of tasks so that an activity in which children be asked to arrange pictures from a story actually focuses on the sequencing of episodes and on the story rather than on the physical requirements that the task calls for.

### 10.4 Research question 3: Very young English learners, ICT-stories, and TBL

In order to address the third research question of the study, data from the interviews, field notes and the survey of the children were combined with the purpose of constructing an overall response. The question was as follows:

Q3. What is the attitude of the children towards learning English using ICT-enhanced stories integrated in the work scheme? About the English course at all?

Key findings related to this question indicated the following:

- According to Teresa, the attitude of the children towards the English lessons improved after the implementation of the work scheme lessons, as evidenced by the children's increased interest on the tasks and their spontaneous use of vocabulary from the stories and their story retellings during playtime;
- Teresa found the children making spontaneous use of vocabulary from the stories during completion of non-ICT tasks; and
- The children found the lesson tasks enjoyable and their ratings indicated their views. Only two children evaluated the lesson tasks negatively as opposed to the six children who gave a positive rating to the tasks.

*Children's attitude towards the stories as observed in their behaviour and rating of the lesson tasks.* An interesting issue that occurred with the introduction of ICT was that Teresa started to use the computer to encourage children's good behaviour which, in my view, presented a paradox. According to Teresa, the children's behaviour improved when she told them that only the obedient, quiet children would work on the computer.

The actual improved behaviour of the children (See 9.2) suggested their eagerness to work on the computer but it also isolated the computer from the rest of the lesson tasks. Teresa's decision to use the computer as a prize hindered its integration into the lessons since supposedly, not all the children were able to work on it, only the ones who had earned the right to. In reality, however, all the children, regardless of whether they behaved well, worked on the computer because Teresa was aware that my research required that all of the children completed the computer tasks.

Although Teresa's intentions seemed positive, as she wanted to promote good behaviour, these decisions contradicted the research on the inclusion of technology in the young learner classroom. Such research leans towards concluding that, for the potential of technology such as computers to have an effect on the learning opportunities that children might have in classrooms, technology should be integrated into the daily lesson activities (Labbo et al., 2000). Technology in my research was successfully used, but it could be said that its integration was not complete, perhaps more from the teacher's perspective than the children's. For the children, the computer became a usual element of their English lessons by the fourth day of implementation, as evidenced by some of the children asking at the beginning of the lessons questions such as: "Are we watching the movie today?" or "When are we working on the computer?" (See 9.4).

Teresa expressed her opinions of how the use of the stories and the computer motivated the children. Their wish to stay behind in the classroom to play on the computer instead of going out to play gave an indication of such a motivation. She also observed the effects of working with the stories on the children's spontaneous use of vocabulary. There are, however, important considerations that need to be made before concluding that a lesson that uses ICT is better than a traditional non-ICT lesson. The danger of accepting the idea that "education with technology is better", is that one could fall prey to the fallacy of the 80's portrayed in the works of Kozma (1991) who was keen to prove that the inclusion of technology in formal educational settings had an effect on increased learning. It has, however, been shown that the sole presence of technology does not guarantee improved learning (Clark, 1983; Joy II & Garcia, 2000). The role played by the teacher is always an important factor to consider in the success of any teaching approach which is supported by ICT (de Jong & Bus, 2002). It is encouraging that teachers are willing to try teaching practices and schemes of work that are innovative and that exploit technology. Nevertheless, it is my view that technology is good only if it is integrated in the daily lessons and is used to construct a meaningful learning environment where the children can be given the opportunity to do more, to go beyond their zone of proximal development (Vygotski & Kozulin, 1986) scaffolded by technology (Yelland & Masters, 2007).

The evaluation of the tasks that the children made via the survey supported the interpretations that I made of the results of my research. It seems valid to suggest that the children enjoyed the stories and liked their English lessons. It is, however, worth noticing that my research took place in a very specific context, during a summer school programme which children attend to have fun. It is possible to hypothesise that children in other contexts might react in a similar fashion as the child participants, taking into account the role played by such variables as the number of English lessons per week, size of class, arrangement conditions of the classroom in the reaction of the children towards the same type of lesson as the one used in my study.

*Some thoughts.* Findings of the study revealed how a foreign language course provided the context to introduce children to foreign cultures in a meaningful way. For example, the child participants showed great interest in the character of the Gingerbread Man and they related it to local food. I took the opportunity to show the children about gingerbread and after getting the school's permission, I baked some gingerbread biscuits for them. They became truly interested and the story of The Gingerbread Man gained a meaning that was brought to their lives. These experiences might have an effect on the children in ways that one can only predict but are still possible. For instance, when some of these children see gingerbread in the future, they might relate it to their English lessons. Although the nature of this study did not allow for corroboration of the above prediction, the possibility that it can happen is undeniable. Finocchiaro (1964) emphasised that one of the important learning experiences of children who learn a foreign language from a very young age is social in nature. Children could become more tolerant of foreign societies by learning about them through their language and customs, which include their food. Additionally, learning about a different culture could open the door for conversations with children from the foreign country, providing a reason to communicate and a common knowledge base that could be shared. For the story of the Billy Goats, the concept learned from another culture was that of the Troll. The children in the study used the words shepherd, purple man and soldier (See 9.4, 8.1, 8.5.2) to refer to this character as Troll was a foreign concept to them. As Teresa did not bring any discussion about this character into the lessons, the final translation of shepherd had an effect on the children's understanding of the story. The material of the story could have been exploited and learning from other cultures would have been possible. If, for instance, Teresa had taken the notion of Troll and expanded the knowledge that the story gives about it, by talking about other mythological creatures from the English literature. The opportunity for such an exchange of knowledge was given by the children's interest in the character and their observations of their colour, (the purple man). This opportunity, however, was not exploited.

## 10.5 Research question 4: Teachers' views on young learners and ICT

Data from the interviews were used to construct a response for the fourth research question of the study. The question was as follows:

Q4. What are the opinions of the teachers involved in the study about the integration of ICT in the preschool curriculum?

Findings stemming from the interviews on this matter were related to the professional development and support provided by the school to implement teaching projects based on technology. The key findings are as follows:

- Isabel and Teresa believed that the extent of use of ICT in young learner classrooms was related to the availability of time since planning projects that involved the use of technology in the classroom was time-consuming;
- Isabel identified the lack of strategies for the use of ICT to be a major reason for its low exploitation in formal education contexts. At the same time, she believed that teachers were expected to use ICT but there was little support to that end;
- Both Isabel and Teresa believed that technical support was an important element for the use of ICT in the classroom;
- It is advantageous to use ICT with young children in the English lessons. ICT has the potential to create learning opportunities, motivate children taking advantage of their natural attraction to technology and stimulate their imagination; and
- According to Isabel, allowing children to work alone with computers was an idea that teachers might not accept easily. The suggestion from Teresa on that aspect was the increase in children:teacher ratio when ICT was included in the young learner classroom.

*Use and integration of ICT in the English lessons.* Although the participant teachers thought of the inclusion of ICT in the classroom as almost necessary, given the need for people to be computer literate, they did not think it was always possible for three major reasons (See 9.2):

- Preparation time;
- Strategies and professional development; and

- Technical support.

*Preparation time.* Isabel and Teresa believed that preparation and planning time play a major role for the use of ICT in the young learner classroom. Schools should consider the busy schedules of teachers and the time involved in learning how to handle technological devices such as computers, digital cameras or software. If teachers are not given time to become confident users of the technology that they will use in the classroom, it is less likely that they will develop and implement projects involving ICTs.

*Strategies and professional development.* Isabel identified the lack of strategies for the use of ICT to be a major reason for its low level of exploitation. In Spain, the use of technology is encouraged through the creation of ICT centres available for teachers and students to support their learning through ICTs. The ambiguity of information regarding the purpose of such centres and how they can be used by teachers to support their practice, has however, limited their use. Cristina talked about the advantages of using technology and believed that the children should be learning about and through technology. Nevertheless, she found that using computers in schools required that the teachers receive formal preparation which was not always available. In the case of Teresa, her lack of experience in working with ICT projects influenced her willingness to use technology in the classroom when working with very young children. With regards to technology, her concerns revolved around the cost of the devices, training and school support to fix potential technical problems that could arise during the lessons. With regards to pedagogy, in order to carry out lessons with technology, she thought that it was necessary to be well trained in matters of technology use, troubleshooting and software capacities in order that lessons with technology could be carried out. She also expressed the view that in order to use technology in a class, such as the way it was done in this study with a "computer corner" where a child worked individually while the rest of the class was working on a different task, required more than one teacher to be present in the classroom. Neither Isabel or Teresa encouraged the independent use of technology by the children (See 9.2).

The views expressed by Isabel, Teresa and Cristina seem to be in line with previous research related to practitioners' views on the use of ICT in education (Turbill, 2001; Sime & Priestley, 2005). Major issues identified in such studies related to ICT use and integration in the curriculum are training, technical support and staff. The participants in my study expressed these same concerns, thus allowing me to offer the same type of solutions to these previously identified issues, namely that teachers need to be trained in classroom settings and be taught to anticipate possible problems that can occur with technological devices. Also, teachers need to witness the advantages of using technology

in order to increase their willingness to allocate extra planning time to such projects, a view expressed by Isabel during the interviews.

*Technical support to encourage the use of ICT in the classroom.* Isabel was the teacher who had experienced the possible problems that could take place during teaching with technology in formal education settings. For example the speakers of her computer failed to work and the song that she had prepared for the lesson could not be heard (See 9.2). Because of this experience, she had learned the usefulness of having technical support in the school so that this type of problem could be solved at the time of the lesson. She believed that the fear that technology could fail during their classes might affect the teachers' willingness to use it. In addition, Teresa thought that a classroom needed to be physically prepared for the use of technology. Furniture should be easily relocated so that the layout could be changed according to the needs of the teacher and the requirements of the technology that was being used (for instance when the light was required to be able to see the screen of the computer). She also thought that something simple such as electrical outlets should be available in a classroom because these simple details could facilitate the process of setting up equipment that needed to be connected. Interestingly, I have not yet found in the literature regarding the use of technology in the classroom references to the teachers discussing this type of logistical problem.

Overall, ICT is regarded as a positive addition to the language classroom. Cristina, using her own experience as language learner, found that technologies provided the children with a meaningful context for learning. Teresa and Isabel also observed how the children were eager to work on the computer naturally. (See 9.2). However, one of the most important observations made by Isabel and Teresa regarding technology and young children was related to the role of the teacher in the implementation of projects involving technology. Studies that have explored children's understanding of ICT-stories without adult intervention have suggested that there are more benefits when children are guided through a story than when they are left to work on their own. These results strengthen the notion that ICTs complement the teachers' work and may not be used as a substitute. In my research, the features of computers made the use of stories written in English possible, as the animations scaffolded understanding. This, however, does not indicate that the stories were understood only because of the multimedia features of the computer. The work conducted with Teresa created the context in which the children were encouraged to learn English while playing and having fun with language. The potential of ICT to enhance learning environments are exploited through the teachers' interventions and this aspect of integrating ICT in classrooms should always be kept in mind at the time of planning projects that use technology in formal educational contexts and thinking about the factors that could influence their success.

## Chapter 11

# Implications, limitations and further work

### 11.1 Overview

As part of the background of the study I reviewed the construct of emergent literacy, the task-based learning (TBL) approach to English language teaching and the use of ICT with young children. Based on this review, I offer my reflections on contributions and implications to these areas as they were used to design and implement the English programme for very young language learners which has been explained throughout this thesis. These reflections are made in the light of my findings and are particularly related to the context of the study. In addition, the study's limitations in theory and in method are discussed. Attending to the study's limitations I present a section of further studies that could derive from this research. Finally, I present the conclusions of the study.

### 11.2 Contribution of this study

For the English teaching practice, the study provided evidence that the use of ICT-stories enhanced the learning environment of the language lesson by increasing the motivation of children, observed in their level of participation and their response to the stories. Engagement of the children with the ICT-stories and their level of comprehension of the stories evidence the potential of this type of material for the English lesson. A further aspect regarding the use of ICT was the way in which it scaffolded comprehension. Animations and sounds helped the children to construct meaning from the stories and as a result, the language in which the stories were told did not produce any observable negative effects on the children.

It can be said that stories constructed with a “three-moment” repetition structure supported children’s construction of meaning from the stories. Elements from the retellings show children’s repeated use of linguistic structures that exemplified each one of the moments, such as first and then. Additionally, repeated viewings of the stories allowed the children to increase understanding, as they were able to acknowledge more details of the stories after each viewing. This shows that using this type of story and giving the children the opportunity to view them more than once also influence the number of details that children understand from stories heard in a foreign language and in turn, later influence the construction of retellings.

Although in this study the stories were delivered through a computer, the storytelling session followed the tradition of a session where printed stories are read to children. This strategy allowed the teacher to participate with the children in the viewing and as a result, the storytelling session was enhanced. This enhancement occurred because the guidance that the teacher provides when technology is being used with young children is vital for the learning experience to be successful. The computer was not a substitute story-teller but a tool that extended the capabilities of the teacher.

Providing the young learner teacher with a strategy for the integration of ICT in the foreign language classroom helped teachers to visualize ways of exploiting ICT, increasing their confidence in the use of technology. Furthermore, the study showed the potential of TBL to teach English to young learners. Purposeful and meaningful tasks based on a story theme as the basis of the lesson gave the children meaning while learning a foreign language. Having the lesson structured with a sequence of tasks with specific learning objectives allowed the teachers to organise and the children to understand the dynamics of the English lesson. This in turn had a positive effect on the development of the lesson as the children developed clear ideas of what was expected of them in the tasks.

In this study I took the approach of emergent literacy to study children working with stories in English and not in their first language in a foreign language context. It has been said that behaviours conducive to becoming literate occur when children are read to or view stories from a computer. In this study the same notion was used with Spanish-speaking children viewing stories in English. Evidence from the study suggest that the work with stories influenced the children’s comprehension of stories which was reflected in children’s retellings. These results suggest that using stories with very young children is beneficial, both from the foreign language learning and the literacy development perspectives.

This study responded to the need pointed out by several authors (Plowman & Stephen, 2003; Lankshear & Knobel, 2003; Verhallen et al., 2006; Tracey & Young,

2007) of exploring how the computer impacts on the development of emergent readers. Through the study, I have attempted to fill a gap in the literature of the effects that using ICT-stories has on children's development of emergent literacy skills in a foreign language context. The study produced modest evidence that children's use of ICT-stories can develop the quality of story grammar elements used in the retelling of stories. The use of ICT-stories supports the development of story-related emergent literacy skills by supporting comprehension of the story through the multimedia features found in this type of software. Features included in the software scaffolded children's understanding of details from the story. Children's retellings reflected awareness of the details and as a result the quality of the stories retold increased, showing the positive effects of using technology in the delivery of stories. The heterogeneous results of this study regarding development of emergent literacy skills show that children's development follows diverse paths and paces. Such diversity of growth highlights another advantage for the use of ICT-stories. Technology has the capability of catering to diverse needs as evidenced by the children's diverse retellings. It can address the needs of the children who rely on animations to understand stories. It provides text for those children who show an interest in print and it provides narratives for those children who show an interest in sound. When working with this type of technology, children will take what they need following their preferences for learning. On the other hand, although the results on story grammars development varied greatly, it must be noted that the changes observed took place in a relative short intervention. Exposure to stories for longer periods is likely to yield more consistent results across the group of children.

### **11.3 Implications for the English teaching practice from the use of ICT with very young foreign language learners**

Results of this study have implications for the teaching practice of young learners in the context of the study. First, training and professional development that teachers receive is vital in how they will envision using ICT with preschoolers. The implementation of the English programme designed for this research allowed the teachers to see the potential of ICT to enhance learning environments of young children in practice. A collaborative project of design and implementation could help teachers to see the pedagogical potential of integrating ICT into the young learner language curriculum and, as a result, increase their confidence towards the use of technology. Furthermore, the teachers' technical concerns when using technology, such as solving problems that could arise during the use of ICT in the classroom and logistic problems such as the reorganisation

of the classroom layout that teachers expressed could disappear also through the implementation of ICT-based projects. These aspects have implications in the preparation of teachers' training courses. If student teachers were given a subject where technology had to be exploited in nurseries and kindergartens, they would be given the opportunity to see technology at work in real environments and experience the pedagogical potential of ICT, thus confidence to use technology could develop. A second aspect arising from the findings was that teachers' involvement in the course design increased their commitment to the programme, and this constituted an advantage of letting the teachers participate in an effort of curriculum design. Giving the teachers the opportunity to be part of a programme design influenced its positive implementation. If teachers are allowed this opportunity in other contexts, this could influence their commitment to efforts of curriculum innovation and subsequently influence its successful implementation. The positive effects that the use of ICT produced on children's attitude towards learning English allow us to see the importance of integrating technology in the kindergarten curriculum as a "core" task and not as an incidental activity that takes place only if time is available. By making ICT tasks part of the daily classroom learning activities, children can develop a sense of organisation that gives them a clear idea of what takes place in the classroom which in turn can improve their behaviour, creating a classroom atmosphere more conducive to learning.

The inclusion of ICT-stories into English lessons can have positive effects on children's motivation towards foreign language lesson. Technology in combination with stories creates an interest in the children that makes learning a foreign language meaningful. Moreover, an early start in the use of ICT devices would allow for the building up of the children's ICT skills to be paced at the children's own capacity. Taking into consideration the time of exposure and the type of task that is asked from them, young children could learn to exploit ICT tools gradually and so, the amount of time required for children to develop ICT-related skills is spread over time. Progressive work with ICT would ensure that young children do not work extended periods of time with technology whilst ensuring that they will have the opportunities required for them to develop such skills.

ICT multimedia features have the capacity of supporting understanding of stories and as has been pointed out, could lead to the development of story-related literacy skills. However, exposure to stories written for native speakers of English is limited in foreign language contexts due in part to availability of materials and also to teachers' notions regarding young children being exposed to the written system of a foreign language. Both conditions have implications for schools and the practice of language teaching. In order to make materials available, budget considerations come into play. For the exposure to a foreign written system, the pedagogical implications are even greater. In

order to understand the effects of early exposure to a language system further research is required (Kenner & Kress, 2003).

Given their age and motor skills abilities, children of the age of the participants working with ICT almost necessarily puts an onus on the teachers to be confident users of technology. Additionally, teachers need to make decisions about the software that children are going to use. The implications for teachers' professional development are clear. They need to be offered opportunities to learn and practice ICT in the classroom, looking at the pedagogical and technical sides of it. Pedagogical to integrate it into the curriculum and technical to be confident users of the technology so that they can scaffold the children and exploit the potential of the technology.

Implications for schools with regards to budget considerations become evident when teachers talked about the need to have a second teacher when working with ICT and very young children in order to have a low student:teacher ratio. In the participant teachers' views, young children need adult support when interacting with technology, to take advantage of its capabilities and to avoid damages. In order to provide such support, which ideally occurs while working individually with children, requires a second teacher in the classroom. Hence, the solution that the teachers provide for the proper exploitation of ICT resources with young children has direct impact on resources and school provision.

#### 11.4 Implications for the emergent literacy approach

Implications of this study for the emergent literacy approach are relevant considering that children could be developing behaviours towards literacy in the form of story grammar knowledge during foreign language lessons when ICT-stories are used.

The use of ICT-stories in the development of emergent literacy has been studied in populations at risk for low socio-economical status (Korat & Shamir, 2008). Such populations can be at a disadvantage because access to books might be limited for economical reasons. In this study, exposure to foreign language stories might not be limited for economical reasons but due to context. The number of stories in a foreign language that children are exposed to might be limited because of the material available in the community. The use of ICT-stories in the language classroom can create the opportunities for children to be exposed to stories in the foreign language. In this study, children belong to a community that regard highly the development of literacy in Spanish. Parents encourage literacy practices. This study tried to explore potential benefits of exposing

young children to foreign language stories with the purpose of learning if and how this could support the development of emergent literacy skills.

