

The Interactive Whiteboard And Foreign Language Learning: A Case Study

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Received: 16 September 2009 / Accepted: 23 September 2010

ISSN: 1697-7467

ABSTRACT: In this paper, we intend to present some research carried out in a state Primary school, which is very well-equipped with ICT resources, including interactive whiteboards. The interactive whiteboard was used in the context of a Unit of Work for English learning, based on a traditional oral story, 'Jack and the Beanstalk'. It was also used for reinforcing other topics like, 'At the beach', 'In the city', 'Jobs', etc. An analysis of the use of the digital board, which includes observation records as well as questionnaires for teachers and pupils, was carried out.

Key words: interactive whiteboard, competences, story, observation, questionnaires.

La pizarra digital y el aprendizaje de una lengua extranjera: un estudio de casos

RESUMEN: En este artículo, intentamos presentar una investigación llevada a cabo en un colegio público de Primaria, bien equipado con recursos tecnológicos, incluyendo la pizarra digital. El uso de la pizarra digital se produjo en el contexto de una Unidad Didáctica para el aprendizaje del inglés, basada en un cuento de tradición oral: «Jack and the Beanstalk» y también se usó para reforzar otros tópicos como: «En la playa», «En la ciudad», «Trabajos», etc. Se llevó a cabo un estudio del uso de la pizarra digital a través de hojas de observación y cuestionarios para profesores y alumnos.

Palabras clave: pizarra digital, competencias, cuento, observación, cuestionarios.

1. INTERACTIVE WHITE BOARDS (IWBs) AND THE LEARNING EXPERIENCE 2.0

Information and communication technologies (ICT) are changing the way schools work. By offering a wide range of multimedia resources, which include text, still images, audio and video, the interactive whiteboard (IWB), combined with an Internet connection and videoconferencing facilities, offers us the possibility to let young learners engage in online virtual encounters, which promote both their intercultural communicative competences (Byram, 1997) and their plurilingual competences (Araújo e Sá, M. H. & Melo, S., 2004).

In this way, school is linked to the world around. In fact, the technologies make the contact with other cultures easier and by exploring the linguistic and cultural competence of these cultures, they help to overcome inhibitions.

Nowadays, globalization is a fact and with it there is an increasing mobility of people and, above all, a constant contact between languages and cultures. In European society, this is of

utmost interest, because as Cruz et al (2006) mention, the Council of Europe's goal has been the promotion of interpersonal and intercultural communication between the European peoples since the 90s.

This promotion is enhanced by technology. In this context, this technology allows access to new strategies, activities and materials which not only involve writing and reading, but also work as a sort of window which opens a new world to the pupils, and in which interactivity is the key word. This is the example of interactive whiteboards (IWB). Thanks to their technological capabilities, they can help to develop pupils' critical cultural awareness (Byram, 1997), including the development of digital portfolios.

According to Greiffenhagen (2002), IWBs are a technology which is relatively new to education, having been originally developed to satisfy needs identified in business settings. An average IWB can exchange information between the board and the computer, at the touch of the screen. Most IWBs have got pens and drag-and-drop facilities embedded in their own software, but there are actually some boards which may be controlled by a finger, enhancing the motivation of pupils during any lesson. In fact, in a specific study, Levy (2002) interviewed some children and came to the conclusion that these children liked lessons with IWBs better because they were quicker, more fun and more exciting.

In another investigation, Miller & Glover (2002) reported that even pupils' attitudes change. They start listening to each other, and they are more supportive and encouraging when a class member is at the board using the specific software. We could say that the flexibility and versatility of IWBs are the reason for this shift. Brainstorming activities end up being carried out in a very easy way. Class discussion and debate are therefore enhanced.

At the same time, Levy (2002) states that another key advantage is that there is less time spent on writing or drawing activities as these are already available from the IWB 'library' of pre-prepared materials. Therefore, pupils are able to concentrate on analyzing every move a teacher makes in demonstrating a particular exercise.

