

ICT and Jolly Phonics

A comparative study between England and Spain

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Abstract

In this dissertation the use of ICT for the teaching of synthetic phonics is explored. It focuses on the method Jolly Phonics which originated in England and was designed to teach native speakers to read and write. Thanks to its great success, the method was later on applied in countries where English was studied as a second or foreign language as it is the case of Spain. Considering the fact that the method and therefore, the software and songs developed for it, were oriented towards native speaker children, it is explored how these ICTs are integrated in Spain where most children speak and learn English as a foreign language. It will be compared how the software and songs fit in the curriculum in both countries and how teachers use them. Moreover, the possible advantages and drawbacks of these ICTs for children in both countries will be examined.

Key words: Jolly Phonics, ICT, bilingual education, English education and Spanish education.

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1. Introduction

1. 1. ICT in education

During the last two decades more and more emphasis has been put into the study and use of ICT in education. The rapid developing technological world where we live requires the equally fast adaptation of educational systems to these technologies if pupils are expected to face the world of work with the necessary skills. Students have to face a new global economy “powered by technology, fuelled by information and driven by knowledge” (US Department of Labor, 1999:1) so it is the duty of each government to introduce these items in the curriculum and in the reality of the classroom. In Spain, the Education Ministry started introducing computers in schools in the 1980s in primary and secondary schools in an experimental way to observe the results and introduce them later on in the whole of the educational system. As a consequence, in 2005, the programme ‘Internet en el aula’ (Internet in the classroom) was created with the aim of introducing the use of ICT in the classrooms. Computer systems were installed, Internet access was guaranteed and teachers were trained in order to implement this programme. (Romero, 2007:13) On top of that; the EURYDICE report from 2001 (EURYDICE, 2001:33) highlighted the need of European cooperation to improve the quality of the education systems through ICTs and the Internet.

One of the reasons, although not the only one, for the introduction of ICT in the classrooms is to provide students with better skills for the job market where ICTs, such as the Internet and computers or other related devices, are used on a daily basis. Technological literacy is therefore essential. Together with this reason, there have been numerous researches where it has been proven that ICT greatly facilitates the acquisition and absorption of knowledge, it motivates students and it provides a wide range of learning methods to suit every learner. (Tinio, 2005:7,17)

Following the line of research into the specific area of early years learning, it has been found that specialists agree in the importance of the introduction of ICT in the very first years of education. The benefits are numerous, from increasing children’s independence, own learning, motivation and self esteem,

to more effective thinking and problem solving as they require active participation. (McCarrick & Li, 2007, Livingstone, 2012)

1. 2. ICT in the curriculum

The importance of ICT in the curriculum has changed greatly in the last 20 years. It has moved from being an independent subject where students learnt to use computers and the most important programmes and which started in secondary school, to an essential skill present in every subject that extends from early years till the end of secondary school. (Ley Orgánica 2/2006 de 3 de mayo and National Curriculum in England, Computing Programmes of Study)

Pupils are expected to learn to use ICT, both at home and in the classroom, to carry out activities related to every subject. (Livingstone, 2012) Technological skills imply that students use information and devices in a responsible way and are critical with the information they access. They are expected to use ITC to solve problems, do research about a topic, present their views or findings, etc. They have to combine knowledge, skills and abilities with values and criticism in order to achieve a goal through the use of ITC. These skills are, therefore, a tool used by students in their everyday work.

In order to achieve this high level of proficiency in the use of ICT by students, governments have been introducing them earlier and earlier in the curriculum and in the classrooms. They are trying to train 'digital natives', that is, people who have been born surrounded by ICT, who have acquired the necessary digital skills and who have learnt to surf the Internet in the same way they have learnt to speak. (Prensky, 2001:1)

Together with the integration of ICT in the curriculum there has been an integration of actual devices in the classrooms. Classrooms have been furnished with computers, projectors and smart boards and teachers have been trained to cope with the integration of these new technologies through retraining courses and the introduction of ICT in teacher training courses. Nonetheless, the introduction of the devices and the training of the staff have been gradual and it has not yet been completed in some areas. Due to this lack of physical resources the extension of the introduction of the use of ICT in certain areas is reduced or different.

1.3. ICT and Jolly Phonics

As it has been mentioned above, the trajectory of ICT in the curriculum has moved from being restricted to a subject matter, to being introduced and used in other areas of the curriculum. The connection between ICT and literacy has been great due to the fact that nowadays most of our reading and writing is done in digital form. Students are asked to do research or presentations using ICT and therefore, they have to apply both their literacy and their ICT skills combined.

Nonetheless, before that can take place, students have to be taught to both read and write and also, to use ICTs properly. An integrated programme designed for young learners to teach them literacy, using ICT to reinforce it, is Jolly Phonics. Although the method itself can be used with the use of limited or even no ICTs, most teachers putting it into practice chose the use of its software for Interactive White Boards (henceforth, IWB) and its CDs, CD-ROMs and DVDs with stories and songs. The multisensory nature of the program is very effective and it is reinforced with the songs and the stories that children can watch on the IWB. In addition, the software offers activities where children can practice what they have learnt, they are therefore, using literacy with ICT skills from a very early age.

The success of the method is the variety of approaches. It includes movements for those children who learn kinaesthetically, sound and songs for aural learners and stories and images for visual ones. (Gardner, 1983) The software and songs put emphasis on the aural and visual aspects of the method and it promotes the use of movement through instructions that the teacher would have to guide. Hence, the ITC of the method addresses every child as it attends to all different types of intelligences and all different types of learners.

2. Aims of the research

Considering that the Jolly Phonics method and the ICT used in it were developed for English native speakers, this research aims to explore the application of the ICT in a country where English is studied as a foreign language. It is necessary, therefore, to take into account the fact that English literacy falls second in the curriculum, that children learn to read and write in their Spanish literacy time too and that their time at school has to be divided between the two languages. Adding to this, it must not be forgotten that children are not familiar with the rhymes and songs used in the method whereas English speaking children would. Also, the stories are told in English with the corresponding language barrier for Spanish speakers. Nonetheless, where there is a small language barrier, there is a great opportunity for learning cultural aspects of the English language and the country.

Considering what it has been previously stated, the objectives of the research are to:

1. explore how the use of Jolly Phonics' ICT fits into the Spanish and British curriculum for early years and primary school.
2. look into how much time teachers in both countries devote for Jolly Phonics' ICT each day or each week and the importance of them in the lesson.
3. examine the training that teachers received in each country and observe any possible difference between them.
4. inquire the age group with which Jolly Phonics' ICT is used in each country and observe any possible difference and the reason behind these differences.
5. research about the application of the software and songs in each country and observe if there are any major differences between them and the reasons for it.
6. compare and contrast the advantages and drawbacks of this ICT in both countries.

3. Background information and methodology

In order to obtain all the information needed for the analysis of the research two routes have been taken. On the one hand, theory of the inclusion of ICT and synthetic phonics in the curriculum in both countries has been investigated. In the case of Spain, the inclusion of Jolly Phonics' ICT has been explored in bilingual schools and therefore, a study of the evolution of this programme is viewed. On the other hand, a questionnaire (see appendix) has been given to teachers in England and in Spain. In the case of England, three teachers were from two state schools and one from an independent school and they answered the questionnaire retrospectively as they stopped using Jolly Phonics four or five years ago. In Spain, although all schools fall into the bilingual programme, six of them are state schools, four of them are ruled by an independent organization but with state support (*concertado*), one of them is an independent school and one belongs to the original MECD (Spanish Ministry of Education, Culture and Sport and British Council agreement). The Spanish schools are either now introducing the method or they have been using it for a few years. This questionnaire asks teachers in both countries about their inclusion of, training in and opinion of Jolly Phonics' ICT and the results are withdrawn from them, together with the theoretical background information.

3.1. Exploring how Jolly Phonics' ICT is introduced in schools

3.1.1. The English case

In order to understand the reason why Jolly Phonics' ICT was used in almost every early years and primary school literacy lesson around England, it is necessary to look back to its implementation in the curriculum.

Over the years, many have been the strategies employed by teachers in the classrooms to teach British children to read and write English. After World War II teachers used global or mixed methods where children had to memorize whole words, they had to recognize them, remember them and then be able to read them and write them from memory. These methods were not very successful, especially among the most underprivileged children.

Due to these poor results, Sue Lloyd, a teacher in a school in Suffolk, introduced, in the late 1970s, a new method which consisted in working with the sounds and the letters instead of with whole words. Together with the sounds and letters she worked on the blending and the segmenting of those sounds for reading and writing. She soon observed the benefits of the method and worked towards making it known to other teachers in an attempt to share her good practice. Together with publisher Chris Jolly, Sue Lloyd created paper based materials which spread quickly and, after their great success, the ICT related to them, that is; the CD with the songs, the CD-ROM, the DVD and the IWB software, were born.