The possibilities of children developing literacy skills during foreign language lessons could lead to a change of attitude towards allowing the children to be exposed for instance to foreign language texts. Currently, literature on EFL and young learners suggest that literacy development in English should be delayed in favour of the development of literacy in children's first language. Teachers are reluctant to develop literacy in the foreign language on the basis that exposing young learners to text in English at an age where Spanish is being developed could be confusing to the development of Spanish. This study suggests that instead of confusing them, children make use of skills to understand stories in Spanish to understand stories heard in English. If children develop a set of literacy skills and use them regardless of the language, then there would be no reason to delay the development of literacy in L2. This however, requires further research through studies that look at the development of phonological systems in children learning two languages in foreign language contexts.

Broadening the scope of subjects that could influence the development of emergent literacy skills is also worth considering. If children develop the skills not only when learning literacy or during the literacy hour, but whenever a story is being read to them in an interactive way, implications for the curriculum are important. Every time a story is used to teach a subject could be influencing the development of literacy behaviours. This needs further research.

Much has been said lately about the need that children have to develop a broader concept of literacy, which includes ICT literacies (such as understanding text read from electronic media). This study shows how the multimedia features of ICT-stories support the construction of meaning from stories and how children approached the stories with a natural interest, taking advantage of the sound and animation features provided with the software. The interaction of the children in the storytelling session, children interacted with each other and the story by imitating animations and sounds even if they were presented in English only. On those occasions that they interacted with a task directly on the computer, they did not find the means or the language to be an obstacle for their completion of the task. Literacy for them took place in the more modern understanding of it, interaction with text delivered via a computer, that goes beyond reading in the more traditional sense of decoding text.

## 11.5 Limitations

The present study has two types of limitations, methodological and theoretical. Methodological limitations are related to the length of the study's intervention and hence the claims regarding emergent literacy development that can be made, to generalisability claims due to the number of participants and to decisions of location during data collection.

Development in this study was acknowledged from the changes reflected in children's retellings regarding the use of story grammars. A strong claim of development cannot be made due to the shortness of the intervention, a three-week course. The cross-sectional design of the study also limits the implications that could be made in terms of development. A longitudinal study where children were observed throughout their school year and post-intervention retellings were gathered could produce the required data to study whether the observed changes in children's retellings remained after the course. In this study this was not possible because of time and resources available, hence, this aspect is suggested for further studies that can extend the results of the present research.

The second methodological limitation of the study is related to the fact that its findings are context bound and hence not generalisable. In addition, the number of participants and the procedure used to select the school do not allow for the results of the study to be immediately applied to a larger population of preschool children. In spite of these limitations, the rich description of the methods followed in the study allows other researchers to replicate this work following the same design in different schools and even with children learning a foreign language other than English. Furthermore, following the settings where the study took place (summer courses with intensive English lessons) and characteristics of the participants (preschool-aged children learning English in a foreign language), it is suggested that it can be replicated in different contexts where English is also part of the preschool curriculum. Considering the exploratory nature of the study, replicability is as valuable as generalisability since there is still a need to understand specific context circumstances (community and home) that foster children's development of literacy skills. The design adopted in this study allows the researcher to focus on more in-depth investigations of the context where further studies could take place.

Due to ethical considerations discussed in Chapter 3, the retelling tasks took place in the children's classroom. There were advantages that resulted from this decision, such as the children's willingness to work individually at the computer. However, it could be argued that the distractions that children faced during the collection of these data might

have had an influence on the length of the retellings. I recognize the limitation of the collection strategy in terms of providing the children with a calm, quiet environment where they could tell their story as opposed as the more distracting classroom environment. In my field notes I recognize however that children were attentive to the ICT and retelling tasks, despite the activities taking place around them. It should also be recognised that the length of the retellings could have been influenced by the same reason. But children's age and their retelling abilities play a role in the length of retellings. Both situations need further research in order to determine the influence of the environment on the collection of retellings with very young participants. My intuition and the teacher's observations tell me that the strategy followed in this study for collecting data in the children's classroom was positive because in this case, it increased the children's sense of safety in spite of working with a person different from their teacher. I also argue that even if I had changed the location of retellings' collection, research takes place in the real world, in noisy or quiet classrooms, with highly active, talkative or quiet children. I conducted data collection in the best way possible, pondering all advantages and disadvantages of the decisions made. The results of the decisions were positive according to the participant teachers' feedback of the course. Hence, for this study in this context the methodological decisions were appropriate. However, I must recognize that in different contexts, data could be collected following alternative strategies and lengthier retellings then can be gathered, which in turn would extend the analysis approach and enable the conduction of in-depth linguistic analysis.

It is true to say that a deeper linguistic analysis of the language used by children in their retellings would have been a strong indicator of development. Learning for instance the amount and type of words that children used in their retellings referred in linguistics as type-token ratio and the number of utterances produced. This study did not pursue the linguistic analysis to such depth because of the length of retellings. It is possible to predict that a longitudinal study would allow the children to understand the dynamics of the retelling tasks while strengthening their relationship with the researcher, thus be able to produce longer retellings. There are however two drawbacks to this strategy. First, children mature as they grow and the age factor would then need to be considered in the analysis of development. Second it would be necessary to take into consideration the fact that children in the context studied are immersed in a literate world, therefore it would be necessary to study home literacy practices in order to account for other reasons for literacy development as this factor has been shown to have a strong influence in children's development of these skills (Teale & Sulzby, 1986).

Theoretical limitations of the study relate to the emergent literacy approach, which tends to take into consideration literacy practices at home and/or socio-economic status of children and their families. It would have been ideal to study the children's home

environments in order to learn how the literacy practices at home could have influenced literacy development observed in retellings. However, in this study time constraints and particularities of the context presented an obstacle to this. Such particularities included the fact that parents were working which is in part why the children were being sent to the summer course, making it difficult to interview the parents after school or ask them to observe the children at home. Although I had initially considered exploring children's home literacy environments in order to relate the results linked to literacy with house literacy environment, this was not possible in the way that had been planned. An effort was made through the conduction of a survey where parents were asked to answer questions about leisure activities, children's encounters with books and how they viewed the use of ICT to support the teaching of English. However, it was not possible to link the survey with the child. From the results of the survey it can be assumed that in this context parents place importance on literacy activities and allow children to interact with ICT. They also believe learning English is important but the activities with higher frequency of practice were the outdoor and leisure ones.

It is my belief that the limitations described do not undermine the richness of the findings of the study. The methodological design adopted provided knowledge of the language classroom dynamics of teachers and children interacting with technology when ICT-stories are used. Given the resources and time available, this knowledge is highly valuable for the English teaching practices as well as the emergent literacy approach.

## 11.6 Further work

After conducting this study, a number of questions arise and could constitute further lines of research in relation to the issues explored in this investigation.

The first aspect is that the qualitative approach that was taken to study emergent literacy can be extended with quantitative measures of children's productive language, as for example, conduct individual ICT-tasks where the children can be tested on improvements in phonological and phonemic awareness and incidental vocabulary learning. A study of this nature could be supported by a deeper understanding of literacy and ICT practices at home, which could lead to the attainment of a more holistic understanding of development.

Another aspect that could be studied further is the influence that home environments have on the attitude of children towards learning English, which could lead to understanding their behaviour in the language classroom. Such understanding is valuable to learn the reasons underlying children's reactions towards a foreign language teaching

approach. Like the case of this study, some of the children's reactions were connected to the perception of learning a foreign language prevalent in the community and not to the learning of a foreign language *per se*.

Research on emerging literacy traditionally takes into consideration socio-economical status since one of the major motivators to study literacy development in early childhood education is to eliminate the disadvantage that growing in poor literacy environments could create. This to me is not necessarily relevant. How children can develop emergent literacy and whether ICT could support its development is no longer a problem of filling the gap of access to technology or attending a population at-risk for poor access to literacy material. It is a problem of understanding the circumstances in which literacy can develop, supported by technology and in first or foreign language. All children can benefit from an early literacy-oriented intervention.

Longitudinal studies can also be illuminating in the aspect of long-term effect in both L1 and English literacy development due to an intervention of the type conducted during this study. Studies in similar context with different languages could be conducted as a form of replication of this study. Finally, research studies could be conducted in mainstream schooling in lieu of an intensive English course as was the case of my research. Such studies would provide insight into the effects of exposure to ICT-storytelling when language lessons are not frequent.

## 11.7 Conclusions: revisiting the problem

The research conducted had the intention of exploring children and teachers' opinions in relation to a novel English programme based on the storytelling approach enhanced by technological tools, as well as aspects of emergent literacy skills development in the context of that programme. Throughout the chapter I situated the study's implications and acknowledge its limitations whilst providing examples of further studies that could strengthen or expand the results of my research.

Implications were intended to put the study in the perspective of the larger scheme formed by the areas of language teaching and literacy development. I started my work around 2003 and reviewing recent literature I have found a growing interest in the use of ICT-stories with preschool-aged children. The effects of exposing children to text that has been enhanced by technology is still a vast area of research that could yield relevant results for the education of the very young children, a population that in my view, needs all the attention from practitioners, researchers and authors.

The work conducted with the teachers during the design and implementation of lessons allowed me to start building an understanding of their opinions on the use of ICT and stories written for native speakers of English in the foreign language classroom of very young learners. I argued that participant teachers provided mainly three reasons why they are in favour of using technology as part of the English lesson, namely, technology has the potential to increase children's motivation during the lesson; the use of authentic stories which turned out to be highly attractive for young children, is possible because of the support offered by animation and sound features contained in this type of software; and exposure to accents and pronunciation of native speakers (which occurs when ICT-stories are used) can help young children to develop native-like fluency of the foreign language. On the other hand, I was also able to explore the reasons why teachers might not find it always feasible to use technology with young learners and the solutions that they provide for the given reasons. Among these were found teachers own ICT professional training, insufficient or non-existent technical support to solve potential problems because of the use of ICT and staffing needs.

The work scheme lessons based on the TBL approach implemented during field work were received positively by the teachers and children. Understanding how young children learn was important to prepare tasks appropriate to them and this aspect, which was considered during lesson design, was taken positively by the teachers. An important finding about the use of TBL was that it stands a better chance of success if the teachers implementing lessons under such approach are given the choice to modify it since the reasons that they provide for the adaptation of the methodology is to cater to learners' needs.

*Emergent literacy behaviours can be developed through exposure to ICT-stories and not as a function of the language of the story.* One of the most interesting findings of the study suggest that children's literacy behaviours at a time when L1 is in-development were not language-bound, this is, children used L1's linguistic resources and narrative skills to construct their stories. Data showed how children used non-verbal cues such as animations and previous experience to understand the stories. Furthermore, the children in this study were able to retell in Spanish stories viewed in English without ever mentioning the language of the story as a problem in the construction of the retelling. The reasons given by the children when they refused to retell a story were related to memory or knowledge of the story and not to understanding because of having heard the story in a language unknown to them. The only occasion when the children made remarks about the language of the story was the first day of implementation. The observation came from Isolda and it was more of realisation and perhaps disappointment than complaint for not understanding the story (incidentally, she recognised the language of the story maybe because it was an English lesson so she assumed correctly). I

assume that the reason for her remark was disappointment because the story played was Goldilocks which as I have explained earlier, was familiar to the children. The children were expecting to hear a story and it is likely to believe that they were expecting it to be in Spanish, hence Isolda's disappointment. Towards the end of the course however, children developed a sense of pride from having stories in English in their lesson

This study looked at the emergent literacy approach in a foreign language context, where English is spoken only in a language classroom. Still, the children in the study made use of the multimedia features of ICT-stories to construct meaning and the construction of their retellings showed improvements in the use of story grammars, which could indicate emergent literacy development. This is, the advantages that have been seen by many researchers regarding the use of ICT-stories with young children to promote emergent literacy development could be observed even in situations where the language of the story is unknown to the children and it is hardly heard as in a foreign language situation. Development of literacy skills could occur if children are exposed to ICT-stories, regardless of the language of the narrative and the context.

As final remark, I can only say that the work that lies ahead presents fascinating challenges that motivate me to continue this journey that has in reality just begun.

# References

- Agudo, J., Sánchez, H. & Rico, M. (2006). Adaptive learning for very young learners. In (pp. 393–397). Berlin: Springer.
- Airey, S., Plowman, L., Connolly, D. & Luckin, R. (2002). Rating children's enjoyment of toys, games and media. In *3rd World Congress of the International Toy Research Association on Toys, Games and Media*. London.
- Amante, L. (2007). The ICT at Elementary School and Kindergarten: reasons and factors for their integration. *Sísifo: Educational Sciences Journal*, 3, 49–62.
- Andrews, R. (2004). *The impact of ICT on literacy education*. London: Routledge-Falmer.
- Araujo, L. (2002). The Literacy Development of Kindergarten English-Language Learners. *Journal of Research in Childhood Education*, 16(2), 232–47.
- Bennett, S., Maton, K. & Kervin, L. (2008). The 'digital natives' debate: A critical review of the evidence. *British Journal of Educational Technology*(39).
- Bialystok, E. (2001). *Bilingualism in development: language, literacy, and cognition*. Cambridge: Cambridge University Press.
- Bialystok, E., Luk, G. & Kwan, E. (2005). Bilingualism, biliteracy, and learning to read: Interactions among languages and writing systems. *Scientific Studies of Reading*, 9(1), 43–61.
- Blok, H. B., van Daalen-Kapteijn, M. M., Otter, M. E. & Overmaat, M. (2001). Using computers to learn words in the elementary grades: An evaluation framework and a review of effect studies. *Computer Assisted Language Learning*, 14(2), 99.
- Bogdan, R. & Taylor, S. J. (1975). *Introduction to qualitative research methods: a phenomenological approach to the social sciences*. New York; London: Wiley-Interscience.
- Bolstad, R. (2004). The role and potential of ICT in early childhood education. *A review of New Zealand and international literature*. Wellington: Ministry of Education, *Early Childhood Education*.
- Boltman, A. (2001). *Children's storytelling technologies: differences in elaboration and recall*. Dissertation, University of Maryland at College Park.
- Bourke, J. M. (2006). Designing a topic-based syllabus for young learners. *ELT Journal*, 60(3), 279–286.
- Brown, J. (1995). *The Elements of Language Curriculum: A Systematic Approach to Program Development*. Boston, MA: Heinle & Heinle Publishers.
- Bruce, B. C. & Hogan, M. P. (1998). The disappearance of technology: Towards an ecological model of literacy. In D. Reinking, M. C. McKenna, L. D. Labbo & R. D. Kieffer (Eds.), *Handbook of literacy and technology: transformations in a post-typographic world*. Mahwah, N.J.; London: Lawrence Erlbaum Associates.

- Bus, A., de Jong, M. & Verhallen, M. (2006). CD-ROM Talking Books: A Way to Enhance Early Literacy? In M. C. McKenna, L. D. Labbo, R. D. Kieffer & R. David (Eds.), *International Handbook of Literacy and Technology* (Vol. II, pp. 129–142). New Jersey: Lawrence Erlbaum Associates.
- Cameron, L. (2001). *Teaching languages to young learners*. Cambridge: Cambridge University Press.
- Cameron, L. (2003). Challenges for ELT from the expansion in teaching children. *ELTJ*, 57(2), 105–112.
- Caplovitz, A. (2005). *The effects of using an electronic talking book on the emergent literacy skills of preschool children*. Unpublished doctoral dissertation, The University of Texas at Austin.
- Carless, D. (2002). Implementing task-based learning with young learners. *ELT Journal*, 56(4), 389–396.
- Carless, D. (2003). Factors in the implementation of task-based teaching in primary schools. *System*, 31(4), 485–500.
- Carless, D. (2004). Issues in Teachers Reinterpretation of a Task-Based Innovation in Primary Schools. *TESOL Quarterly*, 38(4), 639–662.
- Chapelle, C. A. (2003). *English language learning and technology: lectures on applied linguistics in the age of information and communication technology*. Amsterdam: John Benjamins Pub.
- Chen, M., Ferdig, R. & Wood, A. (2003). Understanding technology-enhanced storybooks and their roles in teaching and learning: An investigation of electronic storybooks in education. *The Journal of Literacy and Technology*, 3(1).
- Clacherty, G. & Kushlick, A. (2004). Meeting the challenge of research with very young children: A practical outline of methodologies used in the formative research and pre-testing of the Takalani Sesame HIV and AIDS television and radio programmes. In *Fourth international entertainment education conference*. Cape Town.
- Clark, R. E. (1983). Reconsidering research on learning from media. *Review of Educational Research*, 53(4), 445.
- Clay, M. M. (1979). *Reading: the patterning of complex behaviour* (2nd ed.). London: Heinemann Educational.
- Clements, D. (2002). Computers in Early Childhood Mathematics. *Contemporary Issues in Early Childhood*, 3(2), 160–181.
- Clements, D., Nastasi, B. & Swaminathan, S. (1993). Young children and computers: Crossroads and directions from research. *Young Children*, 48(2), 56–64.
- Clements, D. & Sarama, J. (2003). Strip Mining for Gold: Research and Policy in Educational Technology: A Response to Fool's Gold. *AACE Journal*, 11(1), 7–69.

- Cohen, L., Manion, L. & Morrison, K. (2000). *Research Methods in Education*. London and New York: Routledge Falmer.
- Condie, R. & Munros, B. (2007). *Impact of ICT in schools: a landscape review* (Tech. Rep.). UK: BECTA.
- Conteh, J. (2003). *Succeeding in Diversity: Culture, Language and Learning in Primary Classrooms*. Stoke-on-Trent: Trentham Books.
- Cook, D. (2003). The question is no longer 'if', but 'how best', ICT can be used in early years practice. *Proceedings of the international federation for information processing working group 3.5 open conference on Young children and learning technologies-Volume 34*, 31-38.
- Cordes, C. & Miller, E. (2000). *Fool's gold: A critical look at computers in childhood* (Tech. Rep.). Alliance for Childhood.
- Cordes, C. & Miller, E. (2004). Tech Tonic: Towards a New Literacy of Technology. *Alliance for Childhood*, 122.
- Creswell, J. (1998). *Qualitative inquiry and research design: choosing among five traditions*. Thousand Oaks, Calif.: Sage Publications,.
- Crystal, D. (1987). Child language, learning, and linguistics: an overview for the teaching and therapeutic professions.
- Cuban, L. (2001). *Oversold and Underused: Computers in the Classroom*. Cambridge, Massachusetts: Harvard University Press.
- Curtain, H. A. & Pesola, C. A. (1994). *Languages and children, making the match: foreign language instruction for an early start grades k-8* (2nd ed.). White Plains, NY: Longman.
- Cutspec, P. A. (2004). Influences of dialogic reading on the language development of toddlers. *Bridges: Practice-Based Research Syntheses*, 2(1), 12.
- Darnton, A. (2001). Repeat after me: The role of repetition in the life of an emergent reader. In M. Scott & G. Thompson (Eds.), *Patterns of Text: In honour of Michael Hoey* (p. 323). Amsterdam; Philadelphia: John Benjamins Publishing Co.
- Davis, B. & Shade, D. (1994). Integrate, don't isolate. *Computers in the early childhood curriculum. ERIC Digest. ERIC Document Reproduction Service No. ED 376 991*.
- de Jong, M. & Bus, A. (2002). Quality of Book-Reading Matters for Emergent Readers: An Experiment with the Same Book in Regular or Electronic Format. *Journal of Educational Psychology*, 94(1), 145-55.
- de Jong, M. & Bus, A. (2003). How well suited are electronic books to supporting literacy? *Journal of Early Childhood Literacy*, 3(2), 147-164.
- de Jong, M. & Bus, A. (2004). The efficacy of electronic books in fostering kindergarten children's emergent story understanding. *Reading Research Quarterly*, 39(4), 378-393.
- Desarnaud, P. & Raviart, D. (1996). *Payuta and the ice god*. UbiSoft Multimedia.