Another advantage that IWBs bring is the creation and use of digital portfolios. By using IWBs, portfolios can easily be recorded and shared with other pupils around the planet. In this way, everything that pupils do can be placed in a virtual platform or blog where others can interact with it, sharing and enhancing it. IWB portfolios can promote learning through problem solving and help develop pupils' self-reflection, critical thinking, and responsibility for learning, as well as content area skills and knowledge (Cruz & Cruz, 2006). They are based on the principles of collecting, selecting, and reflecting upon your own work. We could say that they are true living 'books' which can be read, changed, and criticized by anybody.

Moreover, IWB portfolios may provide pupils with chances to:

- a) demonstrate exemplary levels of communication,
- b) showcase outstanding examples of communication, and
- c) support communication for leadership and promote technological skill for digital communication needs.

IWBs are quite important in the modern foreign languages classroom, and they offer a new learning experience: we call it the 2.0 learning experience. As Thomas (2003) points out, the use of websites, CD-ROMs, games, Word documents or even PowerPoint slideshows in conjunction with highlighting, annotation and dragging-and-dropping activities, foster pupils' competences of (re)reading or (re)thinking knowledge. These future citizens will be much more active; and they will be trained to analyze, deconstruct and rebuild the society they form a part of, due to the flexibility and interactivity they have been trained with.

2. THE MAGIC IN IWBS: A CASE STUDY

This research was carried out in a second year Primary classroom at the Doctor Tolosa Latour School (Madrid), with the help of the teachers Gema S. Rodríguez Pino y Ana Zapata Anaya (a trainee teacher doing teaching practice). This school is very well equipped with resources related to ICT, especially IWBs.

The IWB was used in the context of a Unit of Work for English learning, based on a traditional oral story, 'Jack and the Beanstalk'. It was also used to reinforce other topics like 'At the beach', 'In the city', 'Jobs', etc.

We think that the combined use of Internet and the IWB provides a lot of didactic resources in the classroom. First of all, it is possible to have some games or tasks permanently available and so to fill any gap which arises in the lesson. Secondly, you can save time in the classroom and, although a lot of time is necessary to prepare the tasks, the balance is positive because the teacher can work on more tasks and pay more attention to different ones.

An analysis of the use of the digital board was carried out. It includes observation records as well as questionnaires for teachers and pupils. Through the observation results and the answers to the questionnaires, it is easy to see that there is a concordance between them. In this class, specifically, a link of unity between pupils and teacher and between some pupils and others was created.

There were twenty-four pupils in the class. Three of these were gypsy children who had basic learning problems and were behind with reading and writing even in their own language (Spanish). They were frequently absent from class and their level of English was considerably lower than that of most of the others.

There were just four pupils in the class who were not interested in the IWB. We think that this was due to the general difficulties they had to understand the teachers' instructions and their explanations in English as well as their classmates' comments. Because of their difficulties, these pupils presumably paid less attention and they tended to be lost.

2.1. Unit of Work

For the Unit of Work, based on the story 'Jack and the Beanstalk', the final aim was for the pupils to understand the story, participate in it and enjoy acting it out. (Appendix 1). Consequently the Final Task consisted of organizing groups of six pupils which would each act out the story. Each of the pupils played the role of one character. At the end of the Unit, the pupils, accompanied by their teachers, went to a public theatre where this same story was performed by professional actors and actresses. They paid attention to the performance and participated in it actively.

The individual objectives to be achieved in the Unit of Work were the following: 1) To develop non linguistic resources to make the comprehension of the story easier; 2) To broaden pupils' vocabulary with the new words which appear throughout the story (e.g. gold, giant, harp, beanstalk) and to expose them to certain grammar structures (e.g. to be doing something); 3) To develop the four basic skills: Listening, Speaking, Reading (with emphasis on pronunciation and intonation) and Writing; 4) To familiarize the pupils with oral traditional stories; 5) To help them to learn the elements of a story, i.e., beginning, middle and end, and the main characters, events, setting, etc. of this one; 6) To enable pupils to achieve pleasure and amusement from reading and writing stories.