Numerous researches were carried out on the systemic use of this synthetic phonics programme. Nonetheless, there were two very important ones that called the attention of the authorities and the introduction of this method into the curriculum was then developed. Those two researches with the greatest impact were;

1. the Clackmannashire research, published in 2004-5 carried out by Johnston and Watson and which proved a great improvement of the reading and writing abilities of the students using synthetic phonics in comparison with those using global or mixed methods. The students using synthetic phonics were well above the average reading and writing age after 6 years of applying the method. (Johnston & Watson, 2005)

2. The Rose Report from 2006 published by the Independent Review of the Teaching of Early Reading highlights the benefits of a synthetic phonics approach and the importance of its introduction in the education system nationwide. Mr Rose argued that evidence showed that synthetic phonics "offers the vast majority of beginners the best route to becoming skilled readers". (Rose, 2006:19)

Adding to these reports, after the negative results in the Pisa report from 2009 (OECD, 2009) and the evidence from the OFSTED (Office for Standard in Education, Children's Services and Skill) review, Reading by Six, from 2010 where it says that:

"Best schools teach reading, strongly promote adherence to synthetic phonics in primary schools, finding that the diligent, concentrated and

systematic teaching of phonics is central to the success of all the schools that achieve high reading standards in Key Stage 1” (OFSTED, 2010:4), synthetic phonics was introduced in the national curriculum. In the Schools White Paper ‘The Importance of Teaching’, the British government admits the importance of the programme and states the government effort into providing the schools and the teachers with the necessary skills to develop the programme:

“the evidence is clear that the teaching of systematic synthetic phonics is the most effective way of teaching young children to read, particularly those at risk of having problems with reading... We will provide the resources to support the teaching of systematic synthetic phonics in primary schools”. (DfE, 2010:11),

The curriculum in 2006 stated that

‘[t]o be systematic, phonics teaching needs to be carefully planned, reinforcing and building on previous learning to secure children’s progress. It needs to be taught discretely and daily and needs to be engaging and multisensory. High-quality phonics programmes need to be followed consistently and with ‘fidelity to the programme’ (DfES, 2006:5)

to secure the necessary pace and progression. The report gives a definition of high-quality phonic work, based on a recommended synthetic approach, in which the key features are to teach beginner readers:

- " grapheme–phoneme (letter–sound) correspondences (the alphabetic principle) in a clearly defined, incremental sequence
- to apply the highly important skill of blending (synthesising) phonemes in order, all through a word in order to read it
- to apply the skills of segmenting words into their constituent phonemes to spell
- that blending and segmenting are reversible processes.” (DfES, 2006:7-8)

Each of these points is exactly what Jolly Phonics software offers and therefore it fits perfectly in the curriculum, both the 2006 and the new 2014 one which reinforces this ideas. Nonetheless, after 2012 schools have been shifting from using Jolly Phonics to using a new similar synthetic phonics programme called Read Write Inc. which follows the same steps as Jolly Phonics of segmenting and blending. This paper, in that case, has studied the connection

between Jolly Phonics and ICT in England retrieving the experience teachers have from having used it in the past.

Due to the fact that the national primary strategy from 2006 specified that there should be a literacy hour and three-part daily mathematics lessons, schools timetable is organized around that. From there, it was the teacher who decided how much Jolly Phonics' software they use in the class. Thanks to the answers obtained from the questionnaires it has been possible to get a general idea of how Jolly Phonics' ICT fitted into the classrooms in England.

3.1.1.1. Participants

The schools that have taken place in the questionnaire have been three in total.

One of them is a big state school in the city of Wolverhampton where two teachers have answered the questionnaire. One of them is an early years' teacher and the other one is a Key Stage One teacher teaching Year 1. In Year 1 they have both an IWB and some computers in the classroom, they also have access to the ICT room but they do not use it for Jolly Phonics. In early years, they also have an IWB and some computers as well as access to the ICT room. They do not use Jolly Phonics software for IWBs but they use the CD-ROM in the classroom computers for working with individual children.

Another state school, this time medium sized, from the Isle of Wight has also taken part in the questionnaires. From this school, a supply teacher teaching Key Stage 1 and 2 has answered the questions for the study. In the classrooms there are IWBs but there are not computers. There is an ICT room they can have access to but they do not use it for Jolly Phonics.

The third school taking part is a small independent school in Milton Keynes. Due to the size of the school, the teacher has a small class of children from the age of 5 to the age of 7. In the classroom they have an IWB and 3-4 computers which are not used for Jolly Phonics. They have access to the ICT room but they do not use their time there to work with Jolly Phonics.

3.1.2. The Spanish case

The evolution of both the introduction of ICT and English in the classrooms in Spain has been slow in its beginnings but it has taken off substantially in the last few years. As a matter of fact, both subjects have been the ones that have obtained most of the attention from the authorities as they represent the global era we live in. The introduction of ICT devices such as computers in each classroom, updated devices in the ICT classroom, IWB and sound systems has been a number one priority for the Spanish government together with the development of the bilingual programme. Nonetheless, much has still to be done as there are many schools that lack the necessary equipment and not every Spanish school is bilingual, although the Spanish Department for Education has planned to improve the teaching and learning of modern foreign language with a comprehensive programme from 2010-2020. (Ministerio de Educación, 2011)

Since Jolly Phonics ICT is used in early years and primary schools, it is worth having a look at the Spanish national curriculum for these stages and how Jolly Phonics ICT would fit in them regardless of whether the school is a bilingual one or not.

Compulsory education does not start in Spain until the age of 6. Early years education is, therefore, optional. The first stage of early years, from 0-3, is both optional and private whilst the second stage, from 4-6, is optional but free, as the state provides it. Hence, for the first stage, there is very little specified about what children have to achieve, it is not until the second stage that we find some specification in the national curriculum. The curriculum is very general and it leaves the decision making to the Educational Administration of each *Comunidad Autónoma* (self-governing regions) although it provides them with guidelines.

Regarding foreign languages and ICT, the early years curriculum specifies that each Administration should provide the students' approach to both subjects:

'Corresponde a las administraciones educativas fomentar una primera aproximación a la lengua extranjera en los aprendizajes del segundo ciclo de la Educación infantil, ... Asimismo, fomentarán una primera aproximación a la lectura y a la escritura, así como experiencias de iniciación temprana en ... en

las tecnologías de la información y la comunicación...’ (*Real Decreto 1630/2006, de 29 de diciembre:475*)

Moreover, as Jolly Phonics teaches students to read and write, even if it is in English, it does also fit in the Spanish early years curriculum when it refers to learning to read and write:

‘En el segundo ciclo de Educación infantil se pretende que niños y niñas descubran y exploren los usos de la lectura y la escritura, despertando y afianzando su interés por ellos.’ (*Real Decreto 1630/2006, de 29 de diciembre:480*)

As stated before, primary school is compulsory and the central government is in charge of writing the national curriculum. Nonetheless, from the Education Reform in 2006, more freedom has been given to the *Comunidades Autónomas* in the design of timetables and the choice of optional subjects:

‘Esta nueva configuración curricular supone un importante incremento en la autonomía de las Administraciones educativas y de los centros, que pueden decidir las opciones y vías en las que se especializan y fijar la oferta de asignaturas de los bloques de asignaturas específicas y de libre configuración autonómica...’ (*Real Decreto 126/2014, de 28 de febrero:169*)

It is specified that the central government will decide the compulsory subjects and the minimum amount of time per week for them whilst the *Comunidad Autónoma* will decide on the optional subjects, they will design the timetable and they can allow extra time to compulsory subjects if they wish to do so.

Among the primary school curriculum we can find the following general objectives:

- ‘Adquirir en, al menos, una lengua extranjera la competencia comunicativa básica que les permita expresar y comprender mensajes sencillos y desenvolverse en situaciones cotidianas.

- Iniciarse en la utilización, para el aprendizaje, de las Tecnologías de la Información y la Comunicación desarrollando un espíritu crítico ante los mensajes que reciben y elaboran

- Conocer, comprender y respetar las diferentes culturas y las diferencias entre las personas, la igualdad de derechos...’ (*Real Decreto 126/2014, de 28 de febrero:19354*)

Jolly Phonics ICT enhances the acquisition of these key objectives so it can be argued that the use of the method fits into the Spanish curriculum for any kind of school, bilingual or not.