- Domínguez, E., Rico, M. & Cumbreño, A. (2005). Using ICTs at early ages for language teaching and research. *Recent Research Developments in Learning Technologies. Formatez*.
- Donaldson, M. (1987). *Children's minds*. London: Routledge.
- Donker, A. & Reitsma, P. (2007). Young children's ability to use a computer mouse. *Computers & Education, 48*(4), 602-617.
- Dresang, E. T. & McClelland, K. (1999). Radical Change: Digital age literature and learning. *Theory Into Practice, 38*(3), 160-167.
- Dunning, R. (1997). *Cric crac! teaching and learning French through story-telling*. Clevedon; Philadelphia: Multilingual Matters,.
- Durgunoğlu, A. & Verhoeven, L. (1998). *Literacy Development in a Multilingual Context: Cross-Cultural Perspectives*. Mahwah, N.J.; London. Lawrence Erlbaum Associates.
- Edwards, C. & Willis, J. (2005). *Teachers exploring tasks in English language teaching*. Basingstoke: Palgrave Macmillan,.
- Egan, K. (1989). *Teaching as Story Telling: An Alternative Approach to Teaching and Curriculum in the Elementary School*. Chicago: University Of Chicago Press.
- Eisenhart, M. & Howe, K. (1992). Validity in educational research. *The handbook of qualitative research in education, 643-680*.
- Eliot, T. S. (1969). *The complete poems and plays of T.S. Eliot*. London: Faber, (23cm.)
- Ellis, G. & Brewster, J. (1991). *The Storytelling handbook: a guide for primary teachers of English*. London: Penguin English.
- Ellis, R. (2003). *Task-based language learning and teaching*. Oxford: Clarendon Press.
- Engel, S. (1995). *The stories children tell: making sense of the narratives of childhood*. New York, N.Y.: W. H. Freeman.
- Exton, G. & O'Rourke, P. (1993). 'KAL' and 'Real' Books/Reading Schemes. *Literacy, 27*(2), 27-29.
- Farmer, L. (2004). Using technology for storytelling: Tools for children. *New Review of Children's Literature and Librarianship, 10*(2), 155-168.
- Felix, U. (2005). Analysing recent CALL effectiveness research - Towards a common agenda. *Computer Assisted Language Learning, 18*(1), 1-32.
- Fiestas, C. E. & Peña, E. D. (2004). Narrative discourse in bilingual children: Language and task effects. *Language, Speech and Hearing Services in Schools, 35*(2), 155-168.
- Finocchiaro, M. (1964). *Teaching children foreign languages*. London: McGraw-Hill,.
- Fraser, S., Lewis, V., Ding, S., Kellett, M. & Robinson, C. (Eds.). (2004). *Doing research with children and young people*. London: Sage,.

- Garvie, E. (1990). *Story as Vehicle: teaching English to young children*. Clevedon: Multilingual Matters Ltd.
- Gee, J. P. (2005). Learning by Design: good video games as learning machines. *E-Learning*, 2(1), 5–16.
- Gee, J. P. (2007). *What video games have to teach us about learning and literacy* (2nd ed. ed.). New York; Basingstoke: Palgrave Macmillan,.
- George, P. P. E. (2007). *The interplay of identity, culture, school and Mathematics: a Caribbean perspective*. Thesis Ph.D. – University of Leeds School of Education 2007.
- Ghosn, I. (1997). ESL with Children. *Forum*, 35(3).
- Ghosn, I. (2002). Four good reasons to use literature in primary school ELT. *ELT Journal*, 56(2), 172–179.
- Gilabert, R. (2004). *Task complexity and L2 narrative oral production*. Unpublished doctoral dissertation, Universitat de Barcelona.
- Glaser, B. G. & Strauss, A. L. (1967). *The discovery of grounded theory: strategies for qualitative research*. New York: Aldine de Gruyter,.
- Gobel, S. (2004). *Technologies for interactive digital storytelling and entertainment: Second International Conference, TIDSE 2004, Darmstadt, Germany, June 24-26, 2004: proceedings*. Berlin; London: Springer,.
- Goodman, Y. (1984). The development of initial literacy. In H. Goelman, A. A. Oberg & F. Smith (Eds.), *Awakening to literacy: the University of Victoria Symposium on Children's Response to a Literate Environment: Literacy Before Schooling* (pp. xv,240p). Exeter, N.H.; London: Heinemann Educational.
- Gove, P. B. & Webster, N. (1961). *Webster's third new international dictionary of the English language*. London: Bell.
- Graves, K. (2000). *Designing language courses: a guide for teachers*. London: Heinle & Heinle Publishers.
- Grugeon, E. & Gardner, P. (2000). *The art of storytelling for teachers and pupils: using stories to develop literacy in primary classrooms*. London: David Fulton,.
- Guba, E. & Lincoln, Y. (1989). *Fourth generation evaluation*. Newbury Park, Calif; London: Sage Publications,.
- Gunn K., B., Simmons C., D. & Kameenui J., E. (2004). Emergent literacy: Synthesis of the research. In D. Wray (Ed.), *Literacy: Major themes in education* (Vol. I, pp. 359–385). London: Routledge Falmer.
- Haddad, W. D. & Jurich, S. (2002). ICT for Education: potential and potency. In W. Haddad & A. Draxler (Eds.), *Technologies for education: Potentials, parameters and prospects* (pp. 28–40). Paris and Washington: United Nations Educational, Scientific and Cultural Organisation (UNESCO) and the Academy for Educational Development.

- Halliwell, S. (1992). *Teaching English in the primary classroom*. New York: Longman.
- Hammersley, M. (1998). *Reading ethnographic research: a critical guide*. New York: Longman.
- Han, C. (2003). Challenges of using ICT in Hong Kong early childhood settings. *Proceedings of the international federation for information processing working group 3.5 open conference on Young children and learning technologies-Volume 34*, 49-52.
- Harley, B. & Swain, M. (1984). The interlanguage of immersion students and its implications for second language teaching. In A. Davies, C. Cramer & A. Howatt (Eds.), *Interlanguage* (pp. 291-311). Edinburgh: Edinburgh University Press.
- Haugland, S. W. & Ruiz, E. A. (2002). Empowering children with technology: Outstanding developmental software for 2002. *Early Childhood Education Journal*, 30(2), 125.
- Healy, J. (2000). *Failure to Connect: How Computers Affect Our Children's Minds-For Better and Worse*. New York: Simon & Schuster.
- Hiebert, E. & Papierz, J. (1990). The Emergent Literacy Construct and Kindergarten and Readiness Books of Basal Reading Series. *Early Childhood Research Quarterly*, 5(3), 317-334.
- Hinkelman, D. (2004). EML and implications for task design in blended L2 environments. *Proceeding of CLaSIC 2004*, 962-973.
- Hoepfl, M. (1997). Choosing Qualitative Research: A Primer for Technology Education Researchers. *Journal of Technology Education*, 9, 47-63.
- Hoey, M. (2001). *Textual interaction: an introduction to written discourse analysis*. London and New York: Routledge.
- Inside stories*. (2003). McGraw-Hill.
- Irlen, S. (2003). *The impact of video viewing and retelling on preliterate children's narrative comprehension*. Dissertation Abstracts International, 64(04), 1174A.
- Isbell, R., Sobol, J., Lindauer, L. & Lowrance, A. (2004). The Effects of Storytelling and Story Reading on the Oral Language Complexity and Story Comprehension of Young Children. *Early Childhood Education Journal*, 32(3), 157-163.
- Jacquin, J. & Testamarck, M. (1995). *Kiyeko and the Lost Night*. UbiSoft Multimedia.
- James, R. (1999). Navigating CD-Roms: An Exploration of Children Reading Interactive Narratives. *Children's Literature in Education*, 30(1), 47-63.
- Johnson, B. & Christensen, L. (2004). *Educational research: quantitative, qualitative, and mixed approaches* (2nd ed.). Boston; London: Allyn and Bacon.
- Johnson, B. & Onwuegbuzie, A. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14-26.
- Joy II, E. H. J. & Garcia, F. E. (2000). Measuring learning effectiveness: A new look at no-significant-difference findings. *Journal of Asynchronous Learning Networks*, 4(1), 33-39.

- Kenner, C. & Kress, G. (2003). The Multisemiotic Resources of Biliterate Children. *Journal of Early Childhood Literacy*, 3(2), 179–202.
- Kies, D. (2006). *Language development in children* (No. 15 February 2006).
- Kirriemuir, J. & McFarlane, A. (2004). Literature Review in Games and Learning. 8, 1–35. (Retrieved June 2008 from <http://www.futurelab.org.uk/resources>)
- Klerfelt, A. (2007). Gestures in conversation - the significance of gestures and utterances when children and preschool teachers create stories using the computer. *Computers & Education*, 48(3), 335.
- Korat, O. & Shamir, A. (2008). The educational electronic book as a tool for supporting children's emergent literacy in low versus middle SES groups. *Computers & Education*, 50(1), 110–124.
- Kozma, R. B. (1991). Learning with media. *Review of Educational Research*, 61(2), 179.
- Krashen, S. D. (1987). *Principles and practice in second language acquisition*. Englewood Cliffs; London: Prentice-Hall International,.
- Labbo, L., Sprague, L., Montero, M. & Font, G. (2000). Connecting a computer center to themes, literature and kindergarteners literacy needs. *Reading Online*, 4(1).
- Lacey, A. & Luff, D. (2001). Trent focus for research and development in primary health care: An introduction to qualitative analysis. *Unpublished manuscript, Trent Focus*.
- Lankshear, C. & Knobel, M. (2003). New Technologies in Early Childhood Literacy Research: A Review of Research. *Journal of Early Childhood Literacy*, 3(1), 59.
- LeCompte, M. & Goetz, J. (1982). Problems of Reliability and Validity in Ethnographic Research. *Review of Educational Research*, 52(1), 31.
- Lee, S. (2005). Training young learners in meaning negotiation skills: Does it help? In C. Edwards & J. Willis (Eds.), *Teachers exploring tasks in English language teaching* (p. 103–112). Basingstoke: Palgrave Macmillan,.
- Levin, D. E. & Rosenquest, B. (2001). The increasing role of electronic toys in the lives of infants and toddlers: should we be concerned? *Contemporary Issues in Early Childhood*, 2(2), 242–247.
- Lewin, C. (2000). Exploring the effects of talking book software in UK primary classrooms. *Journal of Research in Reading*, 23(2), 149–157.
- Lichtman, M. (2006). *Qualitative research in education: a user's guide*. Thousand Oaks: Sage Publications,.
- Lightbown, P. M. & Spada, N. (2006). *How languages are learned* (3rd ed.). Oxford: Oxford University Press,.
- Lincoln, Y. & Guba, E. (1985). *Naturalistic inquiry*. Beverly Hills, Calif.: Sage Publications Beverly Hills, Calif.

- Lincoln, Y. & Guba, E. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (Vol. 2nd., pp. 163–188). Thousand Oaks, CA: SAGE.
- Linebarger, D., Kosanic, A., Greenwood, C. & Doku, N. (2004). Effects of Viewing the Television Program Between the Lions on the Emergent Literacy Skills of Young Children. *Journal of Educational Psychology*, 96(2), 11.
- Luckin, R. (2002). The Young Ones: The implications of media convergence for mobile learning with infants. *European Workshop on Mobile and Contextual Learning*.
- Luckin, R., Connolly, D., Plowman, L. & Airey, S. (2003). Children's interactions with interactive toy technology. *Journal of Computer Assisted Learning*, 19(2), 165–176.
- Luque, G. (2000). *Aprendiendo Inglés mediante historias*. Jaén: Universidad de Jaén.
- Malkina, N. (1995). Storytelling in early language teaching. *Forum*, 33(1), 38–43.
- Martínez-Roldán, C. & Sayer, P. (2006). Reading through linguistic borderlands: Latino students' transactions with narrative texts. *Journal of Early Childhood Literacy*, 6(3), 293–322.
- Matthew, K. (1997). A Comparison of the Influence of Interactive CD-ROM Storybooks and Traditional Print Storybooks on Reading Comprehension. *Journal of Research on Computing in Education*, 29(3), 263–275.
- McGee, L. & Lomax, R. (1990). On Combining Apples and Oranges: A Response to Stahl and Miller. *Review of Educational Research*, 60(1), 133–140.
- McGee, L. & Purcell-Gates, V. (1997). "So What's Going on in Research on Emergent Literacy?". *Reading Research Quarterly*, 32(3), 310–318.
- McIlvain, A. (2004). Teaching English to very young learners. In *Amazing young minds*. Cambridge: Pearson Education.
- Mello, R. (2001). The power of storytelling: How oral narrative influences children's relationships in classrooms. *International Journal of Education & the Arts*, 2(1).
- Mellor, N. (2001). Messy method: the unfolding story. *Educational Action Research*, 9(3), 465–484.
- Messner, R. (1989). Children and Fairy Tales -What Unites Them and What Divides Them. *Western European Education Journal*, 21(2), 6-28.
- Miles, J. & Sweetland, J. (2001). A Summer Reading Program for Second-Language Learners. *Reading Teacher*, 54(5), 474–77.
- Miller, J. (1981). *Assessing language production in children: experimental procedures*. Baltimore: University Park Press.
- Miller, J. & Chapman, R. (2006). *Systematic analysis of language transcripts: Software for analyzing english and spanish language samples*.
- Miller, L., Blackstock, J. & Miller, R. (1994). An exploratory study into the use of CD-ROM storybooks. *Computers & Education*, 22(1–2), 187.

- Molina-Navarrete, F. (2006). El factor edad como variable a tener en cuenta en el aprendizaje de una lengua extranjera. In D. of English Philology (Ed.), *Tess: Teachers of English to Spanish Speakers. Learning to teach and teaching to learn*. University of Jaén: University of Jaén.
- Moon, J. (2005). *Children learning English*. Oxford: Macmillan-Heinemann.
- Mulholland, C. & Robertson, J. (2001). *Storymakers Pilot Project Report Pictures of the present, visions for the future*. (Available on line <http://homepages.inf.ed.ac.uk/judyx/publications/storymakers.pdf>)
- Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge: Cambridge University Press.
- Newbury, D. (2001). Diaries and Fieldnotes in the Research Process. *Research Issues In Art Design and Media*.
- Niglas, K. (2004). The Combined Use of Qualitative and Quantitative Methods in Educational Research. *Tallinn: TPÜ Kirjastus*, 24–46.
- Nunan, D. (1989). *Designing tasks for the communicative classroom*. Cambridge: Cambridge University Press.
- Nunan, D. (1991). Communicative tasks and the language curriculum. *TESOL Quarterly*, 25(2), 279–295.
- Nunan, D. (1995). Closing the gap between learning and instruction. *TESOL Quarterly*, 29(1), 133–158.
- O’Kane, C. (2000). The development of participatory techniques: facilitating children’s views about decisions which affect them. In P. Christensen & A. James (Eds.), *Research with children: perspectives and practices* (pp. xii, 272 p.). London: Falmer Press.
- Onwuegbuzie, A. (2002). Why can’t we all get along? towards a framework for unifying research paradigms. *Education*, 122(3), 518–530.
- Onwuegbuzie, A. & Leech, N. (2005). On Becoming a Pragmatic Researcher: The Importance of Combining Quantitative and Qualitative Research Methodologies. *International Journal of Social Research Methodology*, 8(5), 375–387.
- O’Rourke, M. & Harrison, C. (2004). The introduction of new technologies: New possibilities for early childhood pedagogy. *Australian Journal of Early Childhood*, 29(2), 11–19. (Early Childhood Australia Inc.(ECA))
- Papert, S. (1993). *Mindstorms: children, computers and powerful ideas* (2nd ed.). Hemel Hempstead: Harvester Wheatsheaf.
- Patterson, M. (2004). How can ict enrich the learning environment in early childhood centres? *Computers in NZ Schools*, 16(1), 25–30.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). London; Newbury Park, Calif.: Sage Publication.

- Phillips, L. (2005). *The role of storytelling in early literacy development* (Nos. June 8, 2005).
- Pinter, A. (2005). Task repetition with 10-year-old children. In C. Edwards & J. Willis (Eds.), *Teachers exploring tasks in English language teaching* (p. 113-126). Basingstoke: Palgrave Macmillan.
- Pinter, A. (2006). *Teaching young language learners*. Oxford: Oxford University Press.
- Pinter, A. (2007). Some benefits of peer-peer interaction: 10-year-old children practising with a communication task. *Language Teaching Research*, 11(2), 189.
- Piquer-Píriz, A. M. (2004). *La comprensión de algunas extensiones semánticas de los lexemas 'hand', 'mouth' y 'head' en las primeras etapas del aprendizaje del inglés*. Unpublished doctoral dissertation, Universidad de Extremadura.
- Plan de fomento del plurilingüismo: Una política lingüística para la Sociedad Andaluza*. (2005). Dirección General de Innovación Educativa de la Consejería de Educación de la Junta de Andalucía. (Retrieved June 2006 from <http://www.juntadeandalucia.es>)
- Plowman, L. & Stephen, C. (2003). A 'Benign addition'? research on ICT and pre-school children. *Journal of Computer Assisted Learning*, 19(2), 149-164.
- Prabhu, N. S. (1987). *Second language pedagogy*. Oxford; New York: Oxford University Press.
- Prensky, M. (2001a). *Digital game-based learning*. New York; London: McGraw-Hill.
- Prensky, M. (2001b). Digital natives, digital immigrants. *On the Horizon*, 9(5), 1-6.
- Prinsloo, M. (2005). Connections between child and adult literacy, regarding learning, skill levels and practices. *Paper commissioned for the EFA Global Monitoring Report UNESCO 2006, Literacy for Life*.
- Purushotma, R. (2005). Commentary: You're Not Studying, You're Just ... *Language, Learning & Technology*, 9(1), 80-97.
- Recio, A. (2005). Task-based Instruction and Storytelling with young learners: Analysis of its advantages. *GRETA*, 13(1 & 2), 61-70.
- Reyes, I. (2006). Exploring connections between emergent biliteracy and bilingualism. *Journal of Early Childhood Literacy*, 6(3), 267-292.
- Richards, J. C. & Rodgers, T. S. (2001). *Approaches and methods in language teaching* (2nd ed.). Cambridge: Cambridge University Press.
- Rixon, S. (1988). Using Chicken-Licken and other cumulative-repetitive children's stories. In S. Holden (Ed.), *English at the primary level: 1987 Sorrento Conference organised by the British Council* (p. 38 p). Oxford: Modern English Publications in association with The British Council.
- Robertson, J. & Good, J. (2004). Children's narrative development through computer game authoring. *Interaction Design And Children*, 57-64.

- Robson, C. (2002). *Real world research: a resource for social scientists and practitioner-researchers* (2nd ed.). Oxford: Blackwell Publishers,. (Colin Robson. ill.; 25 cm.)
- Rocco, T., Bliss, L., Gallagher, S. & Perez-Prado, A. (2003). Taking the next step: Mixed methods research in organizational systems. *Information Technology, Learning, and Performance Journal*, 21(1), 19–29.
- Rodríguez, J. L., Díaz, R. M. & Durán, D. (1995). The impact of bilingual preschool education on the language development of Spanish-speaking children. *Early Childhood Research Quarterly*, 10(4), 475–490.
- Routio, P. (2007). *Arteology. The Science of artifacts. Guide to research and development*. UIAH, University of Arts and Design Helsinki.
- Rumelhart, D. (1980). On evaluating story grammars. *Cognitive Science*, 4(3), 313–316.
- Ryokai, K., Vaucelle, C. & Cassell, J. (2003). Virtual peers as partners in storytelling and literay learning. *Journal of Computer Assisted Learning*, 19, 195–218.
- Schirmer, B. (2003). Using Verbal Protocols to Identify the Reading Strategies of Students Who Are Deaf. *Journal of Deaf Studies and Deaf Education*, 8(2), 157–170.
- Seels, B., Fullerton, K., Berry, L. & Horn, L. (1996). Research on learning from television. *Handbook of research for educational communications and technology*, 299–377.
- Seidel, J. (1998). *Qualitative data analysis* (No. 1 June 2008).
- Shih, C., Chang, C. & Chen, G. (2007). Robot as a Storytelling Partner in the English Classroom-Preliminary Discussion. *Advanced Learning Technologies, 2007. ICALT 2007. The Seventh IEEE International Conference on Advanced Learning Technologies*, 678–682.
- Sime, D. & Priestley, M. (2005). Student teachers' first reflections on information and communications technology and classroom learning: implications for initial teacher education. *Journal of Computer Assisted Learning*, 21(2), 130–142.
- Siraj-Blatchford, I. & Siraj-Blatchford, J. (2003). *More than computers: Information and communication technology in the early years*. London: British Association for Early Childhood Education.
- Siraj-Blatchford, J. & Siraj-Blatchford, I. (2001). *IBM KidSmart Early learning programme: UK. Evaluation report phase 1 (2000/2001)*. London: IBM.
- Siraj-Blatchford, J. & Siraj-Blatchford, I. (2004). *IBM KidSmart early learning programme European evaluation report: France, Germany, Italy, Portugal, Spain and UK. Final report phase 2 (2001/2003)*. IBM White Paper.
- Skehan, P. (1998). *A cognitive approach to language learning*. Oxford: Oxford University Press.
- Snow, C. (2006). What counts as literacy in early childhood? In K. McCartney & D. Phillips (Eds.), *Blackwell handbooks of developmental psychology* (pp. 274–296).