In order to achieve these objectives, the pupils carried out some tasks where they had to listen to the story, recognize the words and structures in it, and use them. First, they were presented with the characters in the story. They listened to the story, demonstrated that they had understood it, and then played some games and sang songs and chants to develop their listening and speaking skills. They practised Reading Comprehension, by carrying out some tasks in which they had to show they had understood the vocabulary words and the storyline: for instance, they were given two options and they had to choose the correct word and the correct sentence, or they were presented with the pictures and the sentences in scrambled order and they had to put them into the correct order. They also used the words they had learnt to fill in blank spaces correctly and in that way they developed their writing skill at word level. For five sessions the pupils worked through these tasks to achieve the objectives mentioned above. At the end of the sessions most of the pupils, with the exception of the four who were showing general difficulties in the class, were able to understand the story.

As far as vocabulary and grammar sub-skills and story comprehension and performance skills are concerned, we observed there was hardly any difference between the pupils. This is a very positive point because it means all the pupils were concentrating hard on the task, presumably because of its interactive and innovative nature.

As far as methodology is concerned, the pupils were working in groups for most of the class, to emphasise the interaction between teacher-pupil and pupil-pupil, and to motivate autonomous learning. It was a very interactive methodology and the pupils were able to get involved in the tasks quite easily. The most important and innovative resource was the IWB, which was used for digital writing, digital text and picture scanning and drag-and-drop activities. The interactivity provided contributed to a generally high motivation in the class.

In addition to this, they were told, from the first day, that each group in the class would be a team. Every team had to get points by giving correct answers, behaving themselves properly and doing other positive things. That implied that they could lose points if the former obligations were not fulfilled. Each group had a sheet which the teacher stuck stars (points) onto. At the end of the week, each group's stars were counted up.

2.2. Materials for tasks

Let us now focus on some of the materials which were used for tasks.

2.2.1. Story Comprehension Sheet

In this worksheet¹, pupils have to decide if the sentences are correct or wrong. In groups, the pupils were able to decide which sentences were correct and which were wrong. The pictures helped the groups to make their decisions.

1. This activity worksheet can be found at <http://www.teachingenglish.org.uk/sites/teacheng/files/comprehension.pdf>

Jack and the Beanstalk

Look at the pictures and read the sentences. Tick the correct sentences and put a cross next to the wrong sentences.



1. Jack and his Mum live in a small house.

2. They've got two cows.



3. A stranger's giving Jack four beans.

4. Jack and the stranger are happy.



5. Jack's Mum isn't very happy.

6. She's eating the beans.



7. Jack's climbing down the beanstalk.

8. There's a castle at the top of the beanstalk.



9. The giant's very angry.

10. Jack's hiding under a table.



11. Jack's jumping.

12. He's got a harp.



13. The giant's chasing Jack.

14. Jack's got a hen.



15. Mum's got an axe.

16. She's chopping down the beanstalk.

The following tasks are among those which were carried out prior to this one:

1 The pupils were presented with some vocabulary words and they reviewed some adjectives with the help of the IWB and flashcards displayed on the classroom walls.

2 The pupils were presented with the characters of the story by means of pictures on the IWB. Then, they wrote the characters' names under the images and did a mood drill, consisting of the following actions:

For Jack, they made movements as if they were climbing up.

For Mum, they looked angry.

For Daisy, they 'mooed'.

For the Stranger, they looked very strange.
 For the Beanstalk, they tiptoed around.
 For the Giant, they stomped about.

3 The pupils listened carefully to the story and then they played the game ‘The giant says’ to review the verbs in the story. During the game, they pointed to vocabulary flashcards and the characters of the story displayed around the class. This game is an adaptation of the traditional game, ‘Simon says’:

Teacher: The giant says, ‘Count from 1 to 5.’

Children: ‘1,2,3,4,5.’

Teacher: ‘Moo’ like a cow!’

Children: _____

Any child who follows an instruction that is not preceded by the words ‘the giant says’ is out.