As it has been mentioned above, the minimum time for the compulsory subjects is specified by the central government. Regarding this, it is observed that the main/compulsory subjects, which are: Natural Science, Social Science, Spanish language and literature, Mathematics, and first Foreign Language, have to represent, at least, the 50% of the timetable among them. This specification applies to every school in Spain whether they are bilingual or not. It can be observed that, each *Comunidad Autónoma* is responsible for the decision of making the school bilingual, as it is defined in the Primary National Curriculum:

‘Las Administraciones educativas podrán establecer que una parte de las asignaturas del currículo se impartan en lenguas extranjeras sin que ello suponga modificación de los aspectos básicos del currículo regulados en el presente real decreto.’ (*Real Decreto 126/2014, de 28 de febrero:19358*)

For this paper, only bilingual school teachers have been involved and only those with IWBs or DVD , CD-ROM or CD players have answered the questionnaire. Therefore, the results show the reality of only a small number of Spanish schools as, of the schools considered bilingual, not all of them have the necessary equipment for the use of Jolly Phonic’s software.

As only bilingual schools have been included in the research, a brief note on the evolution of the bilingual programmes is needed. The first bilingual programmes in Spanish state schools started in 1996 thanks to the agreement between the Spanish Ministry of Education and Culture (henceforth, MEC) and the British Council. This agreement was designed to extend bilingual education to early years, primary and secondary schools in different areas of the country. The agreement was renewed in 2013 and its main objective is the development of an English-Spanish bilingual education through a combined curriculum that involves students from the age of 3 to 16. (Dobson et al, 2006:11-14)

Adding to this agreement, several *Comunidades Autónomas* led by Madrid and Andalusia, have started a parallel bilingual programme in state and *concertado* (fee-paying) schools and a great economical investment has taken place. In Andalusia, in 2005, the Plan de Fomento del Plurilingüismo was

launched (the Plurilingualism Promotion Plan). The plan ultimate aim is to engender a radical shift from social monolingualism to multilingualism through education, under the European ethos that 'Europe will be multilingual or Europe will not be'. (Lorenzo et al, 2009:419) The main objective of the economic investment has been to provide the classrooms with the necessary ICT equipment and the teachers with the language and teaching training required to provide good results. This programme looks at the success of the initial Bilingual Educational Project (henceforth, BEP), launched by the MEC and the British council, for guidelines and recommendations.

In the initial BEP, the distribution of subjects was: 40% of the curriculum taught in English and the other 60% in Spanish. The subjects taught in English were those considered 'soft' subjects, that is; humanities and social studies, and the 'higher status' languages are taught in the main language, Spanish in this case. (Abello-Contesse et al, 2013:183). Nevertheless, in the bilingual programmes developed later by the *Comunidades Autónomas*, this changed and we observe schools that teach Science and Maths in English. It is worth mentioning that schools in this later programme differ in the implementation of the use of English in the classes. The percentage of lessons in English and the subjects taught in each school varies greatly from one *Comunidad Autónoma* to the other and even within the same *Comunidad Autónoma*.

Having said this, it is reasonable to state that the amount of time allocated for English literacy, and the integration of Jolly Phonics ICT in each school vary. Moreover, the general idea of the use of Jolly Phonics ICT in the lessons comes from the questionnaires and does not represent but the reality of the schools involved in the research. Other schools might or might not follow the same methodology.

3.1.2.1. Participants

Out of the twelve schools that have completed the questionnaires:

Six are bilingual state schools found in Albacete, Madrid, Zaragoza, Guadalajara, Sanlúcar de Barrameda and Jerez de la Frontera, where IWB can be found in some classrooms but not in others. The school in Sanlúcar de Barrameda does not have any IWBs or the CD-ROM for the computers therefore the only digital resource they use are the CD with the songs. The

school in Zaragoza has an IWB in the classroom but not the software. They look at Jolly Phonics videos on the Internet on the IWB, they watch stories and do the activities too. They do not have the CD-ROM either. The other four schools have IWB and the Jolly Phonics software for the IWB which they use on a daily basis. They do not use the CD-ROM but they use the CD for the songs.

One is an independent school in El Puerto de Santa María, where IWBs are not found until Key Stage 2 and therefore, the only digital resources used by the teacher who took part in the questionnaire were the songs. Other paper based resources were used such as the story book.

Another school is in Oviedo, it is a BEP state school which uses the software for IWB and has access to computers with the CD-ROM of the method.

The final four schools are bilingual *concertado* ones in Jerez, Sanlucar de Barrameda and Burgos. Out of these four schools, the one in Jerez de la Frontera and the one in Burgos have the software for the IWB and the CDs but not the CD-ROM and both schools in Sanlucar de Barrameda have the CDs with the songs but no IWB or CD-ROM.

3.2. Teacher training

Due to the combination of notions both of ICT and the method Jolly Phonics, teachers have to acquire training to develop both sets of skills. Therefore, the training teachers obtain is going to be divided into two, according to the skills they are training to acquire. Adding to this, it has to be considered when teachers are getting that training; if they get it during their teacher training courses or if they access to it during the course of their careers.

ICT training is broader than Jolly Phonics. When the matter of ICT training is addressed, it is importance to point out that every teacher training course in Spain and England nowadays, regardless of the subject they are training to teach, includes the use and integration of ICT for teaching and learning as a central part of their curriculum. Adding to this, because governments from both countries have invested such a great amount of money in equipment and software, it is expected that teachers have the knowledge and skills to employ the tools provided in order to improve their lessons. Teacher training and continued, on-going relevant professional development are essential if benefits from investments in ICTs are to be maximized.(InfoDev, 2015) Consequently, if teachers do not have the opportunity to access the right training during their teacher training course, they have to access it later on during their career.

In regards of the issue of when teachers obtain their training, InfoDev (2015) distinguishes three phases of successive on-going training and preparation:

"1. Pre-service, focusing on initial preparation on pedagogy, subject mastery, management skills and use of various teaching tools (including ICTs).

It serves 3 main purposes:

- preparing teachers to use ICTs in pedagogically effective ways with respect to standards or competencies;
- preparing teachers to teach ICT-related content;
- applying ICTs to serve teacher education.

2. In-service, including face-to-face and distance learning opportunities building upon pre-service formal (accredited) training and directly relevant to teacher needs; and

3. On-going formal and informal pedagogical and technical support, enabled by ICTs, for teachers, targeting daily needs and challenges."

The first kind of training refers to the training future teachers receive at college/university. Both in England and in Spain, the subject of ICT, as an integral part of teaching and learning, is key. Planning, delivering and assessing a lesson cannot be conceived without the integration of ICT at some stage or the other. These training courses highlight the idea that the role of the teacher has to fall into the background, it is changing to give students the main role and this is achieved thanks to the use of ICT. Technologies are enabling teachers to move from a 'teacher-centered' classroom environment to a 'pupil-centered' one.

Moreover within teacher training, Du toit (2015:9) states that there are several methods used to incorporate ICTs including:

- Stand-alone technology courses;
- Resource-based learning including workshops;
- Infusion of technology into methods and foundation courses;
- Application during field experience including mentoring;
- A combination of the above. (Davis, 1995)

However, as technology suffers changes in very little time, a one-off training is not sufficient and future teachers would need 'on-going' exposure to ICT in order to become aware of the resources available and the possibilities offered to them. One important matter is the knowledge of the range of resources available and the access to this range is sometimes time consuming or difficult to find. To deal with this difficulty, quality 'on-going' training is crucial.

The second kind of training is the one that teachers can obtain when they are already applying their teaching skills in the classroom environment. This kind of training is normally organized by the authorities or the schools and it can be a whole school training session or one which focuses in a specific subject matter. That is to say, a training where every teacher benefits because it addresses the issue of introducing ICT in their teaching and learning strategies. It could also be a training session where the focal point is the implementation, specific resources, strategies, etc. of ICT in one specific subject as it could be, for example, science. After the great investment that governments have made in school ICT equipment during the last few years, many teachers had to undertake this kind of training to learn how to include them in their teaching and

learning and to obtain the necessary skills to use the new hardware and software.

The most important of the trainings is the 'on-going' one and when it comes to this kind of training, it is the responsibility of both the authorities and the individual to keep updated. Although it is true that the authorities have the duty to provide the training for teachers to be able to use and implement the new technologies in their lessons, it is also true that each individual needs to invest some time and energy in the research of resources or in the attainment of new skills. The best way to get the resources, information or skills needed, are teachers sharing their good practice. Thanks to many websites and blogs (Lopez Fernandez, 2009:6-7) teachers have access to materials and accounts from other teachers where they explain what worked for them and how to use it and put into practice it in the lessons.

The teachers that took part in this research had to top up their wide knowledge of ICT with the knowledge of the method of Jolly Phonics. This method requires a very specific training in order to make the most of it.

In contrast with the need of an 'on-going' training for ICT, to carry out successfully the method Jolly Phonics a 'one-off' training is sufficient. According to the Jolly Learning website, there are three ways to obtain the necessary skills to teach reading and writing using Jolly Phonics:

1. Online Jolly Phonics training course.
2. Courses available around the world.
3. Whole-school training with a Professional Trainer.