- Malden, Mass.: Oxford: Blackwell.
- Stein, N. L. & Glenn, C. G. (1979). An analysis of story comprehension in elementary school children. In R. O. Freedle (Ed.), *Advances in discourse processes: Vol. 2. new directions in discourse processing* (p. 53-119). Norwood, NJ: Ablex.
- Strangman, N. & Hall, T. (2003). *Text transformations* (No. Retrieved December 2007). Wakefield, MA: National Center on Accessing the General Curriculum.
- Sulzby, E. & Teale, W. (1991). Emergent literacy. In R. Barr, M. Kammil, P. Mosenthal & D. Pearson (Eds.), *Handbook of reading research* (Vol. 2, p. 727-757). New York: Longman.
- Talley, S. (1994). *The effects of a CD-ROM computer storybook program on Head Start children's emergent literacy*. Unpublished master's thesis, Utah State University. Department of Family and Human Development.
- Talley, S., Lancy, D. & Lee, T. (1997). Children, storybooks, and computers. *Reading Horizons*, 38(2), 116-128.
- Tashakkori, A. & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches* (Vol. 46). California: Thousand Oaks: Sage Publications.
- Teale, W. H. & Sulzby, E. (1986). Emergent literacy as a perspective for examining how young children become writers and readers. In W. H. Teale & E. Sulzby (Eds.), *Emergent literacy: Writing and reading*. Norwood, N.J.: Ablex Publishing Corporation.
- Teale, W. H. & Sulzby, E. (1989). Emerging literacy: New perspectives. In D. S. Strickland & L. M. Morrow (Eds.), *Emerging literacy: young children learn to read and write* (pp. 1-15). Newark, Del.: International Reading Association.
- Tesch, R. (1990). *Qualitative Research: analysis types and software tools*. London: Routledge Falmer.
- Thorne, S. (2000). Data analysis in qualitative research. *British Medical Journal*, 3(3), 68.
- Tizard, B. & Hughes, M. (1984). *Young children learning*. Cambridge, Mas.: Harvard University Press.
- Toolan, M. J. (2001). *Narrative: a critical linguistic introduction* (2nd ed.). London: Routledge.
- Tracey, D. H. & Young, J. W. (2007). Technology and Early Literacy: The Impact of an Integrated Learning System on High-Risk Kindergartners' Achievement. *Reading Psychology*, 28(5), 443-467.
- Trushell, J., Maitland, A. & Burrell, C. (2003). Pupils' recall of an interactive storybook on CD-ROM. *Journal of Computer Assisted Learning*, 19(1), 80-89.
- Tsantis, L., Bewick, C. & Thouvenelle, S. (2003). Examining Some Common Myths About Computer Use In the Early Years. *Young Children*, 1.

- Tsou, W., Wang, W. & Tzeng, Y. (2006). Applying a multimedia storytelling website in foreign language learning. *Computers & Education*, 47(1), 17.
- Turbill, J. (2001). A researcher goes to school: Using technology in the kindergarten literacy curriculum. *Journal of Early Childhood Literacy*, 1(3), 255-279.
- Uchikoshi, Y. (2005). Narrative development in bilingual kindergarteners: Can Arthur help? *Developmental Psychology*, 41(3), 464-478.
- Underwood, G. & Underwood, J. (1998). Children's interactions and learning outcomes with interactive talking books. *Computers & Education*, 30(1-2), 95-102.
- Underwood, J. (2000). A comparison of two types of computer support for reading development. *Journal of Research in Reading*, 23(2), 136-148.
- Unsworth, L. (2003). Reframing research and literacy pedagogy relating to CD narratives: addressing 'radical change' in digital age literature for children. *Issues in Educational Research*, 13, 1-12.
- Uzuner, Y., Kircaali-Iftar, G. & Karasu, P. (2005). Comparing the effects of various procedures on reconstruction of narratives according to Story Grammar of a Youth with hearing loss. *Reading*, 5(2).
- Verhallen, M., Bus, A. & de Jong, M. (2006). The Promise of Multimedia Stories for Kindergarten Children at Risk. *Journal of Educational Psychology*, 98(2), 410-419.
- Verkler, K. W. (2004). Technology in the foreign language classroom. *Journal of Educational Media & Library Sciences*, 41(4), 455-478.
- Victor-Pujebet, R. (1995). *Lulu's Enchanted Book*. Wayland Publishing.
- Vygotski, L. & Kozulin, A. (1986). *Thought and language*. Cambridge, Ma.; London: MIT Press. (Lev Vygotsky; translation newly revised and edited by Alex Kozulin.)
- Wang, X. & Hoot, J. (2006). Information and Communication Technology in Early Childhood Education. *Early Education and Development*, 17(3), 317-322.
- Wells, G. (1987). *The meaning makers: children learning language and using language to learn* (1987, c1986 ed.). London: Hodder and Stoughton Educational.
- Whitehurst, G. J., Epstein, J. N., Angell, A. L., Payne, A. C., Crone, D. A. & Fischel, J. E. (1994). Outcomes of an emergent literacy intervention in head start. *Journal of Educational Psychology*, 86(4), 542-555.
- Whitehurst, G. J. & Lonigan, C. J. (1998). Child Development and Emergent Literacy. *Child Development*, 69(3), 848-872.
- Willis, D. & Willis, J. R. (2007). *Doing task-based teaching*. Oxford: Oxford University Press.
- Willis, J. (1996). *A framework for task-based learning*. Harlow: Longman.
- Wright, A. (1995). *Storytelling with children*. Oxford: Oxford University Press.
- Wright, A. (2000). Stories and their importance in language teaching. *Humanising Language Teaching*, 2(5), 1-7.

- Yaden, D., Rowe, D. & MacGillivray, L. (2000). Emergent literacy: a matter (polyphony) of perspectives. In R. Barr, M. Kamil, P. B. Mosenthal & P. D. Pearson (Eds.), *Handbook of reading research* (Vol. II, pp. 425–454). Mahwah, N.J.: L. Erlbaum Associates,.
- Yaden, D. & Tam, A. (2000). *Enhancing emergent literacy in a preschool program through teacher-researcher collaboration. CIERA Report*. CIERA/University of Michigan, 610 E. University Ave., 1600 SEB, Ann Arbor, MI 48109-1259. Web site: <http://www.ciera.org>.
- Yelland, N. & Masters, J. (2007). Rethinking scaffolding in the information age. *Computers & Education*, 48(3), 362.
- Zhao, Y. (2003). Recent developments in technology and language learning: A literature review and meta-analysis. *CALICO Journal*, 21(1), 7.
- Zimmerman, F., Christakis, D. & Meltzoff, A. (2007). Associations between Media Viewing and Language Development in Children Under Age 2 Years. *The Journal of Pediatrics*, 151(4), 364–368.
- Ziolkowski, R. A. (2004). *Effects of an emergent literacy intervention for children with language impairments from low income environments*. Unpublished doctoral dissertation, Florida State University.
- Zygouris-Coe, V. (2001). *Emergent literacy* (Tech. Rep.). University of Central Florida: Florida Literacy and Reading Excellence (FLaRE) Center College of Education.

## Appendix A

### Work scheme guidelines

The following is an extract of the document that was sent to Isabel, the first participant teacher for the preparation of the English lessons implemented in Phase II of the study.

#### Children Adapted Technology-based Tasks for English Learning: ChATTSEL

ChATTSEL is an English teaching work scheme designed for a PhD research project of the University of Leeds. It stands for Children Adapted Technology-based Tasks for English Learning. The work scheme is grounded on the theory that the use of stories and ICT are beneficial in teaching 3-5 year-old children a second or foreign language called additional here for practical purposes. The language approach used in ChATTSEL to teach is that known as Task Based Learning (TBL). In ChATTSEL, tasks will be used to introduce the stories to the children and guide the work that they will carry out with and in the additional language.

Research has shown that stories appeal to young children while providing them with meaningful learning contexts to develop language or social skills (Boltman, 2001; Nutbrown, 1999; Ryokai et al., 2003; Wright, 1995). On a different line of research, the potential benefits of ICT in children's education are diverse, and have covered for instance how technology promotes children's collaborative work or language learning, and how it supports the development of new literacies (Unsworth, 2003). Research results are promising but still not comprehensive enough to claim that ICT is always beneficial or that the use of stories increases the learning potential of children. Success in learning cannot be attributed to the presence or absence of a learning device ICT- or a factor the use of stories. However, implementation has been seen as a relevant variable in the successful use of ICT (Clark) within teaching contexts or in the improvement of teaching subjects such as English as a foreign language. Following the state of affairs, this project seeks to research the implementation of an English course based on the above elements

in order to see how ICT, stories, and a communicative teaching method can be integrated harmoniously for the benefit of young children's development. ChATTSEL offers a general framework to help teachers design lessons based on the TBI approach, stories, and ICT for young learners of English. In summary, ChATTSEL is based under the following assumptions taken from empirical research and anecdotal accounts of teachers working with ICT and stories or with stories and language teaching:

- Stories appeal to children
- Technology can support children's learning
- Children can be more interested in learning an additional language if they are taught with authentic material that is, material designed for native speakers of the language to teach.
- Using stories to teach a language can trigger more skills than an isolated learning of the language. The language used in stories provides colourful examples of the culture where the additional language is spoken, supporting children in their understanding of diversity; exposes children to the construction dynamics written and oral- of the additional language; helps them to learn what other children read and find cultural commonalities regardless the language they are spoken, fostering the construction of their social skills.
- The benefits that technology offers to the education of young children can be lost if not channelled properly integrating it into an education program where ICT is used as a learning tool and not the substitute of current teaching methods or an isolated/separated activity.
- ICT has much to offer for language teaching
- ICT enhances the practice of storytelling thanks to, for instance, the multimedia environment provided by some types of technological tools. In additional language teaching/learning contexts, this support during the telling of stories can be targeted at helping children to understand stories with a more complex language than they would in a different situation, i.e. traditional book reading or storytelling oral sessions.

### Concepts in ChATTSEL

#### *Task*

An activity or a series of activities that involves learners in comprehending -understanding- manipulating, producing or interacting processing- in the target language while their

attention is principally focused on meaning rather than form; with specific requirements set by the teacher as to what will be regarded as successful completion of the task -not necessarily the production of language-, where learners are required to arrive at an outcome from given information through some process of thought. (Richards, Platt, and Weber, 1985; Prabhu, 1987; Nunan, 1989; Skehan, 1996; Ellis, 2003).

### *ICT*

[Any tool] which allows us to get information, to communicate with each other, or to have an effect on the environment using electronic or digital equipment (Siraj-Blatchford and Siraj-Blatchford, 2003, p. 4):

In early childhood education the term ICT could include the following types of hardware and software:

computers (including desktop, laptop, and handheld computers); digital cameras and digital video cameras; creativity and communication software and tools; the Internet; telephones, fax machines, mobile telephones, tape recorders; interactive stories, simulated environments, and computer games; programmable toys and control technologies; videoconferencing technologies and closed-circuit television; data projectors, electronic whiteboards, and more.

The role and potential of ICT in early childhood education. A review of New Zealand and international literature (2004).

### *Stories*

Delivered via ICT: CD-ROM/DVD Written for native speakers The story must have graphical support for the text exposed and provide support to the understanding of the story through interactive activities that children can perform individually, in groups, or with the teachers support as a whole class activity.

### *Design principles*

Authentic materials: Authentic materials are to be used, not modified versions of stories that fit into an EFL course. Language development: It should be monitored through portfolios and tracking of children's use of language chunks from the story or language structures that lessons have focused on. Focus on language: There is no explicit teaching of language forms. There is no metalanguage involved. Use of language: It should be meaningful, useful, and practical for children. Students awareness: help children track what they learn through a revision of their own portfolios. Task sequence: The interests of the children, the complexity of materials and tasks, and continuous

assessment of how children are performing in the class and enjoying the activities are supplementary factors that must be considered for task sequencing.

### *Sequencing*

Tasks must be sequenced considering two factors. First, the order followed by the materials designers and second, the teachers experience. Within this methodology the material to be used must be designed for native speakers of English. That is, not texts intended to teach English as a second or foreign language. Considering that the contents of the material to be used might be too challenging for non-native speakers, the second factor to consider for task sequencing is the teachers choices according to her experience of teaching children of this age and the context of the project.

Ellis (2003:227). [ ] grading tasks cannot follow a precise algorithmic procedure but rather must proceed more intuitively in accordance with a general assessment of task complexity, informed by the criteria considered above and by the designers experience of how particular groups of learners respond to different tasks. Herein lies the problem with pre-school children. There is not enough information available to know how they will respond to tasks. The purpose is then to begin informing this gap. Can tasks work with young children? Degree of complexity then is informed by teachers experience in this case as to how she believes young children will respond to certain tasks (designed by following the complexity criteria detailed by Ellis). It would be what Ellis proposed could be done in order to address the issue of complexity and working to find a practical solution to it. [ ] course designers first assess the complexity of tasks informally and then use the criteria [Table 7.4 Ellis] to evaluate the reliability of their assessment. (229).

### Focus on form

Instead of writing the course objectives following a sequence of linguistic content that children would acquire, the tasks will be designed by focusing on the meaning that children can construct while and after completing the language activities.

### The role of ICT

Lessons will be planned considering the use of ICT as part of the everyday activities. It cannot have an incidental role, as one of the considerations for using material written for native speakers in an EFL context has been the support that technology can provide for children to understand the stories and perform the tasks planned.

### *Assessment*

A working portfolio for every child will be assembled. This portfolio will include a collection of children's on-line printed work, off-line work, and observational notes from

the teacher [and researcher] of the children performing the tasks, listening to the stories, working in groups, individually, or as a whole class on/with the computer.

Thematic content: Fantasy

Young children are still constructing their cultural values and deciding their interests. In the case of older learners, fantasy might not be an adequate topic for a whole course, as it would be difficult for them to establish a connection between their lives and the unreal context established by the topics explored. However, in the case of small children, they actually relate more with fantasy and it is through fantasy that they are making sense of the world. They are building their real world through the fantasy found in stories. This characteristic of young children becomes the pivotal element of ChATTSEL as it wants to build a learning environment considering the children's characteristics as learners and their developmental needs.

It must be kept in mind that certain tasks would be too challenging for young children. Characteristic map tasks in TBI lessons where for instance students are asked to describe routes to a partner in order to reach previously specified locations, would be highly demanding for children who are still developing a sense of orientation in space and differentiation of right and left. Considering factors like the above, ChATTSEL will work with the types of tasks described below. Each type of task would be designed considering what children can do, and perhaps certain tasks can consider stretching children's abilities to address the needs of fast learners or more mature children.

#### *Types of tasks to use in ChATTSEL*

Following the pedagogical classification proposed by Willis (1996) the types of tasks that would be used in ChATTSEL are:

Listing

Ordering and Sorting

Comparing

Problem-solving

Creative [writing/listening/speaking/reading] tasks (adapted)

Considering that this classification is not exhaustive other types can be used, as long as the operations that learners are required to complete while performing tasks consider children's characteristics as learners.

#### References

Boltman, A. (2001). Children's storytelling technologies: Differences in elaboration and recall. Unpublished Dissertation, University of Maryland at College Park.

Nutbrown, C. (1999). *Threads of thinking*. London: Paul Chapman.

Ryokai, K., Vaucelle, C., and Cassell, J. (2003). Virtual peers as partners in storytelling and literacy learning. *Journal of Computer Assisted Learning*, 19, 195-208.

Unsworth, L. (2003). Reframing research and literacy pedagogy relating to cd narratives: Addressing 'radical change' in digital age literature for children. *Issues in Educational Research*, 13, 1-12.

Wright, A. (1995). *Storytelling with children*: Oxford University Press.



## **IMAGING SERVICES NORTH**

Boston Spa, Wetherby

West Yorkshire, LS23 7BQ

[www.bl.uk](http://www.bl.uk)

**BEST COPY AVAILABLE.**

**VARIABLE PRINT QUALITY**

## Appendix B

# Work scheme lesson plan

Figure B.1 in this page shows an extract of the lessons prepared by Isabel, the first participant teacher of the study.

FIGURE B.1: Implementation lesson plan

- **Actividad 4: Dividimos la clase**
  - a) **Forest Folk.** Algunos alumnos irán con Alejandra a trabajar con el ordenador.
  - b) **TPR Activity.** Los demás realizarán un juego de mímica imitando las acciones que los personajes realizan durante el cuento.  
Se presentan a los niños acciones mediante flash-cards (*Goldilocks eating porridge*). Los niños realizan dicha acción a la vez que la escuchan. Progresivamente se irá aumentando el número de opciones, sin saturar a los niños.

- **Actividad 5: We're Going on a Bear Hunt.**

### SEGUNDO DÍA:

- **Actividad 1: We're Going on a Bear Hunt.**
- **Actividad 2: Matching game**

Vamos a presentar vocabulario específico del cuento.  
Presentamos tarjetas con los objetos principales que aparecen en el cuento. (*little chair, middle-sized bed...*) Explicaremos a los niños que los personajes de nuestro cuento han perdido sus cosas y que tendremos que ayudarles a encontrarlas. Podemos ayudarnos de las marionetas.
- **Actividad 3: Vemos la película**

En esta ocasión el objetivo es que los niños hablen de los diferentes episodios que encontramos

## Appendix C

# Teachers' interview

Instrument type: Semi-structured interview

Teachers' thoughts on ICT

The interview's main objective consisted of gathering teachers' views regarding:

1. ICT and its link to children's learning and development
2. ICT and teachers' professional development
3. Current use of ICT in the classroom and the support provided by school to facilitate its use

1. ICT and its link to children's learning and development

- What advantages or disadvantages do you consider that ICT offers for young children's learning? (Plowman & Stephen, 2003)
- What are the particular concerns related to children's computer use that should be considered when planning to introduce ICT tools in the classroom?
- What is developmentally appropriate use of ICT with young children?
- How can ICT enrich the learning environment of children?
- Do you think ICT can be used to support language development? How?
- How can ICT be used to support children from diverse cultural and language backgrounds? (Bolstad, 2004)

2. ICT and teachers' professional development

- What do you think is the impact of considering the use of ICT in the planning and exercise of teaching strategies? (Plowman & Stephen, 2003)
- Do you have any expectation from the use of ICT?
- Has the school organized courses or training sessions to learn about the capabilities of ICT?
- Are there 'working groups' formed by teachers from this -or other schools-, where you share projects that involve the use of ICT?
- Do you have support to organize previously planned classroom projects that in your view can be enhanced with ICT? Are you allowed the time to plan and implement such projects?
- Based on the experience that you have teaching young children, how would you use ICT to support your practice? (Bolstad, 2004, p. 55) What advantages or disadvantages do you consider that ICT would offer to your practice? (Plowman & Stephen, 2003)

### 3. Current use of ICT in the classroom and the school support to facilitate its use

- How do you exploit ICT in the classroom? (Bolstad, 2004:55) Is there a time allocation procedure? Do you have strategies to regulate computer use and turn taking when children use the computer? (O'Rourke & Harrison, 2004; J. Siraj-Blatchford & Siraj-Blatchford, 2001)
- What do you think are the school needs in terms of ICT equipment and training?
- Have you experienced any problem while using ICT in the classroom? What kind of problems? Technical? Pedagogical? Have these problems been solved? How? Do you receive support to solve them? (Han, 2003)

Research project stage: Phase II

Instrument type: Semi-structured interview

Teachers' views of the work scheme lessons post-implementation

Questions covered those of Phase I plus the following themes.