2.2.2. *Re-reading of the story*

In this re-reading activity, the pupils were invited to choose one of the words in bold, so that the story would make sense:

A boy named Jack lives with his mother. They are very poor. All they have is a dog (cow), called Daisy.

One morning, Jack’s mother tells Jack to take their cow to market and sell her. On the way, Jack meets a woman (man). He gives Jack, some magic apples (beans) for the cow.

Jack takes the beans, and returns home. When Jack’s mother sees the beans she is very happy (angry). She throws the beans out the door (window).

The next morning, Jack looks out of the window. There is a small (giant) beanstalk. He goes outside and starts to jump (climb) the beanstalk.

He climbs down (up) to the sky through the clouds. Jack sees a beautiful castle. He goes inside.

Jack hears a voice. ‘Fee, Fi, Fo, Fum!’ Jack runs into a cupboard.

An enormous giant comes into the room and sits down. On the table, there is a hen and a golden guitar (harp).

‘Lay’ says the giant. The hen lays an egg - it is made of paper (gold).

‘Sing’ says the giant. The harp begins to sing. Soon, the giant is dancing (sleeping).

Jack jumps out of the cupboard. He takes the hen and the harp.

Suddenly, the harp sings ‘Help master!’

The giant wakes up and shouts: ‘Fee, Fi, Fo, Fum!’ Jack runs and starts to climb down the beanstalk. The giant comes down after him.

Jack shouts: ‘Father (Mother), help!’ Jack’s mother takes an axe and chops down the beanstalk. The giant falls and crashes down to the ground. Nobody sees him ever again.

With the golden eggs and the magic harp, Jack and his mother live sadly (happily) ever after.

Before the pupils did this task, the teacher carried out another task in which she re-read the story while showing and pointing to the wrong pictures on the IWB. The pupils had to clap after each one of the mistakes and correct it.

2.2.3. Scrambled pictures and sentences

In this activity², the pupils had to organize the scrambled pictures and text. The task was carried out in groups. They had to order the pictures and sentences, using miniflashcards and squares with the sentences on them. Then correction was carried out as a whole class activity, using big flashcards and big sentences and sticking them on the blackboard. The example we present here is already in the correct order:



1

One day, Jack takes his old cow, Daisy, to the market.



2

On the way he meets a stranger. The stranger gives Jack 5 magic beans for his cow.



3

Jack goes home. Mum isn't happy. She throws the beans on the ground.



4

In the night the beans grow into a tall beanstalk.



5

Jack climbs up and up the beanstalk.



6

Finally, he sees a castle and goes inside.

² This activity worksheet can be found at http://www.teachingenglish.org.uk/sites/teacheng/files/storyboard_notes.pdf

7



A huge giant smells Jack.
'FEE FI FO FUM! Here I
come, bad boy, YUM YUM!'

8



Jack jumps inside a
cupboard. The giant can't
see him.

9



The harp plays some music
and the giant falls asleep.

10



Jack jumps out of the
cupboard and takes the
gold coins.

11



Jack takes the hen.

12



Jack takes the harp and
runs out of the castle. The
harp shouts 'Help!' and the
giant chases Jack.

13



Jack climbs down the
beanstalk.

14



Jack shouts 'Help!' His
Mum chops down the
beanstalk.

15



The giant falls down, 'ARGHHH!!!!' Jack and his Mum
never see him again and live happily ever after!

Now that we have focused on some of the activities that were implemented within this project, let us analyse our data by presenting our analysis codes.

3. CODES FOR THE ANALYSIS

The codes for the observation analysis, which we are about to present, are based on dimensions of empathy and relationships in classrooms. They were developed in order to gain some understanding of the interactions taking place in the classroom. They were based upon some studies such as Cooper and Brna (2002).

A) Nature of individual engagement with tasks

1. Shows real disinterest in the task, says unrelated things most of the time.
2. Shows lack of interest in the task, says unrelated things some of the time.
3. Responds to the task but not with any real interest – does what s/he has to.
4. Responds well to the task, expresses some interest.
5. Responds eagerly to the task almost all the time, expresses strong interest or enthusiasm for it.