After one of these training sessions, teachers are fully qualified to apply the method in their lessons. As it has been pointed out before, the method itself does not require any ICT so this training would not include the use of the software, the DVD or the songs. In order to obtain the relevant skills linked to these specific technologies, teachers have to go through the manual to learn to use them. Teachers would have to explore these applications beforehand if they want to apply them in their lessons. They would have to listen to the songs in order to get familiarized with the lyrics and the rhythm, they would have to watch the DVD so as to know what it offers and they would have to read the manual for the IWB software and try out the different activities that can be done on it. The IWB software is self explanatory and does not require any additional

training apart from the general one of the method itself. It includes the lesson plans for each sound and it is divided accordingly.

Thus, teachers who want to make use of the Jolly Phonics ICT resources need the specific Jolly Phonics method training, the skills to use the ICT related to it, especially the IWB and some general ICT knowledge.

3.2.1. Participants

The teachers who took part in the research range from newly qualified teachers to teachers who have been teaching for many years and some who have been using the Jolly Phonics' ICT resources for years. They have obtained the necessary ICT skills differently; some at college/university, others at school or in specially designed courses, etc. Still, all of them have obtained the Jolly Phonics method skills through a specialized Jolly Phonics trainer, helped by colleagues or individually by reading the Teacher's book for the method. It is of great importance that the method is used exactly in the same way worldwide so that children moving from one school to another do not suffer the change and can continue their learning without any disruption.

Out of the four teachers taking part in the research from Britain, three have attended a specific Jolly Phonics workshop and one of them had no training at all in the method but learned through reading the Teacher's book. Their knowledge of ICT is not specified.

Out of the twenty teachers taking part in the research from Spain, two did their Jolly Phonics training with some colleagues at school, three did no training at all but learned thanks to the instructions in the Teacher's book and fifteen did a workshop for the use of Jolly Phonics method and its related ICTs. Their ICT training is not stated in most cases or they affirm not having received any therefore it is believed that they obtained the required skills at University or individually by using the resources, asking colleagues for advice or doing research by themselves. Only one of the teachers stated that they had received some ICT training outside their teacher training University course.

3.3. Analysis based on the background information

When exploring the similarities and differences in the use of Jolly Phonics ICT in both countries five main points have been analysed from theory, before analysing the questionnaires:

1. the age group the ICT is used with.
2. how the ICT is introduced in the lessons.
3. the resources or devices used.
4. the training teachers had to do.
5. the songs, stories and IWB software activities.

3.3.1. Similarities

Due to the fact that the method of Jolly Phonics itself is the same worldwide and that their creators have put much emphasis on maintaining certain standards and consistency, most of the similarities are going to be observed in relation to this very fact.

1. The age group the ICT is used with.

The theoretical research has implied the scrutiny of numerous case studies and from there it can be stated that the nature of the method, which is, having been created for young learners in order to teach them to read and write, has understood that the ICT of the method, the images, songs, characters, and activities, were created with young children, aged from 4-6, in mind. Thus, in both countries, Jolly Phonics ICT is aimed at the same age group.

2. How the ICT is introduced in the lessons.

To analyse how the ICT is introduced in the lessons, the national curriculum from both countries have been taken into account. In the national curriculums, both the use of ICT and the introduction of literacy were studied. In the case of Spain, the fact that English is taught as a foreign language has been considered together with the literacy time allocated for Spanish language. In consonance with the curriculums, the introduction of the ICT for the method Jolly Phonics in the lessons is similar in both countries as the programme follows very well structured lessons.

The lessons follow a pattern where there is a presentation of the sound with a story where different characters take part, there is the practice of the sound and the movement that goes with the sound, following that, children listen to the song, repeat the sound, sing the song with the stress on the sound and the movement and finally, students carry out different activities in the IWB and on paper. This pattern has been analysed and studied thanks to the common features of the method internationally.

3. The resources or devices used.

To draw the information necessary for the analysis of this point, the emphasis has been put into the answers teachers gave in the questionnaire and it will be analysed in the results. Nonetheless, the teachers that took part in the questionnaire were the ones who use the Jolly Phonics ICT, so this does not represent the reality of the country but only of the few schools that answered the questionnaire and who had the necessary devices in their classrooms.

The ICT used for the method Jolly Phonics required basic devices; an IWB, computer, a DVD player and a CD player. Despite the country where the method is being used, the resources and devices necessary are always the same.

4. The training teachers had to do.

In order to explore the similarities and differences regarding training, this paper has focussed in the answers given to the questionnaire as the findings from the research were too general.

According to the different studies explored, the training related to the method of Jolly Phonics is the same worldwide. Also, the ICT devices and resources are similar across the world, therefore the ICT training should be the same as the software and hardware used are identical.

5. The songs, stories and IWB/CD-ROM software activities.

The method of Jolly Phonics does not change if we use it for non native speakers of English. The songs, the characters, the actions, the stories, the paper based activities or the interactive ones are the same for every child. This uniformity across languages, countries and cultures can be observed thanks to

the analysis of the numerous case studies of the effect of Jolly Phonics that have been carried out around the world. (Jolly Learning website, Case Studies)

3.3.2. Differences

As it has been seen before, there has been a great stress on maintaining the consistency of the method worldwide. Even so, the fact that English is the mother tongue for most students in England and that the cultural aspects introduced in the Jolly Phonics songs, stories and characters are British, create differences between the countries.

1. The age group the ICT is used with.

In regards to the age group, it has been observed how the method, its songs, characters, stories and so on, were created for young learners. However, it has to be mentioned how Spanish speakers of all ages benefit from Jolly Phonics to improve their pronunciation. Although the method is used in England and Spain to teach young children to read and write, there is a further use in Spain that involves learners of English as a foreign language of all ages, which is, the teaching and learning of the correct pronunciation of the sounds of the English language.

2. How the ICT is introduced in the lessons.

In the inclusion of the Jolly Phonics in the classroom, it has been examined how the pattern of the method and its organization favours the similarities in the inclusion in both countries. However, where the National Curriculum for England has to allocate time for English literacy only, the Spanish National curriculum has to divide that literacy time between English and Spanish. As a result, although in both countries the method and ICTs are used with the same structure in the lessons, in England Jolly Phonics ICTs are used more often than in Spain. It has to be taken into account that in Spain, children will use the Jolly Phonics method in their English lessons exclusively whilst during their Spanish literacy lesson they will use another one. Nevertheless, the reading and writing skills from both languages are transferable (Cummins, 2005:587-588) and it is possible that children in Spain

end up benefitting from more literacy time, with the advantage of learning an additional language.

3. The resources or devices used.

The similarities in the ICT resources and devices are evident for Jolly Phonics. Still, the investment from the government from both countries differs and both the quality and quantity of the devices available for both countries have to be taken into consideration. Whilst almost every school in England have had the necessary devices (IWB, DVD and CD players and computers) and the resources (software, DVDs, CD-ROM and CDs), a much reduced number of schools in Spain have the equipment and the resources needed nowadays. Adding to this, the quality of the equipment in both countries differs too as the budget for education from the ministries from both countries have been poles apart, the digital divide (Sciadas, 2002) and its influence in education is evident, and must not be forgotten when contrasting the use of Jolly Phonics ICT in both countries.

4. The training teachers had to do.

In spite of the fact that both the ICT and the Jolly Phonics training are the same and the outcome of the training should be the same, the investment from the government of both countries in teaching differs. This investment differs from the very beginning, that is, the training students get in the teaching training courses, to the very end; the on-going courses where teachers get updated brand new instruction.

5. The songs, stories and IWB/CD-ROM software activities.

The fact that in Spain children learn English as a foreign language and that their exposure to the language is reduced to the school environment, (Lorenzo et al, 2009:419) create problems to these children when it comes to understand some of the aspects of the methods. The song lyrics might be difficult for them, the same as the stories, as they might not have the essential vocabulary in order to follow them. Adding to this, some of the interactive activities consist on matching sounds with the words that contain that sound.

The problem arises when the words that contain that sound are unknown to the students.

Taking these possible problems into consideration, we may speculate that teachers in the Spanish schools will have to teach the lessons where Jolly Phonics ICT are used in a different way than teachers in English speaking countries, so as to overcome these language and culture barriers above mentioned.

4. Results

After comparing the answers from all the teachers that answered the questionnaire and contrasting that information with the knowledge acquired in the theoretical research, the similarities, differences, advantages and disadvantages of using the Jolly Phonics ICT in England and Spain have been drawn.