- A. Work scheme -Method, lesson plans, materials used, and choice of stories. B. Use of ICT with young children C. Use of the storytelling and task-based learning approaches D. Children's:  
level of motivation about the course

learning

feelings towards the use of ICT

attitude towards the learning of English through stories

References:

Clements, D.H., Nastasi, B.K. & Swaminathan, S. (1993): Young children and computer: Crossroads and directions from research. *Young Children*, 48(2), 5664

Bolstad, Rachel.(2004) The Role and Potential of ICT in Early Childhood Education A Review on New Zealand and international literature. Prepared for: Ministry of Education. Early Childhood Education. Tertiary, Curriculum, Teaching and Learning

Han, C.C.W. (2003). Challenges of Using ICT in Hong Kong Early Childhood Settings. In Proc. Young Children and Learning Technologies. Selected papers from the International Federation for Information Processing Working Group 3.5 Open Conference, Melbourne, Australia. CRPIT, 34. Wright, J., McDougall, A., Murnane, J. and Lowe, J., Eds., ACS. 49-52. PDF, BibTex. <http://crpit.com/Vol34.html>

KidSmart: Guide to Early Learning and Technology. 2001 United Way of America and IBM Corporation Internet WWW site located at URL: <http://www.kidsmartearlylearning.org/EN/i>

Miles, J. A. & Sweetland, J. D. (2001). A summer reading program for second-language learners. *The Reading Teacher*. 54(5). 474-477

Plowman, L. (2003) Come back in two years! A study of the use of ICT in pre-school settings. Learning and Teaching Scotland 2003. Early Education Support.

ORourke, M. & Harrison, C. (2004). The introduction of new technologies: New possibilities for early childhood pedagogy. *Australian Journal of Early Childhood*. 29(2)

## Appendix D

# School consent form and informing letter for parents

Consent to participate in the study and to use the data that stemmed from it in academic work is shown in Fig. D.1. The letter distributed to the parents describing the work that was taking place in the English lessons during the summer course is presented in Fig. D.2.

FIGURE D.1: Consent form

**Acuerdo de consentimiento para llevar a cabo el proyecto de investigación referido como CHATTSEL**

CHATTSEL es un proyecto de investigación que consiste en el diseño e implantación de una metodología para la enseñanza del Inglés a infantes, la cual utiliza Tecnologías de Información e historias tradicionales de la cultura inglesa entregadas a través del ordenador. Después de diseñar lecciones para el salón de clases basadas en lo anterior, el trabajo con los niños durante el desarrollo de este proyecto consiste en observar sus reacciones, aprendizaje y desarrollo del Inglés durante las clases. Las sesiones serán audiograbadas -únicamente voz. No se tomará video ni fotografías de los niños. En los reportes, tesis, artículos o publicaciones académicas que resulten de este proyecto, no se utilizará el nombre real de los niños. Es importante también aclarar que los datos que sean recopilados en esta investigación -transcripciones de las grabaciones de voz y notas de trabajo- serán únicamente utilizados en conferencias o publicaciones académicas. Este proyecto está supervisado y avalado por los lineamientos de ética de la Universidad de Leeds, Inglaterra. Estos lineamientos pueden ser consultados en el sitio de la Universidad en la dirección:  
[http://www.education.leeds.ac.uk/current\\_students/files/87.doc](http://www.education.leeds.ac.uk/current_students/files/87.doc)

Sabiendo que la información sobre los niños participantes recopilada durante el estudio será usada únicamente en reportes de investigación (tesis, conferencias y publicaciones académicas) emanadas del proyecto que se ha descrito líneas arriba, permito que se lleve a cabo con los alumnos de este curso de verano (*Vacaciones en el Cole*).

28-Jun-2006  
Fecha

Fdo.

\_\_\_\_\_  
Nombre y firma de la Coordinadora del curso de verano  
*Vacaciones en el Cole*

Alejandra Recio D.      Alejandra Recio S  
Nombre y firma del investigador que obtiene  
el consentimiento/autorización

FIGURE D.2: Research information letter for parents

**Verano 2006****Actividades para la clase de Inglés**

**CHATTSEL** es una metodología de enseñanza del inglés para niños que utiliza una fusión de técnicas didácticas tradicionales y tecnologías de la información. Consiste básicamente en el uso de historias tradicionales entregadas a través del ordenador.



El curso de verano *Vacaciones en el Cole 2006*, ha incluido esta metodología en sus horas de inglés con el propósito de poner en práctica los conceptos mencionados y estudiar el desarrollo de la lengua inglesa de los niños durante el curso.

El uso de historias y ordenadores con niños ha generado últimamente un gran interés debido a los efectos positivos que se han encontrado cuando los niños pequeños aprenden utilizando estas herramientas. Los niños trabajan en los temas de las historias y, mientras, desarrollan su creatividad e imaginación.

La metodología ha sido diseñada tomando en cuenta la edad e intereses de los niños. De esta manera, se ha decidido elegir historias conocidas que los motiven y diviertan (*Los tres cerditos y el lobo*, *Ricitos de Oro y los tres osos*, entre otras), mientras aprenden inglés. El uso del ordenador está considerando también las habilidades de los niños y el tiempo, de manera que trabajen en diversas actividades durante la clase.



Las actividades por realizar incluyen canciones, actividades en el ordenador y manualidades trabajando constantemente alrededor del tema de las historias. De este modo, las clases resultan divertidas y atractivas para los niños, mientras se mantiene el objetivo de aprendizaje de la lengua extranjera.

**Participación de los niños**

Paralelamente al uso de esta metodología, se ha diseñado un proyecto de investigación para intentar conocer los efectos que pudiera tener en el aprendizaje de los niños.



Las actividades dentro del proyecto consisten en observar sus reacciones, aprendizaje y desarrollo del inglés durante las clases y durante dos sesiones individuales de 15 minutos llevadas a cabo dentro del colegio.

Este proyecto de investigación está supervisado y avalado por los lineamientos de ética de la Universidad de Leeds, Inglaterra, de donde es originario. Dichos lineamientos pueden ser consultados en el sitio de la Universidad ([www.education.leeds.ac.uk/current\\_students/files/87.doc](http://www.education.leeds.ac.uk/current_students/files/87.doc)).

Tenemos plena confianza en que los niños disfrutarán de las actividades de inglés de este curso de verano y que su aprendizaje se verá favorecido con esta propuesta metodológica.

## Appendix E

### Interview transcription excerpts

E1 I: Los medios de audio no? que reproducen ... porque dan la oportunidad de mmmhhh ... de que el niño oiga diferentes registros de voz y bueno, acentos de mmhhh ... no se, diferentes otro tipo de canciones de ... luego esta por otro lado el tema del audiovisual, la televisión no? que luego tienen la capacidad ... la ... el poder de captar la atención con el tema de las imágenes que siempre son atractivas para los niños. Y luego habra que ver lo de los ordenadores. Pero es que es muy amplio no? Los ordenadores ya pues tienen la ventaja de además de poder poner audio de las imgenes, que el niño interactua, puede actuar, puede tocar puede mmhhh ... manipular no?

E2 T: Pues yo creo que el idioma lo que es escuchar directamente idiomas extranjeros porque yo puedo hablar idiomas extranjeros pero no hablo igual que lo hablan que lo, que se escucha el sonido en el cassette ni en el video ... que es directamente inglés no?

T: Pues yo creo que mejora porque cuando yo he estado ... cuando estoy dando clases aquí cuento con pizarra, y pizarra. No hay nada más que pizarra. Entonces claro, muchas veces hay con como son niños pequeños no puedes perder ni un momento en pararte a escribir en la pizarra porque de momento se te desborda todo.

T: Vale. Pues, ventajas veo ehh la llamada de atención que tienen las nuevas tecnologías a los niños pequeños.

E3 I: Problema ... no alrevés. Yo creo que es buena para el desarrollo de los niños sobre todo en la actualidad no? porque tienes que ofrecerles una ... una formación global y englobar las nuevas tecnologías entran ... forman parte de esa formación global no?

E4 T: la disposición de la clase en cuanto a enchufe no? electricidad, a las mesas bien colocadas, que haya espacio suficiente para que se puedan colocar bien los ordenadores.  
T: Yo creo que cuidado en cuanto a tener cuidado que no le ocurra nada a lo que es el aparato. T: que hay coles que no tienen tantos recursos en cuanto a nuevas tecnologías como para poder abastecer a todos los niños del colegio. T: yo creo que hay que estar pendiente a la hora también de restringir, no dejar los ordenadores para decir venga, pues ahí tienen los ordenadores y navegar por Internet o ... no porque aparte aparte de haber muchas cosas importantes y de utilidad en el Internet y en los ordenadores también hay páginas que deben estar restringidas a la hora de trabajar con niños, tanto pequeños como los adolescentes. T: Yo lo veo bien. Pero creo que sería muy difícil ehh .. en un curso escolar por ejemplo una profesora, con un grupo de alumnos de 3 y 4 años. Que aquí por ejemplo tenemos ahora 10 11 niños no? Pero cuando tu estas en un cole tienes un grupo mas grande de niños que ahora mismo porque hemos estado las dos pero creo que haría falta o dos personas o llevarlo de alguna forma para que se pudiera llevar bien. no se como se podría trabajar no se, claro si harían falta dos monitores o harían falta mas ordenadores.

E5 C: Hombre la verdad, que el uso del ordenador en el inglés es una manera de fomentar en los niños que eso vaya gustando mas como algo nuevo. Se acabó el tema, de "to be" ... I you Los esquemas verbo to be ohh eso era hoorr. .. horrible pero horrible horrible, pero en fin. Puede llegar que sea una manera de que a los niños les guste. Lo tienes todo y vas aprendiendo. Ya la manera de escribirlo, o la manera de colocarlo en palabras, ay es otra cosa. Y yo lo veo muy práctico como cuando los niños aquí empiezan a leer. No es lo mismo m y a ma. A que tu les vayas enseñando al niño cosas y maneras de ir formando palabras y cuando te das cuenta el niño sabe leer. Pues en el inglés igual, a traves de cuentos, a traves del ordenador, yo veo que los niños van utilizando muchas palabras que ellos mismos van usando frases y que no tiene por que decir, bueno estoy usando el was o el were el presente el pasado el can Horrible. Yo mi manera de aprender inglés fue horrible.

E6 I: Ahora por ejemplo también ehh desde la Consejería de Educación se están poniendo ... se estan planteando, o sea, se se piden y se premian los proyectos de mhh de tecnología. Gente que cree material didáctico para trabajar con los alumnos ehhh ... con los ordenadores. Porque pasa eso, que mmhh. ... se estan dotando a los centros con muchísimos ordenadores, y muchísimas historias.

I: Mmmhh ... El problema es precisamente que no hay estrategias definidas de ningún tipo. El ... vamos a ver, aquí en España ahora mismo se está intentando promocionar de alguna manera el uso de la, de los ordenadores, se están creando centros TIC y centros DIC y no se si de eso has oído hablar. Son centros que los TIC los confundí. Unos son ... los TIC creo que son ehhhh ... mmmhh la característica básica es que tienen que tener dos ordenad ... un ordenador por cada dos alumnos, claro! Y los centros DIC son aquellos que ... no se centran tanto en el ordenador vamos en los centros TIC los niños por ejemplo no tendrían libro de texto, sino que todo partiría del ordenador no? Y los centros DIC pues lo que ocurre es que, todo es, es como que todo es muy audiovisual no? la sala de profesores hay alomejor una pantalla ehh no se ... de estas de plasma para poder hacer presentaciones o no se todo muy digitalizado no? Lo que ocurre es que se, yo creo que se está invirtiendo, porque se está invirtiendo, no en todos los centros pero en algunos, pero luego el, la formación del profesorado hay falla por un lado no? porque yo por ejemplo en el centro esto no lo ...por ejemplo en el centro donde yo estoy trabajando este año no tiene ni idea ... ordenador ... es muy complicado ... llevar pa'lante una programación en la que se incluyan ehh, pues el uso de los ordenadores.

E7 T: Yo pienso que sí. Yo pienso que las personas que estamos haciendo ahora a dar docencia deberíamos tenerlo ya. Creo que deberíamos tenerlo ya. Porque después está la polémica de los profesores tradicionales que llevan muchos años dando clases y que no ... que se niegan a introducir en su curriculum las nuevas tecnologías. Pero claro, ellos a lo mejor pueden tener la excusa de que ellos llevan ya su su forma de dar clases que la tienen ya muy arreglada pero no quieren ... se niegan a que entren ...las nuevas tecnologías pero nosotros que lo tenemos ahora, que estamos ahora formándonos todavía deberíamos tenerla. Sabes? Porque queremos meterles la idea a los otros que tienen ya las ideas muy fuertes pero si nosotros no damos un poquito de si ahora que estamos aprendiendo, pues más difícil va a ser con con los otros creo.

E8 T: Además los han entendido muy bien. Porque el de Ricitos de Oro por ejemplo sí que lo sabían. El hecho de los tres Ositos y Ricitos de Oro ya les sonaban a cuentos que habían escuchado pero los otros dos no los conocían ni nada y yo creo que han tenido que estar atentos al cuento y a lo que son las cortitas explicaciones que han entendido lo que es la historia o lo que es el argumento de la historia (E8).

E9 T: Mejor que contados en una pantalla

T: Yo creo que contarlos se pueden perder un poquito más. Pueden perder un poquito más el hilo de que sigue el cuento. Y sin embargo visto en el ordenador se queda mucho

las imágenes. Que a los niños les encantan mucho las imágenes, los dibujos los colores (E9).

## Appendix F

# Survey for parents

FIGURE F.1: Survey for parents

**Opiniones de padres sobre el uso de tecnología y la enseñanza de inglés a niños en la etapa infantil**

1. ¿Cree usted que el uso de herramientas de Tecnologías de Información, tales como ordenadores o juegos electrónicos, pueden ser utilizados para promover el aprendizaje de los niños en la etapa infantil?

Sí  No

2. Marque Sí o No aquellas actividades en donde usted considera es posible utilizar tecnología

	Sí	No
En la enseñanza de una lengua extranjera		
Como apoyo en la enseñanza de otras asignaturas		
Para motivar a los niños a aprender		
Para utilizar canciones y otros recursos en las clases		

3. ¿De qué otras manera puede ser utilizada la tecnología con los niños de esta edad?

---



---

4. ¿Cuál es la frecuencia con la que lleva a cabo las siguientes actividades con su(s) hijo(s)? Favor de marcar con una X la casilla que más aplique a su caso.

Frecuencia	4-6 veces por semana	2-3 veces por semana	1 vez por semana	Una vez al mes	No practica esta actividad	Comentarios
<b>Manualidades</b> Barro, cartón, pasta o dibujo						
<b>Actividades al aire libre</b> Parque Bicicleta						
<b>Lectura</b> Periódicos, revistas o guías de TV Historias de libros Historias en ordenador						
<b>Escritura</b> Lista de mandado o notas Tarjetas						

## Estadísticos

	ICT como apoyo al Aprendizaje	Lengua Extranjera	Apoyo Otras Asignaturas	Canciones Vídeos
N	14	13	12	12
Válidos				
Perdidos	0	1	2	2

## Tabla de frecuencia

## ICT como apoyo al Aprendizaje - ICT as Support To Learning

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	No	1	7.1	7.1	7.1
	Si	13	92.9	92.9	100.0
	Total	14	100.0	100.0	

## Lengua Extranjera - Foreign Language

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	Si	13	92.9	100.0	100.0
	Perdidos	1	7.1		
Total		14	100.0		

## Apoyo Otras Asignaturas - ICT and Support To Other Subjects

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	No	1	7.1	8.3	8.3
	Si	11	78.6	91.7	100.0
	Total	12	85.7	100.0	
Perdidos		2	14.3		
Total		14	100.0		

## Songs/Videos

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	No	2	14.3	16.7	16.7
	Si	10	71.4	83.3	100.0
	Total	12	85.7	100.0	
Perdidos		2	14.3		
Total		14	100.0		

## Estadísticos descriptivos

	N	Mínimo	Máximo	Media	Desv. típ.
Motivación	13	1	5	1.85	1.281
Aprendizaje	13	1	4	2.23	.832
Distracción	13	1	5	3.77	1.423
Habilidades Matemáticas	13	1	5	3.77	1.301
Desarrollo Habilidades Interfaz Electrónica	13	1	4	2.85	.899
N válido (según lista)	13				

## Estadísticos

	Manualidades	Parque	Bicicleta	Revista Periódica	Historias	Cuentos TIC	Notas Mandado	Jactanda Evaluación
N Válidos	14	12	9	10	13	11	11	9
Perdidos	0	2	5	4	1	3	3	5

## Tabla de frecuencia

## Manualidades - Crafts

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	4-6 veces por semana	1	7.1	7.1	7.1
	2-3 veces por semana	4	28.6	28.6	35.7
	1 vez por semana	5	35.7	35.7	71.4
	No practica la actividad	4	28.6	28.6	100.0
	Total	14	100.0	100.0	

## Parque - Out to the park

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	4-6 veces por semana	5	35.7	41.7	41.7
	2-3 veces por semana	4	28.6	33.3	75.0
	1 vez por semana	3	21.4	25.0	100.0
	Total	12	85.7	100.0	
Perdidos	Sistema	2	14.3		
Total		14	100.0		

## Bicicleta - Biking

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	4-6 veces por semana	1	7.1	11.1	11.1
	2-3 veces por semana	2	14.3	22.2	33.3
	1 vez por semana	3	21.4	33.3	66.7
	1 vez al mes	3	21.4	33.3	100.0
	Total	9	64.3	100.0	
Perdidos	Sistema	5	35.7		
Total		14	100.0		

## Revista Periódica - Magazines Newspaper

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	4-6 veces por semana	1	7.1	10.0	10.0
	2-3 veces por semana	2	14.3	20.0	30.0
	No practica la actividad	7	50.0	70.0	100.0
	Total	10	71.4	100.0	
Perdidos	Sistema	4	28.6		
Total		14	100.0		

## Historias - StoryBooks

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos	4-6 veces por semana	8	57.1	61.5	61.5
	2-3 veces por semana	3	21.4	23.1	84.6
	1 vez al mes	1	7.1	7.7	92.3
	No practica la actividad	1	7.1	7.7	100.0
	Total	13	92.9	100.0	
Perdidos	Sistema	1	7.1		
Total		14	100.0		

Cuentos TIC - ICT Stories

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos.	4-6 veces por semana.	1	7.1	9.1	9.1
	2-3 veces por semana.	1	7.1	9.1	18.2
	1 vez por semana.	4	28.6	36.4	54.5
	1 vez al mes.	2	14.3	18.2	72.7
	No practica la actividad.	3	21.4	27.3	100.0
	Total	11	78.6	100.0	
Perdidos.	Sistema.	3	21.4		
Total		14	100.0		

Notas Mandado - Shopping list

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos.	4-6 veces por semana.	1	7.1	9.1	9.1
	1 vez por semana.	5	35.7	45.5	54.5
	1 vez al mes.	3	21.4	27.3	81.8
	No practica la actividad.	2	14.3	18.2	100.0
	Total	11	78.6	100.0	
Perdidos.	Sistema.	3	21.4		
Total		14	100.0		

Tarjetas de Felicitación - Special Occasion Cards

		Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Válidos.	1 vez al mes.	4	28.6	44.4	44.4
	No practica la actividad.	5	35.7	55.6	100.0
	Total	9	64.3	100.0	
Perdidos.	Sistema.	5	35.7		
Total		14	100.0		