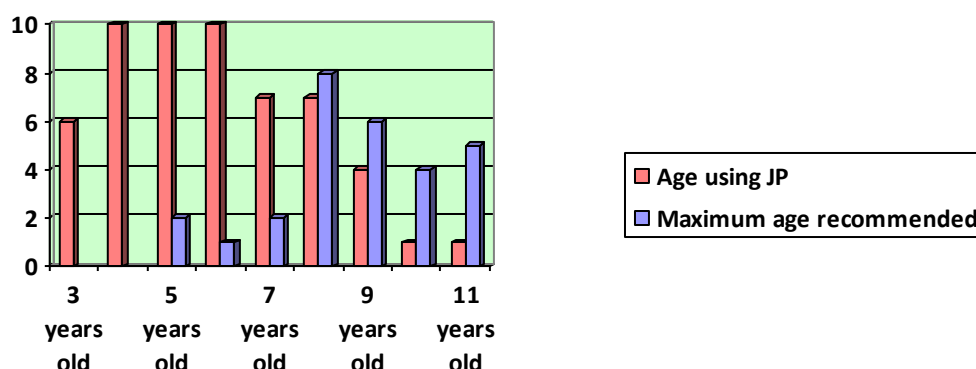
4.1. Differences and Similarities between countries

1. The age group the ICT is used with.

In England, all the schools taking part in the research state that they start using the method in early years with children aged 4. They consider the method to be adequate up to Year 3/4, that is to say, up to when children are 8/9 years of age. It has to be taken into consideration that the resources of the method are used every day, as they do literacy every single day of the week. Consequently, students will cover all the sounds and tricky words and they will have done all the activities, both digital and paper based, in the first couple of years of using the method. Nevertheless, the method could be used up to the age of 8/9 with weak students that need extra practice or work.

In Spain things are slightly different. We can observe from some questionnaires that teachers start using the songs and the IWB software when students are as young as 3 years of age and some of them continue using it up until the last year of primary school, that is, when students are 11 years old. In fig. 1 it can be observed the different answers teachers gave of the age they are using the method and resources with and up until the age they consider it appropriate:

Fig. 1 Age group with which Jolly Phonics is used and Age until which it is appropriate.



From fig. 1 it can be seen that in Spain, the method and its resources are used earlier and they continue to be used until children are older. Nonetheless, most teachers use it similarly to England, that is, when children are between 4 and 7 years old. Adding to this, the maximum age recommended for its use is also similar in both countries; most teachers believe that the method is useful up to the age of 8/9. The characteristics of the interactive activities and the songs can be the cause for this as they are designed for young children and therefore, although the method itself is useful for older children, the resources might be childish for children aged 10 or over.

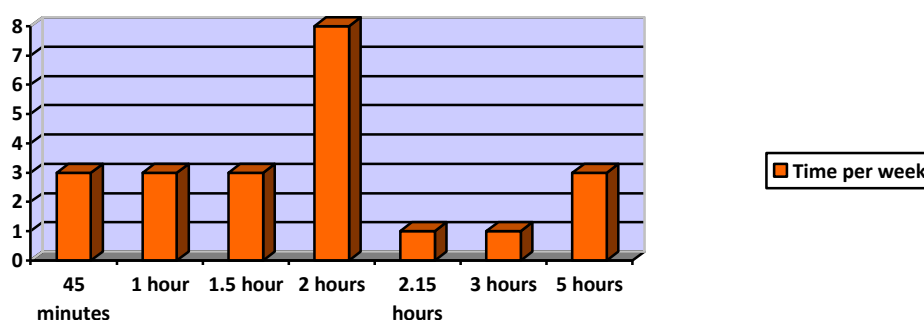
2. How the ICT is introduced in the lessons.

In England literacy is taught every day of the week, as a result the ICT in relation to the method is used every day for the first part of the lesson. All three schools that took part in the research have IWB in the classrooms and one interactive resource or another. All three schools had the IWB software and they used it every day for the introduction of the new sound with the story, the songs and the interactive activities. This took them between 10-15 minutes. In early years in the school in Wolverhampton they did not use the IWB software but used the story book and the songs to revise and introduce new sounds. Apart from the IWB software and the CD with the songs, the school in Wolverhampton used the CD-ROM with some or all of the children. In early years, the CD-ROM activities were used twice a week, not all the class at once but different children

at the time. In Year 1 the CD-ROM was used with weak students to reinforce the letters and sounds and provide extra practice.

In Spain, as it has been seen before, English literacy lessons have to share time in the curriculum with Spanish literacy lessons. The time spent in English lessons varies from school to school. Also, in English lessons not only literacy is taught; vocabulary, grammar, listening and speaking is also covered. Fig. 2 below shows the amount of time teachers do English per week:

Fig. 2 Time spent teaching English per week.



The amount of time varies in the same way it does in England; in early years less time is allotted whilst in year 3/4 of primary more time is invest in the subject. Even so, in Spain, the use of ICT and the method is similar as in England, what differs are the activities that follow the use of ICT. In Spain, as in England, the first 10-15 minutes of the lesson are employed in the revision of the sounds and the introduction of new sounds with the IWB or the songs, flashcard and the story book. After the phonics practice, in Spain, teachers move on to teaching other matters of the subject such as vocabulary, speaking, etc.

3. The resources or devices used.

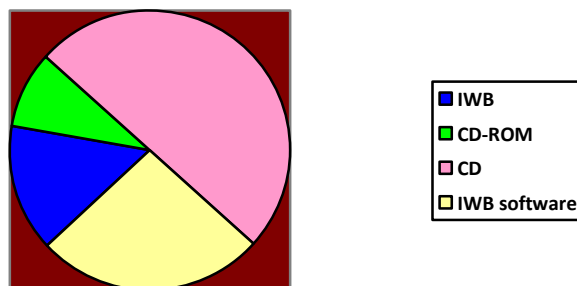
In England more access to IWB and computers is guaranteed in each classroom. On top of that, more schools invested in the Jolly Phonics resources having both the IWB software and the CD-ROM in almost every school.

From the schools that completed the questionnaire, all of them had the IWB software and used them in every session with the exception of the early years group in Wolverhampton which, even though they had the IWB and the

software, they did not use it preferring the songs and story book instead. The IWB software includes the story which can be found in the story book and the songs which are in the CD. This means that every teacher used the songs and watched and listened to the stories in one way or another, that is, via the IWB or the teacher with the storybook and the CD. The CD-ROM was used only by one of the three schools and it was pointed out by the teacher in the Isle of Wright school that, even though the interactive activities in the CD-ROM are very useful, some schools do not have the necessary technology to use the CD-ROM. This teacher was a supply teacher, which means that he/she has worked in many different schools and acknowledges the fact that not every school has access to computers in order to use the CD-ROM. The schools in Wolverhampton and Milton Keynes did have access to some computers in the classroom and they could also use the ICT room, however, only the school in Wolverhampton used the CD-ROM. When there is no lack of access to technology, the use of the resources, or absence of use in this case, could be due to lack of time, lack of the necessary staff or personal choice. The individual teacher might believe that the activities are not relevant or less relevant than other activities. Adding to that, because the use of the CD-ROM is individual, the teacher would require a teaching assistant to support him/her in the development and assessment of the activities carried out individually on the computer using the CD-ROM.

Moving on to the Spanish sphere, fig. 3 shows the resources used by teachers in Spanish schools:

Fig. 3 Resources used by teachers in the lessons.



From this, it can be affirmed that the most used resource is the CD with the songs followed by the IWB software. There are some teachers who have access to an IWB but they lack the software for the method. In that case, teachers use the IWB combined with Internet access and they watch videos and do activities related to the Jolly Phonics method but not the ones found in the software. Finally, the CD-ROM is the least used resource as it requires an individual computer per student or per pair of students. It is difficult to have access to this type of resources and even when there is the possibility of going to the ICT room and use the computers there, the time it takes to perform such a task would prevent students from doing many other activities.

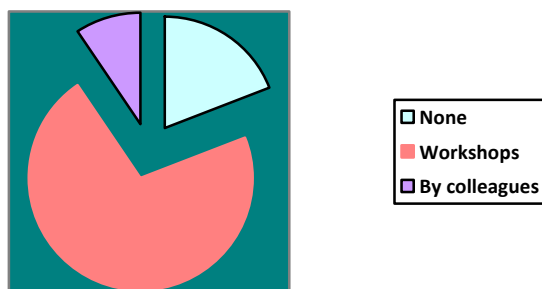
4. The training teachers had to do.

Every teacher was asked what kind of ICT training and Jolly Phonics training they had received. From both countries, only one teacher from Oviedo, in Spain, stated that she had received some specific ICT training. All the other teachers answered to the question about Jolly Phonics but did not specify if they had attended any ICT course or training. From this, it can be understood that all these teachers had received some training during their University course or that they had learnt by using it. Many of these teachers have experienced the rapid changes in both the hardware and the software used at school and this could mean that, if they had not received any training after their University course, they must have learnt to use the resources and the software individually by asking colleagues, reading the programmes' guidelines and teachers' notes or simply by trial and error.