## Appendix G

# Retelling transcriptions

FIGURE G.1: Retelling transcriptions in Spanish

G3Bs (12.07.06)	TGM (19.07.06)	3BGG (25.07.06)
<p>R Can you tell me the story?  R Dime de que se trata el cuento  E De (ee) que (eee).  E (Ehh) : .  E (Que) : (que) que el oso (eh) llego a su casa.  R Ok Y despues?  E Despues pasolpasar que la (aaa) : niña [se] echo a la calle.  R Ok Y luego?  E Y luego estaba dormida  E Y lueg y luego se despertó  E De (ee) que (eee).  E (Ehh) : .  E (Que) : (que) que el oso (eh) llegó a su casa.  E Después pasó que la (aaa) : niña se echó a la calle.</p>	<p>R Cuéntame todo el cuento desde el principio  E Después pasó que llegó ñun ñun ñun  Y después lo estaba haciendo y después cuando se levanto se va corriendo  Y después y des y después fue corriendo la madre  Y después llega la niña y el niño  Y después llega el abuelo y la mujer(mujé) y la abue la abuela  Y después que se lo comía  Y después estaba ñun ñun  Y después corr y después no podía correr a correr  Y después cuando llegó el zorro se lo tenía que comer  Y después cuando estaba en la tierra el zorro Estaba el zorro así (Enrique shows me how the fox was leaning against the tree)con las patas y después pasó que se lo comió  R Very good!  R That's a beautiful story!  R Me gustó tu cuento</p>	<p>E que estaba el otro día que pasó el hombre  E Y pasó después que se después de ahí y y después se y estaba la luna y después le tiró al agua  R ¿Y por que le tiró al agua?  E Porque quería pasar  A ¿Y que hacia el hombre morado?  E Que lo tiró al agua  A Por que y porque el quería pasar ¿y qué estaba haciendo el hombre morado cuando la cabra quería pasar?  E Que que que quería el que que esta allí su amigo y le le tiró  R Porque el hombre morado : ¿que hacia el troll que hacia?  E el troll Se escondió el troll lo que pasó cuando pasó se creía que era malo y lo tiró al agua  E Que esta eh mmm Que que estaba que estaba viendo estaba arriba haciendo así con las patas y después que que cuando pasó el que ya pasó y la tiró  E Mmm Mmm Había pasto  E Que después pasó que ya estaba en la casa y cuando estaba el zorr las cabra y cuando apareció aquí el hombre estaba aquí pasa después que cuando estaba y estaba la luna</p>

G3Bs (12.07.06)	TGM (19.07.06)	3BGG (25.07.06)
<p>E and then she was sleeping  E and then she woke up  E and the (ee) that (eee).  E (Ehh) : .  E (that) : (that ) that the bear arrived to his house.  E and then it happened that the girl ran away to the street</p>	<p>R Can you tell me the entire story from the beginning?  E Then it happened that he arrived ñun ñun ñun  And then she was making it and then he stood up and left running  and then and the and then the mother was running and then the girl and the boy got there and then the grandfather and the woman and the grandm the grandmother  and then that it ate him and then he was ñun ñun and then he ra(n) and then he couldn't run he couldn't run and then the fox came and he had to eat him  and then when he was on the land the fox  the fox was like this  {Enrique showed me how the fox was leaning against the tree with his hands}with its legs and then it happened that it ate him  R Very good!</p>	<p>E that the other day that the man crossed {the man was the word in Spanish that Enrique used to refer to the character of the troll}  E and then then that he then from there and then the moon was there and then it threw him into the water {this is the end of the story, so I asked questions to help him remember more details and produce a longer story}  R and why did it throw him into the water?  E because it wanted to cross  R and what was the purple man doing?  E that he threw him into the water  R why did we want to cross and what was the purple man doing when the goat wanted to cross?  E that that he wanted that his friend was over there and he threw him  R because the purple man ... what was the troll doing? {Changed the question because man was not producing anything new}  E the troll hid the troll it happened when he {the goat} believed that the troll was bad and threw him into the water  E that I mean {este} eh mmm that that he {the goat} was looking he was looking upwards and doing like these with the legs and then that when he {the goat} crossed the one that had crossed already and then he threw him  E Mmm Mmm There was grass  E that it happened that when they were in the house and when the fo(x) the goat was there and when the man appeared here {pointing at the bridge on the picture} the man was here and then when it was there the moon was up</p>

Transcription conventions:

( ) Letters in parenthesis indicate hesitation, false starts or extended words.

{ } Words pronounced in local accent. The preceding word is the correct version in Spanish.

: Indicate pause.

[ ] indicate verbs whose action falls in the subject.

E=Enrique

R = Researcher

## Appendix H

# Publications

### *Task-based learning and storytelling with young learners: analysis and advantages*

Classroom language teaching methodologies have followed a progression of methods that have gone from very prescriptive lessons focused on the teaching and learning of linguistic features of the language, to lessons where the focus has shifted to communicating in the target language supported by a noticing of linguistic features as opposed to their explicit teaching. The communicative approach to language teaching is a current tradition shaping the language teaching practice in classrooms worldwide belonging to the latter trend. TBL find its roots in the communicative approach and to date has been actively used in language classrooms for more than a decade. It is a methodology that emerged from the mainstream education system, but developed within language teaching practice. This work reports the observations carried out during a period of eight weeks within a pre-school classroom, where stories and tasks have been used in an ESL environment. The purpose of these observations is to inform the development of a language teaching methodology that incorporates both TBI and storytelling and that would be applied in an EFL setting in an on-going research project.

### *ICT-delivered stories, English as a foreign language and 3 & 4 year-old Spanish speaking children: can the combination work?*

### *Emergent literacy across languages: using stories and technology to teach English to three and four year old Spanish children in a foreign language context*

#### Introduction

FIGURE H.1: Article in GRETA

## TASK-BASED INSTRUCTION AND STORYTELLING WITH YOUNG LEARNERS: ANALYSIS OF ITS ADVANTAGES

Alejandra Recio Saucedo

University of Leeds  
a.saucedo@leeds.ac.uk

*Alejandra Recio is a full-time PhD student at the University of Leeds. Her areas of interest are Teaching of English to Speakers of Other Languages (TESOL) and Information and Communication Technologies (ICT) in Education. Her research project is aimed at investigating the implementation of the Task-based Instruction (TBI) approach with very young learners of English supported by ICT tools and ICT-supported stories. She has experience in teaching English in bilingual schools, in private language centres, and using the communicative approach in Foreign Language contexts in Mexico. She has also worked with Information and Communication Technologies (ICT) as a systems administrator and as a lecturer implementing undergraduate courses in virtual learning environments like Blackboard. This has given her insight into the potential uses of technology in educational settings.*

*Classroom language methodologies have followed a progression of methods that have gone from prescriptive lessons focused on the teaching and learning of linguistic features of a language, to lessons where the focus is communicating in the target language supported by noticing events of such features. The communicative approach in language teaching (attached to the latter trend) currently shapes the language teaching practice in classrooms worldwide. Task-based Instruction (TBI) finds its roots in the communicative approach and to date has been actively used in language classrooms for more than a decade. This work reports on the observations carried out during a period of two months within a pre-school classroom, where communicative tasks have been used within an English as a Second Language context. The purpose of these observations is to inform the development of an English as a Foreign Language teaching methodology that incorporates TBI in an on-going research project.*

### INTRODUCTION

There is a trend to expand the English curriculum to the lower levels of mainstream school systems in many countries around the world (Cameron, 2003). With the purpose of responding to the challenges that this phenomenon poses, a research project aimed at designing a methodology of English as a Foreign Language (EFL) for pre-school children based on the Task-based Instruction (TBI) approach is being carried out. The research is being informed by practice through a series of participant observations conducted in a pre-school classroom in an English as a Second Language (ESL) context in a UK school.

The overall purpose of this paper is to show the potential of TBI for the Young Learners curriculum, as it can provide children the support they need to learn English according to their

requirements as learners. The first part presents the advantages of TBI to teach English to young learners and the second shows some findings of the observation sessions illustrated with material produced by children when performing communicative tasks.

### THE POTENTIAL OF TBI

TBI finds its roots in the notion of Communicative Language Teaching (CLT) and has to date been actively used in language classrooms for more than a decade. It followed other approaches (Grammar-Translation, Audio-Lingualism) and parted from them by changing the underlying principles of curriculum design. In TBI, morphosyntactic, phonological, and lexical language elements (grammar, phonology, discourse, and vocabulary) are located secondarily in curriculum design, while

specific learners' needs and ways of learning the language are brought to the foreground (Nunan, 1991; Ellis, 2003).

TBI seems to have characteristics that suit children's needs as language learners.

Furthermore, communicative tasks constructed around stories make them valuable for teaching languages to young children. This assertion is based on research results that show how stories appeal to young children by providing them with meaningful learning contexts to develop language or social skills (Bolton, 2001; Nutbrown, 1999; Ryolai et al., 2003; Wright, 1995, 2000). TBI's methodological potential and the usefulness of stories as a thematic component to teach languages are highlighted by Kiernan (2005: 59) while conducting a small-scale research project with beginner-level adult learners: *"tasks provide a framework for storytelling [stories] which can be manipulated by the task designer or teacher to both support and challenge the learner"*. At this point, and despite the fact that success in language development cannot be attributed to the presence or absence of learning devices (stories) or an approach (TBI), results of the above studies are promising in terms of the educational benefits that stories and TBI offer to young learners (Lee, 2005; Pinter, 2005).

#### The concept of task for very young language learners

The diverse understanding of the elements that compose task definition (i.e. scope, perspective, authenticity, linguistic skills, and psychological processes concerned with task performance) constitutes the origin of the varied meanings of tasks found in the literature (Ellis, 2003). For instance, considerations regarding the scope of tasks vary in terms of differentiating a *classroom exercise* from a *task*, so while some believe that tasks are activities that call for primarily meaning-focused language use, others think that any kind of language activity can be considered a task. This diversity of understanding affects each of the elements mentioned above and, not being our intention to create a new meaning for task, we suggest the use of a working definition, one that within this project considers already existing descriptions, the age of the learners

that will be using tasks and the context in which the tasks will be implemented. In view of these conditions, *task*, within this research project, is defined as a meaningful and purposeful activity (specifically for young children) that involves learners in comprehending -understanding-, manipulating, producing or interacting in the target language, while their attention is principally focused on meaning rather than form. There should be specific requirements set by the teacher as to what will be regarded as successful completion of the task -not necessarily the production of language-, where learners are required to arrive at an outcome from given information through some process of thought.<sup>1</sup>

#### Characteristics of young children as language learners

Regardless of the individual differences in children's language development and the theories that explain the processes involved in its acquisition and growth, it can be said that children learn languages (first or second languages in certain conditions) relatively easily. For instance, linguistic theories maintain that children have a natural ability to learn languages (Reis, 2006) and studies conducted on bilingualism show that children are able language learners (Bialystok, 2001).

Now, despite the ease with which children learn languages, foreign language contexts challenge their natural ability given that this *easiness* is related, among other factors, to exposure -which in these contexts will be limited in the majority of cases to the language classroom. Considering this, the importance of making classroom language learning events meaningful and appropriate to children's learning needs becomes crucial. At this point, in order to learn how to increase the learning potential of classroom events, it is helpful to analyze children's characteristics as learners first, to later match these characteristics to teaching approaches. This match would serve the purpose of designing meaningful language lessons for young children that would address their needs as learners. In connection with this idea, Table 1 explains the characteristics of children associated with language learning and development.

## TEACHING VERY YOUNG LEARNERS • TEACHING VERY YOUNG LEARNERS

Children are:	Research, teaching literature, and observation evidence
Good at language understanding (at a holistic level)	<ul style="list-style-type: none"> <li>- are already very good at interpreting meaning without necessarily understanding individual words (Halliwell, 1992).</li> <li>- rely heavily on oral language (Cameron, 2003).</li> </ul>
Uninhibited in language production	<ul style="list-style-type: none"> <li>- already have great skill in using limited language creatively.</li> <li>- take great delight in talking (Halliwell, 1992; Cameron, 2003).</li> <li>- are less inhibited than older learners to talk in the foreign language (Cameron, 2003).</li> <li>- most lack self-consciousness when they speak a new language (McLvin, 2004).</li> </ul>
Willing to engage in language construction within their cognitive capacity	<ul style="list-style-type: none"> <li>- have fun with language: i.e. rhyming and alliterations.</li> <li>- need and enjoy repetition (McLvin, 2004).</li> <li>- require that language learning opportunities have appropriate literacy [language] demands.</li> </ul>
Developing nascent literacy skills	<ul style="list-style-type: none"> <li>"[...] literacy teaching needs to be sensitive to the development of first language literacy, to the differences between first language and English in the relationship between spoken and written forms, and to the learners' knowledge of spoken English." (Cameron, 2003: 104).</li> <li>- may not be ready for certain structures and complexities in either first or second language (McLvin, 2004).</li> </ul>
Indirect but active in learning style	<ul style="list-style-type: none"> <li>- frequently learn indirectly rather than directly.</li> <li>- are continuously asking questions, wondering (Lizard and Hughes, 1984).</li> </ul>
Engaged in understanding the world and constructing reality	<ul style="list-style-type: none"> <li>- are always searching for meaning (Cameron, 2003), causing them to be actively involved in a process of formulating the rules that lead to the understanding of the world (Wells, 1987).</li> <li>- like to process new experiences, ask questions, experiment (Donaldson, 1987; Lizard and Hughes, 1984).</li> </ul>

Table 1. Characteristics of young children as language learners

**TBI attributes in the light of young children's characteristics**

With the purpose of establishing a rationale of why the characteristics of TBI suit young children's needs as language learners, its methodological description is explained in relation to young children's characteristics as language learners. The following reasoning underlying each connection provides the basis for this argument. This relationship is summarized below in Table 2.

**a. Learners' needs.** Children use language - among other reasons - to understand the world, to make sense of their reality and the rules to engage with other children and adults. Tasks in a language classroom can address the need of children to make sense of their reality because the approach allows for planning the language objectives based on learners' needs. For example, a task in a young learner classroom

could be to draw a picture about how Goldilocks felt when she left the bears' house and talk about this picture with the target language vocabulary related to emotions. The task will help the children understand or deal with the morale of the story - it's not right to enter other people's houses without permission - through a language task.

**b. Learner-centred curriculum.** In TBI, learners influence curriculum design. This is interesting when learners are young children who can change the course of a task or go beyond its expected outcome because of their natural curiosity towards new experiences. If the teaching approach provides room to let learners guide the learning process - to an extent which the teacher considers appropriate or useful - teachers will have more tools to plan and carry out language learning opportunities related to the learner.

## TEACHING VERY YOUNG LEARNERS • TEACHING VERY YOUNG LEARNERS

**c. Learners communicating in the target language.** One of the purposes of using communicative tasks in language classrooms is to get learners to talk in the target language. Children's lack of inhibition to talk becomes an advantage because if the topic of the tasks interests children, communication is likely to occur and even to be initiated by children rather effortlessly.

**d. Focus on form.** TBI allows for a type of syllabus where complex features of the language are taught according to learners' needs. Young children do not need explicit teaching of these features because they are developing the skills to grasp the concept of a language rule. The delay in the teaching of complex language features can be planned because TBI in principle accepts the teaching of these concepts as secondary. Learner needs - i.e. playing with the language, being

exposed to it - come first. Moreover, if the young learner curriculum is planned on a long-term basis, communicative tasks can incorporate a focus on form gradually, considering how children develop the skills to understand concepts related to complex features of language.

**e. Correction of form.** TBI asks for a focus on form to happen in natural interventions such as, for instance, when learners ask for an explanation or actually make a mistake. Considering that young children are taught form in L1 in natural instances, TBI seems an appropriate approach to teach an L2 considering this principle. If, for instance, children use the wrong form of the past tense of a verb, parents, family or care-takers might correct them. However, these corrections happen naturally since the word is normally corrected when the children make these

	Methodological characteristics of TBI	Children's characteristics as language learners
a. Learners' needs	Language learning activities should directly reflect what learners "potentially or actually need to do with the target language" (the "rehearsal rationale" (Nunan, 1991).	Children as language learners are always looking for meaning (Cameron, 2003). They are involved actively in the formulation of rules that lead to the understanding of the world (Wells, 1987).
b. Curriculum flexibility	Teacher control instruction lessens in favour of learner-centredness (Wills, 1996; Skehan, 1998).	They like to process new experiences, ask questions, experiment (Donaldson, 1978; Tizard and Hughes, 1984).
c. Learners communicating in the target language	Communicative tasks are especially suited for this approach (Ellis, 2003; Skehan, 1998; Willis, 1996).	They are less inhibited than older learners to talk in the foreign language (Cameron, 2003). Most lack self-consciousness when they speak a new language (McLavin, 2004).
d. Focus on form	Procedural syllabi allow for a random selection and sequencing of rules (Guerrero, 2007). In TBI, morphosyntactic, phonological, and lexical language elements (grammar, phonology, discourse, and vocabulary) are located secondarily and curriculum (and tasks) design parts from specific learners' needs and ways of learning the language (Nunan, 1991).	They are developing first and second language literacy, becoming familiarized with the written word (Cameron, 2003).
e. Correction of form	Focus on form is required (to foster the acquisition of formal linguistic elements) but should occur in "natural interventions" during tasks (Harley & Swain, 1994).	They require that language-learning opportunities have appropriate literacy demands. They may not be ready for certain structures and complexities in either the first or second language (McLavin, 2004).

Table 2. Connection between TBI and Young Children as language learners?

## TEACHING VERY YOUNG LEARNERS • TEACHING VERY YOUNG LEARNERS

mistakes and without formal teaching of a language rule. The person who corrects a child does not go into detail or long explanations about why the form for the past tense of the verb *run* is *ran* and not *runned*. In TBI communicative tasks, focus on form can happen spontaneously: If children doing communicative tasks make a mistake related to form, they can be corrected in the way they would be corrected by parents, when the mistake occurs and without formal language rule explanation. Furthermore, the focus on form is not necessary for communicative tasks to take place. Children will ask for language explanations as they are ready to understand them. This again will happen naturally because children will show signs of readiness and tasks can evolve to consider form according to these signs.

The relationship between young learner needs and TBI methodology summarized in Table 2 has been thus far suggested. Moreover, the results of a small-scale field study (discussed in the second part of this paper) are encouraging in

terms of the benefits of implementing TBI with young learners.

## REALITY CHECK: ESL PRE-SCHOOL CLASSROOMS

In order to study the strategies employed by teachers to support the language development of pre-school children in an English as a Second Language (ESL) context and to see how this support could be translated into tasks in an EFL classroom, a series of participant observation sessions were conducted in a school in the UK with pre-school children whose native language is different from English. The school was chosen because of the varied ethnic backgrounds of the students, the teachers' positive response towards this work, and the approach that the teacher was using to support the language and literacy development of these children – storytelling and related activities. The observations took place between September 2005 and January 2006, once a week, in sessions of three hours, at a literacy-

Story-related task	Means	Variations
Teacher telling a story	Oral telling	Fiction and non-fiction Short and long versions of the same story With/without props, i.e. puppets or objects related to the story Asking the children questions as the story is being told
Children re-telling a story	Oral re-telling	Using the pictures from the book as clues Using puppets: individually/group
Drawing a picture	Pictorial	Without asking children to describe the drawing Asking for a description
Recognizing vocabulary	Oral Symbolic	Having children recognize words from their sound, from pictures, or through written text
Recognizing phonological patterns	Oral	Asking children to repeat and distinguish patterns: rhyming, alliterations, or middle sound Hat/pat; cat/cat; train/rain
Making puppets	Pictorial	Pictures of characters directly taken from the story read Pictures of characters different from the pictures of the story
Role-playing with puppets	Oral	Individual Group
Writing sentences to describe pictures	Writing	With corrections: letter formation, punctuation, capitalization Without corrections

Table 3. Tasks in a pre-school classroom

## TEACHING VERY YOUNG LEARNERS • TEACHING VERY YOUNG LEARNERS

training course organized and run by the teacher of the children attending this course.

On average, each session included 4 children and 3 adults. The structure of these sessions was to sit around a small table—at the children's school library—and perform diverse activities related to literacy. Such activities were organized resembling a storytelling session, where the teacher read a story to the children and asked them to complete activities that stemmed from the tale. The diverse language background of the children who attended the course included Somali, French, Vietnamese, Farsi, and Spanish. At home, all the children spoke their mother tongue with parents and family.

With the aim of generating a set of typical tasks performed within this context and of conducting a further analysis of them, the observed tasks were classified. Below is a list of some of the activities produced during the participant observation period, showing delivery means and variations (Table 3). The work observed was not consciously or explicitly based on the TBI framework; however, after perceiving key elements of TBI in its philosophy and organization, we judged it suitable for the present analysis. The data source for the analysis consisted in observation notes, the anecdotal journal generated during this course, and sample material prepared by the children during the sessions.

#### Detail of Telling-a-Story task

Following the task cycle suggested by Willis (1996), the telling-a-story task takes up the sequence of events shown in Fig. 1. In this task,

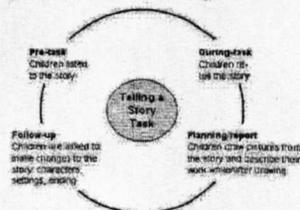


Fig. 1. Telling-a-story task cycle.

children are asked to tell a story to the teacher in small groups. Children are encouraged to follow a structure in the story where a beginning-middle-end organization can be observed; however, children are free to change details as long as they can talk about the reasons underlying such changes.

Other types of tasks that can be used with young learners include *listing* (i.e. characters from stories); *ordering and sorting* (i.e. elements from stories such as vocabulary); *comparing* (i.e. story versions); and *problem-solving* (i.e. stories' plots) (Willis, 1996). Taking into account that this classification is not all-embracing (Ellis, 2003), other types of tasks can be used, as long as the operations that learners are required to complete while performing tasks consider children's characteristics as learners, as previously discussed.

#### Considerations of task effectiveness with young learners

There is an important feature of the tasks observed which we decided to label the *performance component*. This is the children's response to the activity and the degree of proximity between the teacher's expected outcome of the activity and the actual one. The expected outcome of each exercise was discussed with the teacher before the children joined the session. We, as participants, were aware of the teacher's objective in each task. This feature was analyzed on a per-task basis; that is, each task observed was considered *complete-matching* if the children were able to finish the task, felt motivated by it, and the outcome met the teacher's expectations; or *part-matching*, when the previous conditions differed from the teachers' expectations or were not met in full.

On the whole, the tasks observed were successful, but certain variations presented more challenges to children or generated discussion between them not directly related to the plot of the story; for instance, when children were asked to make puppets with character pictures that differed from the story pictures. This task produced interesting twists that, to some extent, addressed the way children learn: always asking, always making sense of the world. The original

purpose of the task was to complete the puppets and use them to retell the story. However, when the children noticed the differences between the pictures from the book and the puppets that they were making, they spontaneously started talking about these differences—clothes, facial features, height, or size. This discussion was made relevant to the task when the teacher talked with the children about the differences, asking for example which characters the children preferred. The teacher later told us that it is important for children to recognize differences in shapes and patterns because it is a useful skill to understand Maths concepts. In this way, tasks with *part-matching* components were still learning experiences for the children.

#### Children's language development: sample of produced material

Early October 2005

"The Gingerbread Man" is a story with multiple variations. It is about a couple that bakes gingerbread shaped like a man, from which the story takes its title. "The Gingerbread Man" character jumps out of the oven to avoid being eaten and is chased by different characters, including its-makers. The chasing characters are usually animals, although some versions have children. As the Gingerbread Man escapes from its chasers, he repeats its trademark phrase: "Run, run as fast as you can. You can't catch me, I'm the Gingerbread Man", showing in a way its confidence in being faster than others and unbeatable. However, the gingerbread character

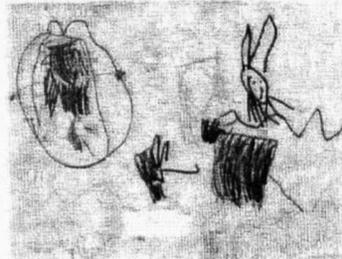


Fig. 2. "The Gingerbread Man"

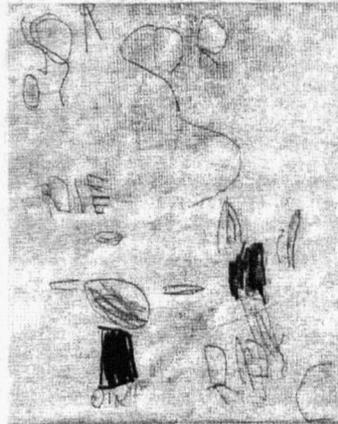


Fig. 3. Words from "The Gingerbread Man"

is finally tricked by an astute fox and gets eaten at the end of the story.

After having listened to the story "The Gingerbread Man" (based on the version published by Ladybird<sup>3</sup>), they were asked to draw a picture about it (Fig. 2). As Sarah (4 years and 3 months) was drawing the picture, she was talking about it. The figure inside the circle is the gingerbread man, being cooked in the oven. To the right of the circle, there is a square coloured in black, which represents the cow that tried to eat the gingerbread man. The picture on top of the cow is the wolf that in the end ate the cookie. The wavy lines represent the river in the story, and the sun was drawn because everybody was running outside chasing the Gingerbread Man. After drawing the picture, the teacher asked the children to write their own story (Fig. 3). Sarah wrote "well" under the picture to the left of the page, and the letters at the top represent the word "gingerbread".

Late January 2006

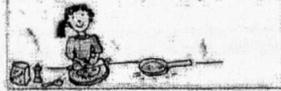
The teacher told the children a modified version of "The Gingerbread Man" called "The Chapati

Man'. A key difference between the stories is the main character. Instead of gingerbread, the runaway character is a chapati (Indian food shaped as a flat circle made with flour, salt, and water). A girl is the one who makes and cooks the chapati and the chasing characters are people and animals. A pig is the astute character that finally tricks the Chapati Man to eat it.

After listening to the story, children were asked to colour a picture of a girl who, like in the story, cooked chapatis. The question above the square where the ingredients of the recipe are drawn reads: "What happens next?" The children talked about the story to answer this question (Fig. 4). Having finished the telling, the teacher showed the children a chapati recipe and asked them to copy the recipe, drawing pictures of the ingredients. The children were talking about their pictures and the recipe while drawing and copying (Fig. 5). The work illustrated here is also Sarah's (4 years and 6 months).

What happens at the start of the story?

Once, a girl made a chapati to fry for her tea.



What happens next?

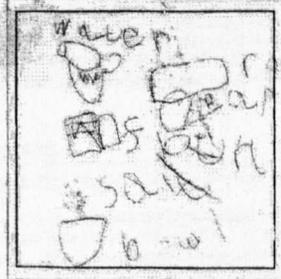


Fig. 4. Recipe from "The Chapati Man"

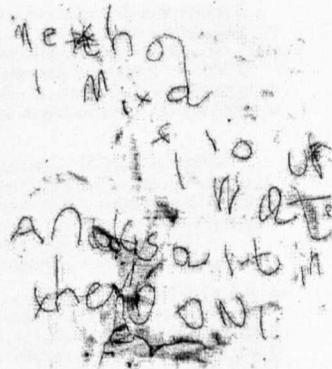


Fig. 5. "How to make chapatis"

The material shown in the pictures provides an example of the outcome of communicative tasks performed by young children. This material is useful in various ways, i.e. to observe and keep track of a child's language development. To illustrate this, observable changes in the writing of the sample work are used as the focus of analysis.

**Changes in writing skills observable from the materials gathered during the tasks**

The following is an extract from the entries of the anecdotal journal:

*Changes in writing between the two work samples are related to many causes, including child maturation. However, the children's teacher saw Sarah's development as 'interestingly fast', considering that at the beginning of the course in September, the gap in oral and writing skills between Sarah and the older children (7 years, 10 months and 3 years old) in her class was considerable. By the end of January, according to Sarah's teacher, she had overcome the gap in language production and writing skills, evident in September in a rather short period of time.*

*Letter formation and separation between letters to write words have improved from October (Figs. 6 and 7) to January (Fig.*

## TEACHING VERY YOUNG LEARNERS • TEACHING VERY YOUNG LEARNERS



Fig. 6. 'Gingerbread'.



Fig. 7. 'Wolf'.

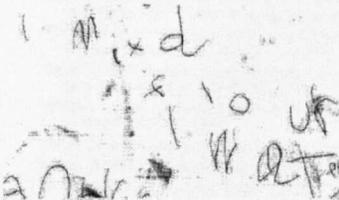


Fig. 8. Chapati recipe: "1 mis[e]d flour water"

8). In both cases, children had to copy words from a model given by the teacher (book and printed recipe)."

## CONCLUSIONS

The objectives of Teaching English to Young Learners (TEYL) courses need to consider the

long-term goal of the English curriculum in mainstream school and allow young children to learn according to their needs (Cameron, 2003). Considering this, it is suggested that the TBI approach can address the long-term goal of language curriculum while looking at children's needs.

With the purpose of understanding the processes involved in the support of language development in ESL contexts, an observation exercise was organized. This exercise yielded interesting results on the feasibility of implementing tasks with young learners.

A review of the literature shows that to date, the use of communicative tasks with very young learners is a somewhat unexplored area (Pinter, 2005). With the exception of studies conducted at the primary level by Prabhu (1987), Carless (2002) and Lee (2003), studies connected to the implementation of TBI with children in the age range of 3 to 5 are scarce. Research of this kind is thus considered relevant, as the positive effects that tasks have in language development, as was shown in the case of a child in this paper, are worth exploring and pursuing.

## Notes

- <sup>1</sup> Based on definitions from Cameron (2001), Ellis (2003), Nunan (1999), Prabhu (1987), Richards, Platt and Weber (1985) and Skehan (1998).
- <sup>2</sup> Based on Donaldson (1978), Harley and Swain (1984), Tizard and Hughes (1984), Nunan (1991), Willis (1996), Ellis (2003), Cameron (2003) and McLean (2004).
- <sup>3</sup> Ladybird Books is a publishing company of children's books. The reduced vocabulary versions of traditional stories used in their Reading Scheme have made the company's books popular in British primary schools. A small sample of the modified versions of traditional tales is available on the company's website, which can be accessed at <http://www.ladybird.co.uk/playzone/index.html>.
- <sup>4</sup> All children's names have been changed to ensure anonymity.

## REFERENCES

- Blahosok, E. 2001. *Bilingualism in development: Language, literacy, and cognition*. Cambridge: Cambridge University Press.
- Bolman, A. 2001. *Children's storytelling technologies: Differences in elaboration and recall*. Unpublished Dissertation, University of Maryland at College Park.
- Cameron, L. 2001. *Teaching languages to young learners*. Cambridge: Cambridge University Press.
- Cameron, L. 2003. 'Challenges for ELT from the expansion in teaching children', *ELT Journal* 57/2: 103-112.
- Carless, D. 2002. 'Implementing task-based learning with young learners', *ELT Journal* 56/4: 389-396.
- Donaldson, M. 1987. *Children's Minds*. London: Fontana Press.
- Ellis, R. 2003. *Task-based Language Learning and Teaching*. Oxford: Clarendon Press.

## TEACHING VERY YOUNG LEARNERS • TEACHING VERY YOUNG LEARNERS

- Guerrero, R. G. 2004. *Task complexity and L2 narrative oral production*. PhD Thesis, Barcelona: Universitat de Barcelona.
- Hallwell, S. 1992. *Teaching English in the Primary Classroom*. London; New York: Longman Group UK.
- Harley, B., and M. Swain. 1984. "The interlanguage of immersion students and its implications for second language teaching." *Interlanguage*. Eds. A. Davies, C. Crifer and A. P. R. Howat. Edinburgh: Edinburgh University Press. 291-311.
- Kes, D. 2005. "Language development in children". [Internet document available at <http://papyr.com/hypertextbooks/grammar/igdev.htm>]
- Kierman, B. 2005. "Storytelling with low-level learners: developing narrative tasks". *Teachers exploring tasks in English language teaching*. Eds. J. Willis & G. Edwards. Basingstoke: Palgrave Macmillan. 38-68.
- Lee, S. M. 2005. "Training young learners in meaning negotiation skills: Does it help?" *Teachers exploring tasks in English language teaching*. Eds. J. Willis and G. Edwards. Basingstoke: Palgrave Macmillan. 103-112.
- Melvin, A. 2004. "Teaching English to very young learners". *Selected Papers from the Amazing Young Minds 2004*. Cambridge. 25-29 July 2004.
- Nunan, D. 1989. *Designing tasks for the communicative classroom*. Cambridge: Cambridge University Press.
- Nunan, D. 1991. "Communicative tasks and the language curriculum". *TESOL Quarterly* 25/2: 279-293.
- Nutbrown, C. 1999. *Threads of Thinking: Young Children Learning and the Role of Early Education*. London: Paul Chapman.
- Pinter, A. 2005. "Task repetition with 10-year-old children". *Teachers Exploring Tasks in English Language Teaching*. Eds. J. Willis and G. Edwards. Basingstoke: Palgrave Macmillan. 113-126.
- Prabhu, N. S. 1987. *Second Language Pedagogy*. Oxford: Oxford University Press.
- Richards, J., J. Platt and H. Weber. 1985. *Longman Dictionary of Applied Linguistics*. Harlow: Longman.
- Ryokai, K., C. Vauelle and J. Cassell. 2003. "Virtual peers as partners in storytelling and literacy learning". *Journal of Computer Assisted Learning* 19: 195-208.
- Skehan, P. 1998. *A Cognitive Approach to Language Learning*. Oxford: Oxford University Press.
- Tizard, B. and M. Hughes. 1984. *Young Children Learning*. Cambridge, Mass.: Harvard University Press.
- Wells, G. 1987. *The Meaning Makers: Children Learning Language and Using Language to Learn*. London: Hodder and Soughton Educational.
- Willis, J. 1996. *A Framework for Task-Based Learning*. Harlow: Longman.
- Wright, A. 1995. *Storytelling with Children*. Oxford: Oxford University Press.
- Wright, A. 2000. "Stories and their importance to language teaching". *Initiating Language Teaching* 2/5: 1-7.

FIGURE H.2: Poster presented at CAL07

**ICT-delivered stories, English as a Foreign Language and 3 & 4 year-old Spanish speaking children: can the combination work?**

UNIVERSITY OF LEEDS  
Alejandra Recio  
edra@leeds.ac.uk

**Introduction**  
This work explores some of the results of implementing an ICT-based work scheme to teach English to a group of very young Spanish speaking children. The method used storytelling in English via a computer.

**Development: An ICT-enhanced storytelling method**  
Work scheme to teach English to preschool-age children based on ICT-enhanced stories.  
Implementation: 18 children, 12 lessons, three stories, story played in English a foreign language context.  
Exploration of the effects of the scheme on:  
- children's development of emergent literacy skills and attitude towards ICT-developed the use of ICT in their English.

**Disrupting Learning: Narrative skills**  
Narrative skills  
Exploration of children's narrative skills  
Task choice  
ICT skills

**Debate: Challenges & Needs**  
Teachers work in the presence of ICTs in the classroom. The work scheme is based on the use of ICTs to deliver stories in English. The work scheme is based on the use of ICTs to deliver stories in English. The work scheme is based on the use of ICTs to deliver stories in English.

**Preliminary conclusions**  
The use of ICT-enhanced stories to deliver English to young preschool children's use of ICTs in the classroom. The work scheme is based on the use of ICTs to deliver stories in English. The work scheme is based on the use of ICTs to deliver stories in English.

English programs around the world are being increasingly integrated to the preschool school level curriculum. In some countries, this integration is accompanied by a growing interest in the use of information and communication technologies (ICT) to support the delivery of education across all school levels. These developments are explored in a PhD research project through the implementation of a work scheme aimed at teaching English to preschool children based on stories delivered via a computer. The research took place in Spain which is considered a foreign language context since English is not the official language of the country, the medium of instruction or the primary language spoken in the children's home.

### Research questions

Based on the aims of the project, the research questions explored in this paper are:

1. Can some form of development in children's emergent literacy skills be observed throughout English lessons prepared under a work scheme based on ICT-delivered stories?
2. What is the children's attitude towards learning English using ICT-delivered stories?

### Methods

A total of ten preschool children aged between 3 and 4 years old participated in the study. The teacher who delivered the course was also a participant and she was interviewed twice, before and after the implementation of the trial lessons prepared under the work scheme. The participant children took a total of 12 lessons 45-min. in length spread out in three weeks. The lessons were organized in three separate instances: (a) Whole-class storytelling sessions (b) Story-related tasks and (c) Computer tasks. In the classroom children worked individually with me on the story-related computer tasks. One of these tasks was to sequence the story watched by rearranging pictures on the screen. A narrative task happened after the sequencing and although the pictures were available on the screen to help the child remember the story, they were asked to try re-telling the narrative without looking at the pictures. In addition, the children were not pressured to re-tell the story in English. All of the children participated in the re-telling task after having viewed the story two times at least. Three stories were used throughout the course, one per week. Goldilocks and the Three Bears was the first title and the children were familiar with the story. The other two titles, The Gingerbread Man and Three Billy Goats Gruff were new to the children and are not traditional in the Spanish context. In order to control variations in design and software features of the stories, which can differ significantly between software designers and publishers (de Jong & Bus, 2003), the three stories used were taken from the same series (*Inside Stories*, 2003).

## Results

Children's story retellings were audio taped and transcribed for analysis under the Narrative Scoring Scheme (J. Miller & Chapman, 2006). This scheme evaluates young children's narratives extending the Story Grammars approach (Stein & Glenn, 1979) by categorizing narratives in seven components: Introduction, Character Development, Mental States, Referencing, Conflict resolution, Cohesion, and Conclusion. Four independent reviewers evaluated and scored the story transcriptions and the scores were averaged in order to establish a week-to-week comparison. The analysis of children's narratives based on the scores showed changes in the use of story grammar elements between narratives. The following case illustrates these assertion. Figure H.3 presents an example of the changes in the narratives of one of the participant children, a boy called Enrique. His narrative of The Gingerbread Man improved for the Introduction component in week two (Wk2) of the course, but interestingly the narrative for week three (Wk3) based on the story of The Three Billy Goats Gruff did not show the same level of complexity for the same component. Figure H.4 shows the scores for Enrique regarding Cohesion. It illustrates Enrique's use of this component during his

narratives of Goldilocks with a score of 1, improving in one point for the second narrative. An increase of one point under the NSS indicates development in the use of a story grammar component.

FIGURE H.3: Changes for the component of Introduction in Enrique's narratives

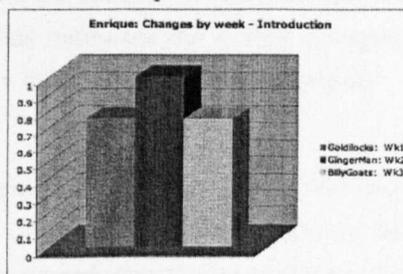
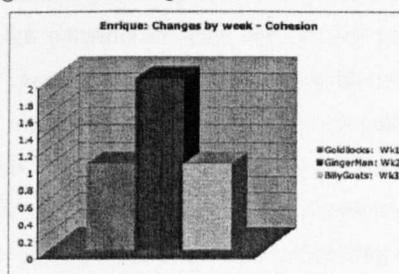


FIGURE H.4: Changes for the component of Cohesion in Enrique's narratives



## Conclusions

*Regarding emergent literacy development across languages through growth of story grammars.* The project results can be an indication of emergent literacy skills development (Teale & Sulzby, 1986) across languages since the stories were heard and viewed in English but retold in Spanish. Also, they provide evidence of the support offered by stories to young children's development of literacy skills in situations when literacy is not the teaching aim considering that the focus of the lesson was the teaching of English but the analysis of the children's narratives showed developmental story grammar changes between weeks. A possible explanation for the changes in children's narratives could lie in their preferences of the stories used during the course. In the case of Enrique, he selected *The Gingerbread Man* as his favourite story and this narrative is incidentally the one with the highest average scores as evaluated by the reviewers.

*In connection to the benefits of using ICT-stories in the teaching of English and specifically on EFL.* Children learning English from an early age can benefit in other ways than attaining native-speaker fluency as could be observed in the development of emergent literacy skills. Additionally, children who are being exposed to the foreign language

linguistic structure by watching stories created for native speakers, can have long-term benefits related to comprehension of discourse of the foreign language (Garvie, 1990). This is particularly useful in foreign language contexts considering that the practice of the language is largely restricted to the classroom. The use of ICT as the delivery medium of the story allowed the children to construct meaning without the need to hear the translated version. This reinforces the notion of exposure to the foreign language discourse as the stories are delivered without adaptations.

*Teacher's views on children's increased motivation and interest in learning English via ICT-delivered stories.* As observed by the participating teacher, children's motivation towards learning English increased after the introduction of the computer and the stories into the lessons. She observed changes in children's attitude towards the lesson between the first two weeks of the course (pre-implementation of the trial lessons) and the last three (implementation). She considered that the stories provided the children with a lesson structure, allowing them to take advantage of the contents of the lesson. Furthermore, the teacher felt that watching stories from a computer allowed the children to listen to properly-spoken English, supporting the children's development of native-speaker fluency. Finally, she considered that the animations in the story provided the children with support tools to help them construct meaning from a story that was being heard in English, making translation unnecessary.