In regards of the training related to Jolly Phonics, three out of the four teachers in England had attended some training workshops to learn to use the method and the supply teacher from the Isle of Wight stated that he/she had receive no training at all. It could be said that the reason why this teacher had not received any training was because he/she was a supply teacher and he/she was not teaching at a school during the time when the permanent staff of that school was invited to attend the relevant training workshops to learn to use the method.

In Spain, due to the fact that the number of teachers taking part in the research was greater, the results are more varied.

Fig. 4 Jolly Phonics training teachers did.



As it is the case of England, most teachers obtained their Jolly Phonics training attending workshops. Three out of the twenty teachers in Spanish schools affirmed not having received any training related to the method and consequently, it can be said that, as it is the case of teachers in England, these teachers must have obtained the necessary skills by reading the corresponding guidelines and teachers' notes or by trial and error. Two teachers affirmed having asked colleagues for help and it could be the case that teachers who are familiar with the method organise some informal training with other colleagues so as to help them familiarise with it when have not had the opportunity of doing so via a workshop.

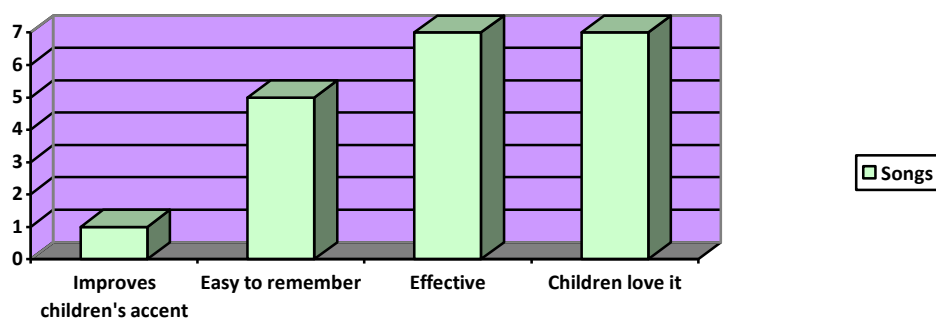
5. The songs, stories and IWB/CD-ROM software activities.

Every teacher that took part in the research from England used the CD with the songs in every lesson. They affirmed that they were very useful as they helped children remember the sounds. The songs are combined with a gesture and these two together work extremely well when reinforcing the memorisation of the sound. If children have any problem identifying a letter, the gesture or a brief fragment of the song is repeated to help them remember.

In the case of Spain, although every teacher uses the songs, not everyone has the same opinion about the usefulness of the resource. Out of the 20 teachers who took part in the research, one did not approve of the songs as he/she thought that they are too complicated for Spanish children of the age of 3 to 7. Adding to this individual teacher, another individual teacher stated that he/she used other songs from the Internet as he/she thought that the Jolly Phonics songs were not lively enough or had not simple enough lyrics.

The other teachers gave different positive reviews of the songs as it can be seen in fig. 5:

Fig. 5 Teachers' opinions about songs.



Interestingly, only one teacher mentioned the usefulness of the songs when it comes to improving children's pronunciation. Most teachers liked the songs because they were very effective for learning the sound and motivating due to the fact that children enjoy them very much.

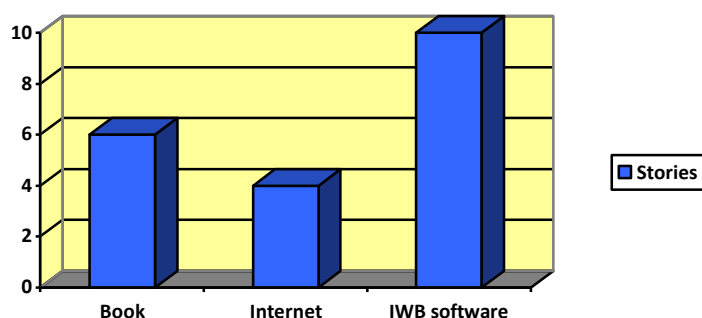
The stories are an important part of the presentation of a sound and children may have access to that story through the story book, that is, through paper based material, or through the IWB in two ways, that is, with the IWB software or connecting to the Internet and viewing it online.

Out of the four teachers from England, three used the IWB software to do the presentation of the sound through the story whilst one preferred the book even though he/she had access to the IWB software. A reason for doing so might be the fact that using the story book allows the teacher greater interaction with the children and can expand the story to involve children more by asking direct questions. It can be stated, therefore, that the decision about what resource to use in regard of the story is a personal one.

In Spain, since not every teacher had access to the digital resources, the story book is used more often. Adding to that, when teachers have the IWB in the classroom, it has been the case that some of them lack the related software and so they have accessed the story by connecting to the Internet and viewing it online. From fig. 6 below it can be observed how teachers have access to the story. Six teachers present the sound using a story book as they lack the

necessary digital equipment to present it otherwise. The other teachers have access to IWB but out of the fourteen teachers, ten have the Jolly Phonics IWB software and the other four access the story via the Internet.

Fig. 6 How teachers access the Jolly Phonics stories.



Finally, the IWB/CD-ROM activities are a very used resource in England where teachers use one kind or another of these digital resources. Out of the four teachers, three use the IWB activities and express positive reviews about them stating that they are ‘interactive, instant and engaging’. The CD-ROM activities are used in the school in Wolverhampton but not in the school in Milton Keynes and the school in the Isle of Wight uses them when the teacher has access to the necessary equipment, that is, computers, which not every classroom have. When it comes to using the CD-ROM activities, lack of personnel, time and/ or resources seems to be the obstacles that impede introducing them in the session, not the quality or effectiveness of the activities themselves.

The Spanish teachers have more difficulties accessing this type of resources. Out of the twenty teachers taking part, six have no access to either IWB software with the activities or the CD-ROM and so their practice of the method was via paper-based materials or kinaesthetically. From the teachers who have access to IWB or CD-ROM activities, only four have access or used the CD-ROM and the teacher from the school in Oviedo stated that he/she preferred the activities in the CD-ROM rather than the ones in the IWB as he/she found them ‘more attractive and motivating’. The opinions from the teachers using the IWB were all positive and they categorised these activities

as 'very effective' (five teachers) and well designed for children as 'children loved them' (four teachers).

4.2. Advantages and drawbacks for each of the countries

The use of the ICT related to the method Jolly Phonics seems to have far more advantages than disadvantages for both countries. From what it has been gathered from the questionnaires and the background information, the digital resources are excellently designed for the children they are aimed at and the response from those children is very positive both in England and in Spain. It seems clear that children respond similarly to digital activities independently of their country of origin or the language the resource is in.

One of the drawbacks of the digital resources is, ironically, linked to its successful design. Since the digital resources are aimed at young children (4-7 years old), once children reach the age of 8/9, the resource lacks relevance or attractiveness. Interestingly, here again, the language is neither a help nor a barrier as this happens in both countries similarly.

Another drawback is related not to the method itself but the digital form it adopts. The need of these resources of the required equipment means that schools with little financial budget will have no access to them. Equally, the use of the CD-ROM implies a certain number of computers as well as teaching personnel to guarantee the successful use of the resource. For that reason, Spanish schools stand in a disadvantage situation as many schools still lack the necessary equipment and very few schools have teaching assistants to help in the classrooms.

5. Conclusion

The use of the digital resources that Jolly Phonics' method provide is similar in England and Spain since the resources are designed bearing in mind the age of the children and the way they learn at that specific age. Moreover, the digital songs, stories and activities have graphics and language which adapts to every child between the age of 4 and 7 regardless of what their mother tongue is. The digital resources take into account children's age and learning habits at a specific age, which is why they are successful in an English speaking country as England is and a non-English speaking country as Spain is.

Yet, it has been observed that teachers in Spain start using the method earlier (at the age of 3) and might continue using it until later (up to the age of 11). This is due mainly to the fact that Spanish schools have to share their literacy time between English and Spanish and therefore Jolly Phonics and its related resources are used less time each session having to share the lesson time with other aspects of language learning. Thus, teachers might use the resources for longer to cover all the topics, to do all the activities which in England, contrastively; they would have done quicker as they spend more time per week using these resources.

Besides, the access to the hardware needed in order to develop the digital resources is an important aspect to take into account. Schools in England have wider access to hardware, IWB and especially computers, whilst in Spain, this is still an issue and an investment in this matter is being carried out at this very moment. Having said that, in equal conditions regarding the access to the hardware, the use of the software would be similar in both countries.