## Appendix I

# Story transcriptions

FIGURE I.1: Goldilocks and the Three Bears

### Goldilocks and the Three Bears

Once upon a time there were three bears: a great big Papa Bear, a middle-sized Mama Bear, and a little Baby Bear. They all lived together in a cottage in the woods.

They had three chairs: a great big chair for Papa Bear, a middle-sized chair for Mama Bear, and a little chair for Baby Bear.

They had three beds: a great big bed for Papa Bear, a middle-sized bed for Mama Bear, and, you guessed it, a little bed for Baby Bear.

And they had three bowls for their porridge.

One morning the porridge was too hot. So while it cooled, the three bears went for a walk in the woods.

Someone else was walking in the woods that morning. It was a little girl named Goldilocks.

She saw the three bears' house.  
 "I wonder who lives here," she said,  
 and she walked inside.

Goldilocks saw the three bowls of  
 porridge. She tasted the porridge  
 in the great big bowl. But it  
 was much too hot. She tasted  
 the porridge in the middle-sized  
 bowl. But it was too hot, too.

Then she tasted the porridge in the  
 little bowl, and it was just right.  
 So she ate it all up.

Goldilocks saw the three chairs.  
 She sat in the great big chair,  
 but it was too high. She sat in  
 the middle-sized chair, but it  
 was too wide.

She sat in the little chair, and it  
 was just right ... but then it broke!

Next, Goldilocks saw the three beds.  
 She tried the great big bed,  
 but it was too hard. She tried  
 the middle-sized bed, but it was  
 too soft.

But the little bed was just right,  
 and before long, Goldilocks  
 was fast asleep.

Soon the three bears came back  
 from their walk in the woods.

"Someone's been eating my porridge!"  
 said Papa Bear.

"Someone's been eating my porridge!"  
 said Mama Bear.

"Someone's been eating my porridge,"  
 said Baby Bear, "and it's all gone!"

"Someone's been sitting in my chair"  
 said Papa Bear.

"Someone's been sitting in my chair"  
 said Mama Bear.

"Someone's been sitting in my chair,"  
said Baby Bear, "and it's broken!"

Then the three bears walked into  
the bedroom.

"Someone's been sleeping in my  
bed!" said Papa Bear.

"Someone's been sleeping in my  
bed!" said Mama Bear.

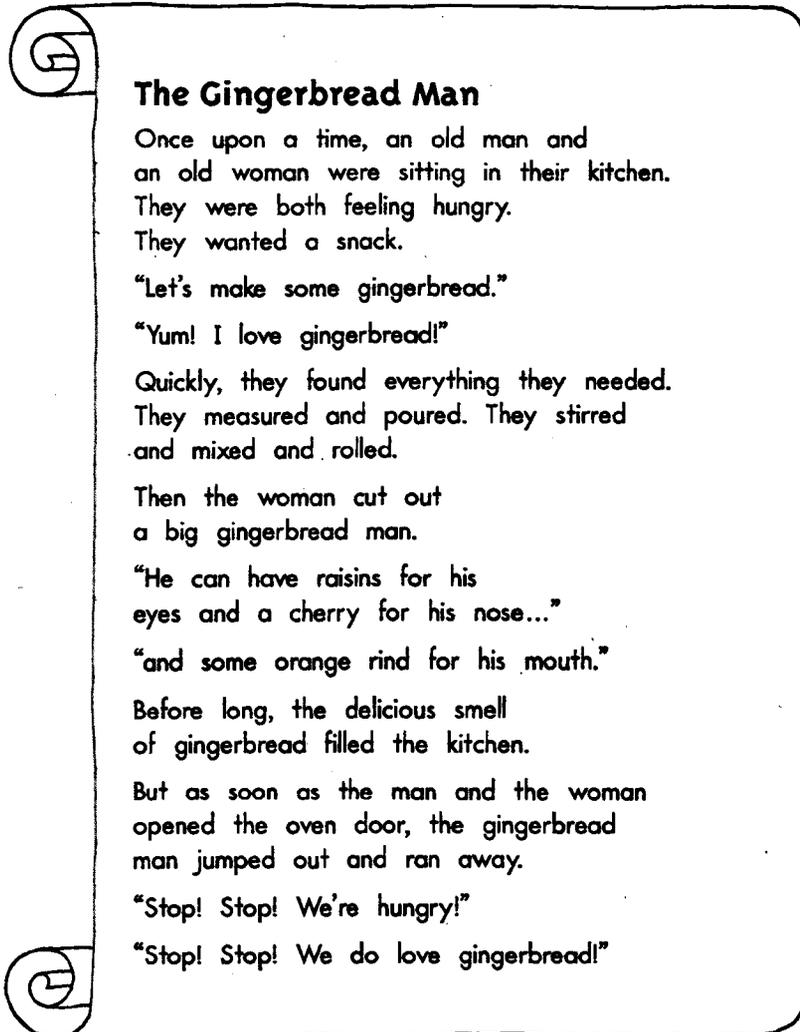
"Someone IS sleeping in my bed!"  
said Baby Bear. "Look!"

Goldilocks woke up. She saw  
the three bears. They looked  
VERY angry.

She jumped out of bed and  
ran right out of the house!

And she kept on running, as fast  
as she could, all the way home!

FIGURE I.2: The Gingerbread Man



The man and the woman ran after the gingerbread man, but he just ran faster.  
*"Run, run, as fast as you can. You can't catch me - I'm the gingerbread man."*  
 He ran past a tree, where a boy was pushing a girl on a swing.  
 "Stop! Stop!"  
 "We love gingerbread!"  
 The man and the woman and the boy and the girl all ran after the gingerbread man, but he just ran faster.  
*"Run, run, as fast as you can. You can't catch me - I'm the gingerbread man."*  
 He ran and ran, past a dog and a cat and on through the town.  
 "Stop! Stop!"  
 "We love gingerbread!"  
 The gingerbread man kept running. Soon he had left the town far behind.  
*"Run, run, as fast as you can. You can't catch me - I'm the gingerbread man."*

Copyright © 2014 The Gingerbread Man  
 The Gingerbread Man

He ran up a hill - and everyone ran after him. He ran down the other side - and everyone got closer.  
 Then the gingerbread man came to a river. He stopped and stared.  
 "What can I do? There is no bridge!"  
 Suddenly a fox appeared from behind a tree.  
 "Don't worry, little gingerbread man. Just hop on my back and I'll carry you across." The gingerbread man held on tightly as the fox jumped into the water. But soon...  
 "Help! My feet are getting wet!"  
 "Climb up on my head and you'll keep dry." But in no time at all his feet were getting wet again.  
 "Help! My feet are getting wet!"  
 "Climb out on my nose and you'll keep dry."  
 "Thank you!" said the gingerbread man, as he climbed out on the fox's nose.  
 "Thank you!" said the fox, and he licked his lips.  
 "I love gingerbread, too!"

Copyright © 2014 The Gingerbread Man  
 The Gingerbread Man

FIGURE I.3: The Three Billy Goats Gruff

### The Three Billy Goats Gruff

Once upon a time, three hungry Billy Goats Gruff lived on a bare hillside.



Nearby, across a bridge, there was plenty of sweet, green grass . . . but the bridge was guarded day and night by a mean and hungry troll.

Every day, the goats grew hungrier. They just *had* to get across the bridge, and one evening, they finally thought of a plan . . .

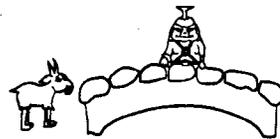


Next morning, Little Billy Goat Gruff walked onto the bridge.

*Trip trap, trip trap.*

"Who's that crossing my bridge?" bellowed the troll.

"It's just me, Little Billy Goat Gruff."



"I'm going to come and eat you up!" roared the troll.

"Oh, please don't eat *me*. I'm only a mouthful," said Little Billy Goat Gruff.

"Wait for my brother. He'll make a much bigger meal."

The troll liked that idea. "Hurry across before I change my mind," he grumbled.

So Little Billy Goat Gruff trip trapped on his way. Soon he was eating sweet green grass.

A few minutes later, Middle-sized Billy Goat Gruff walked onto the bridge. Trip trap, trip trap.

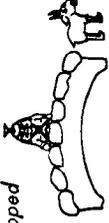
"Who's that crossing my bridge?" roared the troll.

"It's just me, Middle-sized Billy Goat Gruff."

"I'm going to come and eat you up!" roared the troll.

"Oh, please don't eat me. I'm only a snack," said Middle-sized Billy Goat Gruff.

"Wait for my tasty big brother."



"Huff . . . all right. Hurry across, before I change my mind," said the Troll.

Finally, Big Billy Goat Gruff walked onto the bridge. TRIP TRAP, TRIP TRAP.

He was very big and very hungry.

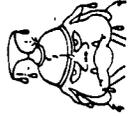
"Dinner at last!" cried the troll.

"We'll see about that!" said Big Billy Goat Gruff. He raced at the troll, and butted him once, twice, three times with his horns.

Down, down, down tumbled the troll, and with a great big SPLASH, he landed in the river.

From that day, the three Billy Goats Gruff crossed the bridge whenever they liked . . .

. . . and the troll never, ever tried to stop them again.


## Appendix J

# Matrix analysis of the stories

FIGURE J.1: Matrix analysis of Goldilocks and the Three Bears (Hoey, 2001, p. 101)

*A matrix perspective on text* 101

Table 6.3 A fuller matrix analysis of Goldilocks and the Three Bears

	Goldilocks	Father Bear	Mother Bear	Baby Bear
1	Goldilocks goes for walk	Father goes for a walk with Mother and Baby while the porridge cooks	Mother makes porridge; which is too-hot so they all go for walk	Baby goes for a walk with Mother and Father while the porridge cooks
2	She comes to the bears' house and enters	He walks	She walks	He walks
3	She finds and tastes Father Bear's porridge, rejecting it	He walks	She walks	He walks
4	She tastes Mother Bear's porridge, rejecting it	He walks	She walks	He walks
5	She eats Baby Bear's porridge	He walks	She walks	He walks
6	She sees and sits on Father Bear's chair, rejecting it	He walks	She walks	He walks
7	She sits on Mother Bear's chair, rejecting it	He walks	She walks	He walks
8	She sits on and breaks Baby Bear's chair	He walks	She walks	He walks
9	She sees and lies on Father Bear's bed, rejecting it	He walks	She walks	He walks
10	She sees and lies on Mother Bear's bed, rejecting it	He walks	She walks	He walks
11	She goes to sleep in Baby Bear's bed	He walks	She walks	He walks
12	She sleeps	He returns from his walk with his family and discovers his porridge has been tasted	She returns from her walk with her family and discovers her porridge has been tasted	He returns from his walk with his parents and discovers his porridge has been eaten
13	She sleeps	He discovers that his chair has been sat upon (!)	She discovers that her chair has been sat upon (!)	He discovers that his chair has been broken
14	She wakes up	He discovers that his bed has been lain in	She discovers that her bed has been lain in	He discovers that Goldilocks is in his bed
15	She makes her getaway	He watches her escape	She watches her escape	He watches her escape

Matrix analysis of the story *The Gingerbread Man* based on Hoey (2001).

	Setting	Gingerbread Man	Man and Woman	Boy and Girl/ Dog and Cat	Fox
What are the Man and the Woman doing? (Setting)	A Man and a Woman are baking gingerbread				
(1) What is the Gingerbread Man doing? (Catalyst/Initiating Event)		Jumping out of the oven and running away			
(2) What does the Gingerbread Man want to do?		He wants to avoid being eaten			
(Internal response)					
(3) What do the characters do to get their wish? (Consequence)		The GM runs and chants: "Run, run as fast as you can, you can't catch me, I'm the Gingerbread Man"	They run after the Gingerbread Man and ask him to stop	They run after the Gingerbread Man and ask him to stop	The Fox tricks the Gingerbread Man and offers help to cross the river
(4) What happens next? (Consequence)		Then the Gingerbread man came to a river and can no longer run	They lose the Gingerbread Man	They lose the Gingerbread Man	The Fox asks the Gingerbread Man to climb up his head/nose
(5) What happens to the Gingerbread Man? (Conflict resolution)		The Gingerbread Man is eaten			The Fox eats the Gingerbread Man

Matrix analysis of the story *The Three Billy Goats Gruff* based on Hoey (2001).

	Setting	Little Billy Goat: First attempt	Middle Billy Goat: Second attempt	Big Billy Goat: Third attempt	Troll
(1) What are the Billy Goats doing? What is the Troll doing?	Looking at the green grass on the other side of the bridge				Guarding the bridge
(2) What do the characters want to do? (Catalyst/Initiating event)		Cross the bridge to reach the greener grass	Cross the bridge to reach the greener grass	Cross the bridge to reach the greener grass	He wants to stop the goats from crossing the bridge
(3) What do they do about their wish? (Catalyst/Initiating event)	They thought of a plan to cross the bridge and reach the side with the greener grass	Little Billy Goat Gruff walked onto the bridge	Middle-sized Billy Goat Gruff walked onto the bridge	Big Billy Goat Gruff walked onto the bridge	He tries to stop the three Billy Goats
(4) What happens when the Troll tries to stop the Big Billy Goat? (Consequence)				Big Billy Goat races at the Troll and butts him	The Troll lands in the river
(5) What happens to the Billy Goats? (Conflict Resolution)	From that day, the three Billy Goats Gruff crossed the bridge whenever they liked	He crosses the bridge and finally eats the green grass	He crosses the bridge and finally eats the green grass	He crosses the bridge and finally eats the green grass	The Troll did not try to stop them again

## Appendix K

# Transcriptions of a retelling task

FIGURE K.1: Elena: TGM retelling task

**The story of Elena**

Sample record of the work conducted with children during implementation of work scheme lessons

**Table conventions:**

G=Group

Pa=Pairs

Seq/Retell=Sequencing and re-telling tasks

P=Puzzles

DraChar= Drawing characters via 2Create

SW=Software

G3Bs= Goldilocks and the Three Bears

TGM= The Gingerbread Man

3BGG= Three Billy Goats Gruff

Participant Child	Date: (July 2006)	Task	Story	Location in recording	Length
Elena	10	G/Seq/Retell	G3Bs	42.45	3.33
	13	DraChar	G3Bs	19.07	7.30
	17	DraChar	TGM	26.40	5.02
	19	Seq/Retell/P	TGM	25.50	7.15

E=Elena

A=Alejandra

July 19

25.50 (33.25) – 7.15

A Hi Elena. Do you want to play one computer game?  
 E yes  
 A yes?  
 E el pastel  
 A ok this is a game  
 A it's a game about the story of the gingerbread man ok?  
 A it's a game  
 E y este es el gato y este es el perro  
 E this is the cat and this is the dog  
 E the cat!  
 A yes which one is the cat Elena?  
 E ahora el pastelito  
 A yeah very good this is the  
 E porque tiene hambre  
 A yes!  
 E que vamos a hacer a puzzle?

A no a different one A puzzle {pronounced as in the Andalusian region pronounce puzzle –something similar to p/u/z/le tomorrow}

E en el agua salian

A the fox? :(I was opening the activity where four pictures from the story had to be ordered in sequence. Elena had completed this type of task once before with the Goldilocks story, so she went directly to order the pictures in the numbered boxes without waiting for my instructions. As I started organizing the pictures following her directions, the sequencing part of the task was finished quickly).

E eh primero era este

A ok very good! So we put this number one

A and then what's next?

E que fueron

A running and running

E despues era este!

A este y despues?

E despues era este!

A all right very good Elena!

**A can you tell me the story about the gingerbread man with the picture?**

**E que estaba haciendo el pastelito despues le da miedo y y despues salio corriendo a la calle se fue corriendo y despues lleo lleo a aqui se lo encontraron iba corriendo todavia y y y despues vino el zorro y se ponio encima del zorro y y se lo comio el zorro y se se se lo comio y decia slurp! (Elena licks her lips)**

A hahahaha! Very good! It's a fantastic story!

A do you like the stories Elena?

A te gustan los cuentos?

E :(broad smile)

E mucho!

A do you want to go with Teresa now? Or do you want to draw something?

A quieres hacer un puzzle?

E Si

A ok vamos a hacer un puzzle

E este este es el gato

A bien do you remember how to say ... :(I wanted to ask her how to say cat but she quickly pointed at the picture of the dog and said este es el dog using the word dog in English (this is the dog))

E este es el dog!

A dog muy bien!

E y este vino corriendo en el principio

A ok yes that's true!

E anda guau!

A ok Elena te voy a preguntar algo de la historia y tu me dices la respuesta y te voy a dejar que tu elijas la respuesta

E vale

A who chased the gingerbread man?

E el pastel que salio corriendo y y

A y quien lo perseguia?

E la madre y el padre

A bueno la madre y el padre pero aqui no estan (because from the choices given the old man and the old woman were not one of them) quien mas lo perseguia?

A the boy and the girl!

A bueno dame tu mano

A we're going to click here and ... ;(in the software, after clicking on the right choice which was presented with three pictures from the story one of the shaded pictures of the puzzle in the background was highlighted)

A ohh that's beautiful right?

E laughs

A who jumped out of the oven?

E que despues se encontro al a al zorro se encontro a a X y al zorro

A aha

E y y y la madre y el padre salieron lo lo vieron ahi

A muy bien y quien se salio del horno quien brinco? Who?

E who?

A quien?

E que corria y que ...

A the gingerbread man

E que corria este y la madre lo perseguia (pointing at the gingerbread man on the screen)

A exactly!

A can you give me your hand and click on the gingerbread man?

A click! (I gave Elena some time so she could click the mouse herself)

A wait wait wait ;(Elena wanted to keep clicking on the choices for the other question, so I asked her to wait for me so I could read the question to her I decided to do this activity in this way, I read the question and not let the children do it themselves influenced by Belen. When she was evaluating and working on the software preparing the lessons, she told me that the activities of the type of the puzzle were too difficult for the children, or could be I decided then to take a more guided approach and not let the children explore the task on their own I was able to observe however, after looking at Elena work with the puzzle, let Pablo explore this activity on his own, and I tried to stay 'away' of the task. I let Pablo and Elena work a puzzle together without reading the questions to them but letting them listen to the question as the software played it Both of them were able to complete the task, and even though Pablo followed a trial-and-error approach to it, Elena actually responded to the questions correctly after hearing them from the computer)

A very good you have two pieces ok?

E si

A who was swinging in the tree?

E que que corria el pastel y se ..

A y quien estaba en el columpio?

E la ninia

A can you click on the girl please

E y y y

A click on the girl please, click (Elena does) very good

A who jumped on the back of the fox? Quien brinco en la espalda del zorro?

E eeh el pastelito  
 A can you click on the gingerbread man please? (Elena does)  
 A muy bien  
 A who run away? *Quien se escapaba?*  
 E ehh  
 A quien se estaba escapando de todos los demas?  
 E los ehh el el mmhh el {points at the screen}  
 A gingerbread man can you click?  
 A who eat the gingerbread man?  
 E que  
 A quien se comio al gingerbread man?  
 E el zorro  
 A can you click on the fox? (Elena does and as she clicks the last piece of the puzzle shows up and the puzzle is finished)  
 A ahh! You've finished! Very good! Give me five!  
 : {we both laugh}  
 A ok you can go with Teresa now and we can play again tomorrow  
 33.25

Some thoughts: Reading back this transcription I was able to see the over control I had over the task. I could have let Elena talk more but I didn't and this I take as my own learning for future work with children. Time for them works at different pace than to adults. I had set a series of goals and objectives for each session and I was under pressure to complete them. Perhaps a plan to work for a longer periods than five weeks could help, but then, the important variable of the rapid changes occurring in children at this age would need to be considered. Different studies, different strategies.

Another important aspect of the conversations with the children is that I tried to intervene after waiting a few seconds, trying to give each child an opportunity to keep talking. The waiting lapse could be expanded, but in this case, I wanted to give all of the children the same number of opportunities to work with me on the computer, so I was always conscious of the time and accordingly kept the tasks moving rather fast, not waiting long for the child's responses. Consider this for the retelling tasks to come.