Finally, it would be interesting to research the different outcomes the method has in both set of children. Here, the matter of language and culture in relation to the method and the digital resources would have to be observed in order to figure out any possible benefits or disadvantage for the children. It could be speculated that children from non-English speaking country would encounter the difficulty of the language when listening to the stories, the songs or when doing the activities where they would identify the sounds but they would not know the meaning of the words, whilst English speaking children would. On the other hand, children in non-English speaking countries would

expand their knowledge of the language through the stories, songs and activities benefiting doubly. Moreover, they would have access to many cultural aspects such as the nursery rhymes which the Jolly Phonics' songs come from and the digital activities which feature words typical from the culture of English speaking countries.

6. Works cited

- Abello-Contesse, C., Chandler, P.M., López-Jiménez, M.D. and Chacón-Beltrán, R. (2013). *Bilingual and Multilingual Education in the 21st Century: Building on Experience*. Bilingual Education and Bilingualism, vol. 94. Bristol: Multilingual Matters.
- BOE número 4 (2006) *REAL DECRETO 1630/2006, de 29 de diciembre, por el que se establecen las enseñanzas mínimas del segundo ciclo de Educación infantil*.
- BOE número 52 (2014). *Real Decreto 126/2014, de 28 de febrero, por el que se establece el currículo básico de la Educación Primaria*.
- Cummins, J. (2005). A proposal for action: Strategies for recognizing heritage language competence as a learning resource within the mainstream classroom. *The Modern Language Journal*, 89, 585-592. Retrieved from <http://onlinelibrary.wiley.com.ezproxy.uned.es/doi/10.1111/j.1540-4781.2005.00331.x/epdf>
- Davis, N. (1995). International Encyclopedia of Education 3rd ed, ed. by Penelope Peterson, Eva Baker, and Barry McGaw. Elsevier. In Du Toit, J. (2015) *Teacher Training and Usage of ICT in Education: New directions for the UIS global data collection in the post-2015 context*. Montreal: UNESCO Institute for Statistics.
- Department of Education (2010). *The importance of teaching: The Schools White Paper*. London: DfE.
- Department of Education. (2013) *National Curriculum in England: Computing Programmes of Study*. London: DfE
- Department for Education and Skills (DfES) (2006) *Primary National Strategy: Primary framework for literacy and mathematics*. Norwich: OPSI
- Dobson, A., Perez Murillo, M.D. and Johnston, R. (2006). *Bilingual Education Project Spain: Evaluation Report: Findings of the independent evaluation of the Bilingual Education Project of the Ministry of Education (Spain) and the British Council*. Madrid: Ministry of Education (Spain) and British Council.
- Du Toit, J. (2015) *Teacher Training and Usage of ICT in Education: New directions for the UIS global data collection in the post-2015 context*. Montreal: UNESCO Institute for Statistics.

- EURYDICE. (2001). *Information and Communication Technology in European Education Systems*. Retrieved 14 December, 2015, from <http://eoi.es/valores2/055ES.pdf>.
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
- Infodev. (2015). "Teachers, Teaching and ICTs". Retrieved 21 December, 2015, from <http://www.infodev.org/articles/teachersteaching-and-icts>.
- Johnston, R. S., & Watson, J. (2005). *The effects of synthetic phonics teaching on reading and spelling attainment, a seven year longitudinal study*. Edinburgh, Scotland: Scottish Executive Education Department. Retrieved 1 December, 2015, from <http://www.scotland.gov.uk/library5/education/sptrs-00.asp>.
- Jolly Learning. Jolly Phonics and Grammar Training Courses. Available from <http://jollylearning.co.uk/training-courses/>
- Ley Orgánica 2/2006 de 3 de mayo, de Educación (LOE)
 - El Real Decreto 1513/2006, para Educación Primaria.
 - El Real Decreto 1631/2006, para Educación Secundaria
- Livingstone, S. (2012). Critical reflections on the benefits of ICT in education. *Oxford Review of Education*, 38:1, 9-24.
- López Fernández, Ricardo. Universidad de Salamanca. *Buenas prácticas en el uso de las TIC: fundamentaciones pedagógicas. Blogs educativos para alumnos, profesores y padres*. Fundación Wikisaber.
- Lorenzo, F., Casal, S. & Moore, P. (2009). The Effect of Content and Language Integrated Learning in European Education: Key Findings from the Andalusian Bilingual Sections Evaluation Project. *Applied Linguistics* 31.3, (July 2010), pp. 418-442. Available from <http://ejournals.ebsco.com.ezproxy.uned.es/direct.asp?ArticleID=4056A516793509A83E0F>
- McCarrick, K., & Li, X. (2007). Buried Treasure: The Impact of Computer Use on Young Children's Social, Cognitive, Language Development and Motivation. *AACE Journal*, 15, 73-95.
- Ministerio de Educación (2011). *Programa Integral de Aprendizaje de Lenguas Extranjeras*.
- OECD (2009). *Pisa 2009 Results: What Students Know and Can Do*. OECD.

- Org. Retrieved 3 December, 2015, from <http://www.oecd.org/pisa/pisaproducts/pisa2009keyfindings.htm>.
- OFSTED (2010). *Reading by six: how the best schools do it*. Manchester: The Office for Standards in Education, Children's Services and Skills.
 - Prensky, M. (2001). *Digital Natives, Digital Immigrants*. On the Horizon, October 2001, 9 (5). Lincoln: NCB University Press.
 - Romero, S. (2007). *Introducción temprana a las TIC: Estrategias para educar en un uso responsable en Educación Infantil y Primaria*. Madrid: Ministerio de Educación, Cultura y Deporte.
 - Rose, J. (2006). *Independent Review of the teaching of Early Reading*. Final Report, London: DfES.
 - Sciadas, G. (2002). The digital divide in Canada. *Canadian Economic Observer*, 15(11) Retrieved 15 December, 2015, from <http://search.proquest.com.ezproxy.uned.es/docview/217111753?accountid=14609>
 - Tinio, V. L. (2005). *ICT in Education*. Retrieved 1 December, 2015, from http://www.saigontre.com/FDFiles/ICT_in_Education.PDF
 - U.S. Department of Labor. (1999). Futurework: Trends and challenges for work in the 21st century. Washington, DC: Author. In En Gauge, 21st Century Skills for 21st Century Learners. *enGauge® 21st Century Skills: Helping Students Thrive in the Digital Age*. Retrieved 30 November, 2015, from http://www.cwasd.k12.wi.us/highschl/newsfile1062_1.pdf

7. Additional Bibliography and Webliography

- Agudo, J. Enrique; Sánchez, Héctor, Rico, Mercedes. Adaptive Learning for Very Young Learners. Adaptive Hypermedia and Adaptive Web-Based Systems, 2006. *Lecture Notes in Computer Science. Volume 4018*, pp. 393-397.
- BOJA Número 135. (2011). ORDEN de 28 de junio de 2011, por la que se regula la enseñanza bilingüe en los centros docentes de la Comunidad Autónoma de Andalucía.
- Consejería de Educación. (2013) *Guía Informativa para centros de enseñanza bilingüe*. (2nd ed.) Junta de Andalucía. Retrieved 21 December, 2015, from http://www.juntadeandalucia.es/export/drupaljda/Guia_informativa_centros_enseñanza_bilingue_.pdf.
- Department of Education. (2013) *English programmes of study: key stages 1 and 2 National curriculum in England*. London: DfE
- Department of Education. (2014) *Statutory Framework for the Early Years Foundation Stage: Setting the standards for learning, development and care for children from birth to five*. London: DfE
- Dryden, P. (2012). ICT/SEN/Early Years - log on to the future. *The Times Educational Supplement*, 4999, 42. Retrieved 23 December, 2015, from <http://search.proquest.com/docview/1034778876?accountid=14609>
- Fernández-Cueto Sosa, M. (2014). *Propuesta de Intervención para la adquisición del inglés a través del método Doman, TPR y Jolly PHonics en el aula de 4 años*. (Degree dissertation). Retrieved 21 December, 2015, from <http://reunir.unir.net/bitstream/handle/123456789/2510/fernandez.cueto.pdf?sequence=1>. UNIR.
- Jolly Learning. Case Studies. Available from <http://jollylearning.co.uk/2011/03/16/case-studies/>
- Jolly Learning. Research. Available from <http://jollylearning.co.uk/2011/03/24/research/>
- Junta de Castilla y León. Las TIC en Educación. Programa aprende. Retrieved 29 December, 2015 from <https://www.cyldigital.es/sites/default/files/library/manuallasticeneducacionprogramaaprende.pdf>

- Keengwe, J., & Onchwari, G. (2009). Technology and Early Childhood Education: A Technology Integration Professional Development Model for Practicing Teachers. *Early Childhood Education Journal*, 37, 209-218. Available from <http://dx.doi.org.ezproxy.uned.es/10.1007/s10643-009-0341-0>
- López Fernández, Ricardo. Universidad de Salamanca. “Buenas prácticas en el uso de las TIC: fundamentaciones pedagógicas. Blogs educativos para alumnos, profesores y padres”. Fundación Wikisaber.
- Marqués Graells, P. (2000, última revisión 2010). “Cambios en los centros educativos: construyendo la escuela del futuro”. Dept. Pedagogía Aplicada, Facultad de Educación. DIM-UAB.
- Nikolopoulou, K. (2010). *Methods for Investigating Young Children's Learning and Development with Information Technology*. In A. McDougall, J. Murnane, A. Jones, & N. Reynolds (Eds.), *Researching IT in Education: Theory, Practice and Future Directions* (pp. 183-191). London: Routledge.
- Synthetic Phonics Spain. Media Articles-U.K. Available from <http://coralgeorge.com/index.php/synthetic-phonics/synthetic-phonics-in-uk/media-articles>
- Synthetic Phonics Spain. Media Articles-Spain. Available from <http://coralgeorge.com/index.php/synthetic-phonics-in-spain/newspapers-articles>

8. Appendix

Jolly Phonics Questionnaire

Type of school: _____

Location: _____

1. What age group do you teach?
2. What Jolly Phonics and ICT training did you do?
3. What Jolly Phonics resources do you use?
4. How many hours of English literacy do you do per day/week?
5. How do you integrate Jolly Phonics in your lessons? In a normal lesson, how long do you do Jolly Phonics for? What resources each time?
6. How long do you spend in each sound? How long in blending? How helpful are songs and the smart board software for each of these matters?
7. How effective are the songs?
8. How effective are the activities on the smart board or the CD-ROM?
9. What is the most effective resource (digital or paper based)?
10. Do you think children respond well to Jolly Phonics in the smart board?
Why?
11. Up till what age would you say Jolly Phonics software and songs are appropriate?
12. Is there anything you would change about the songs, the software or the interactive activities?

Jolly Phonics Questionnaire

Type of school: Public mixed

Location: Wolverhampton

1. What age group do you teach?

5-6

2. What Jolly Phonics/ICT training did you do?

A workshop day for Jolly Phonics. Smartboard all school training.

3. What Jolly Phonics resources do you use?

Software for smartboard, flashcards, printables, CD Rom.

4. How many hours of English literacy do you do per day/week?

5 sessions of 45 minutes.

5. How do you integrate Jolly Phonics in your lessons? In a normal lesson, how long do you do Jolly Phonics for? What resources each time?

5 minutes revision of old sounds with flashcards.

10 minutes with the new sound with the smartboard.

5 minutes with extra resources blending.

15 minutes with printables practicing hand writing.

6. How long do you spend in each sound? How long in blending? How helpful are songs and the smart board software for each of these matters?

Depending on the sound. The first single sounds 1 day each plus revision the following days before inserting the new sounds.

In blending, 5 minutes each day.

Songs and smart board are very useful for sounds. Songs are not for blending but smartboard is although more practice is needed.

7. How effective are the songs?

Very effective, children love them with the actions.

8. How effective are the activities on the smart board or the CD-ROM?

Very effective. The smart board is very engaging and the CD-ROM is great for weak students to get extra practice.

9. What is the most effective resource (digital or paper based)?

Both.

10. Do you think children respond well to Jolly Phonics in the smart board?

Why?

Yes. It is very engaging, they love the stories and coming up the smartboard. They love singing together and repeating the sounds and actions.

11. Up till what age would you say Jolly Phonics software and songs are appropriate?

Up to year 3.

12. Is there anything you would change about the songs, the software or the interactive activities?

I would include more blending activities in the software.

Jolly Phonics Questionnaire

Type of school: C.P. B.E.P

Location: Oviedo (Asturias)

1. What age group do you teach? Infants 5
2. What Jolly Phonics/ICT training did you do? Several courses of both phonics and ICT.
3. What Jolly Phonics resources do you use? All of them: teacher's book, cards, freeze, Jolly Songs book and CD, CD Rom, posters, books ("Read and See" and red series, too).
4. How many hours of English literacy do you do per day/week? 8 sessions per week.
5. How do you integrate Jolly Phonics in your lessons? Depending on the days. We work on phonics on a daily basis and then, every now and then, we devote a whole session to reinforce and revise phonics through different games. In a normal lesson, how long do you do Jolly Phonics for? 10 minutes daily. What resources each time? Posters, freeze and songs CD every day. The rest of resources, depending on the day and week. The CD Rom only once a week, as we don't have any IWB in the Infants English room.
6. How long do you spend in each sound? Around 5 minutes in the presentation and some more every time we revisit them. How long in blending? Around 5 minutes every day and in those "special" sessions I mentioned above, we spend more time, around 20 minutes practicing blending through different games. How helpful are songs and the smart board software for each of these matters? The songs are very important for my kids, especially at the age of 3, but my 5 year-olds still do like them. The IWB software is really good and helpful, the games are motivating and attractive and kids love them. I prefer the CD Rom rather than the IWB software.

7. How effective are the songs? Very!!! They are really important to accompany gestures and to remember the sounds. Songs are memorable for kids, so they remember things better through them.

8. How effective are the activities on the smart board or the CD-ROM? We use the IWB software less, as we don't find it as motivating, active and attractive as the games on the CD Rom. We use the latter a lot.

9. What is the most effective resource (digital or paper based)? I think both are.

10. Do you think children respond well to Jolly Phonics in the smart board? Why? Mine do, at least. Because they can practice the sounds in a more interactive way with the characters, there's a great variety of activities to revise sounds, etc.

11. Up till what age would you say Jolly Phonics software and songs are appropriate? 5-6.

12. Is there anything you would change about the songs, the software or the interactive activities? I'd extend them, all of them, to cover other alternative spellings and letter-sounds combinations.

Jolly Phonics Questionnaire

Type of School: 'Concertado' bilingual

Location: Jerez de la Fra (Cádiz) Spain

1. What age group do you teach?

year 3 and 4. (8-9 years old)

2. What Jolly Phonics/ICT training did you do?

3. What Jolly Phonics resources do you use?

interactive white-board DVD, posters, Activity book, wordbox.

4. How many hours of English literacy do you do per day/week?

less than 5 hour/week

5. How do you integrate Jolly Phonics in your lessons? In a normal lesson, how long do you do Jolly Phonics for? What resources each time?

I started with Jolly Phonics. Reviewing some contexts for 10 min.
I Always use the interactive DVD, and I combine another resource each time.

6. How long do you spend in each sound? How long in blending? How helpful

are songs and the smart board software for each of these matters?

10 min per sound and I review it constantly, more for blending.
They are really helpful for the kids. it helps them to learn the new contexts.

7. How effective are the songs?

Really effective with the gestures. That's what makes them keep the contexts longer.

8. How effective are the activities on the smart board or the CD-ROM?

9. What is the most effective resource (digital or paper based)?

Digital. Those resources are more engaging for them. They are highly motivated with digital resources.

10. Do you think children respond well to Jolly Phonics in the smart board?

Why? Yes, because of what I answered above.

11. Up till what age would you say Jolly Phonics software and songs are appropriate?

10-11 year olds maybe. After that age they start to feel embarrassed towards their classmates.

12. Is there anything you would change about the songs, the software or the interactive activities?

not really. It's a good system, maybe there are too many exceptions (tricky words). Jolly Phonics rules can not be applied in many words. So the range of structures and vocabulary is very small. Once they start learning more difficult contexts, Jolly Phonics becomes obsolete.

Jolly Phonics Questionnaire

Type of School: state - bilingual

Location: Jerez de la Frontera

1. What age group do you teach? I teach students in Pre School (4-5 years) Primary (1st, 2nd, 3rd & 5th class)
2. What Jolly Phonics/ICT training did you do? I've done a Jolly Phonics Training Workshop
3. What Jolly Phonics resources do you use? Songs, flash cards
4. How many hours of English literacy do you do per day/week? In Pre School 1 lesson : 45 min 1st and 2nd: 2 times a week (2 x 45 min) 3rd and 5th class (3 x 45 min)
5. How do you integrate Jolly Phonics in your lessons? In a normal lesson, how long do you do Jolly Phonics for? What resources each time? 10 - 15 minutes each day. Flash cards with the letters and the gestures
6. How long do you spend in each sound? How long in blending? How helpful are songs and the smart board software for each of these matters? I spend some minutes.
7. How effective are the songs? The songs are great, students get the best accent
8. How effective are the activities on the smart board or the CD-ROM? Smart board is a very useful resource as the attention is
9. What is the most effective resource (digital or paper based)? From my experience digital, it is more visual
10. Do you think children respond well to Jolly Phonics in the smart board? Why? Yes, you can play the songs and they can see real people doing the gestures
11. Up till what age would you say Jolly Phonics software and songs are appropriate? Till 10 years old I find it appropriate
12. Is there anything you would change about the songs, the software or the interactive activities?