B) Quality of interaction

1. Responds to others with either inaccurate understanding or lack of feeling.
2. Responds to others with either partially accurate understanding or minimal feelings.
3. Responds as if they appear to understand but with no elaboration/extension of idea or feeling.
4. Responds with understanding and slightly elaborates idea or feeling.
5. Responds with well-expressed understanding and really extends or develops idea/feeling.

C) Degree of control/domination in tasks

1. Nearly always cedes control to another.
2. Sometimes takes control but not usually.
3. Shares control – both takes and cedes it.
4. Usually takes and keeps control of action.
5. Nearly always keeps control of action.

4. RESULTS

As we can see in the table below, the IWB is a tool that attracts the pupils' attention in a very special way. We used the analysis codes to evaluate the pupils' behaviour. These are the results obtained per pupil, within a class of 24 pupils:

Table 1: Results.

2nd A pupils	Nature of engagement	Quality of interaction	Degree of control/ domination
1	5	5	4
2	5	4	3
3	2	2	2
4	5	5	4
5	4	5	5
6	2	1	1
7	4	4	4
8	4	3	2
9	3	4	2
10	5	5	4
11	4	2	2
12	4	3	3
13	4	3	3
14	4	3	2
15	5	4	3
16	4	2	2
17	5	4	3
18	4	3	4
19	5	4	3
20	5	4	3
21	4	4	4
22	4	5	5
23	1	1	1
24	5	4	3

4.1. Nature of engagement

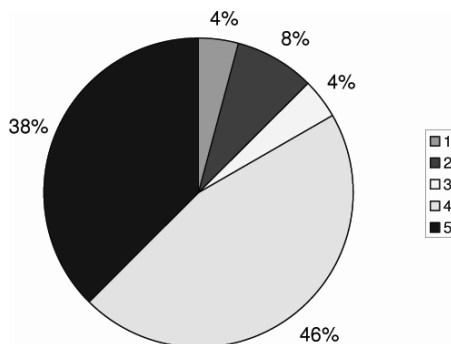


Chart 1: Nature of engagement

As we have pointed out above, four of the pupils were not interested in the IWB and this was probably due to the difficulties they had with the language. They were sometimes lost and they did not make enough effort to follow the class, so that in the end they got bored.

Their problem was probably that they were not able to adapt to the IWB because it was a novel experience for them. In the traditional classroom when they had to follow their textbooks, use their exercise books, etc, they behaved normally.

The three gypsy pupils with special needs, on the contrary, were very engaged and enjoyed the activities carried out using the IWB, although they had to be helped with written support material in the Listening Comprehension, etc, tasks.

In the Final Task, when the pupils had to act out the story, these three pupils did not perform their roles from memory, but they followed the written text and they read their parts aloud.

4.2. Quality of interaction

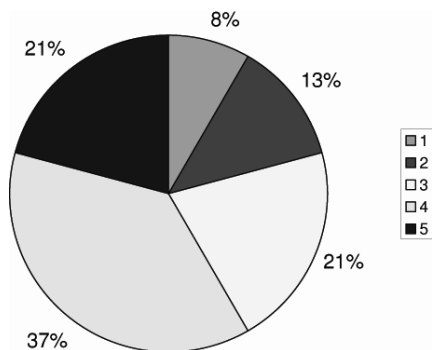


Chart 2: Quality of interaction

As we can see from the pie chart above, the quality of interaction is still positive in the class, although the balance is not as high as in the 'Nature of engagement' pie chart. The reasons are the difficulties of the pupils themselves. As each pupil has their own difficulties and capacities, what they are going to get from an activity depends, in a high percentage, on themselves. The important positive point here is that even if they have difficulties, thanks to the IWB and interactive activities, they concentrate on the tasks and they will obtain better results than in an activity which does not attract their attention.

4.3. Degree of control/ domination

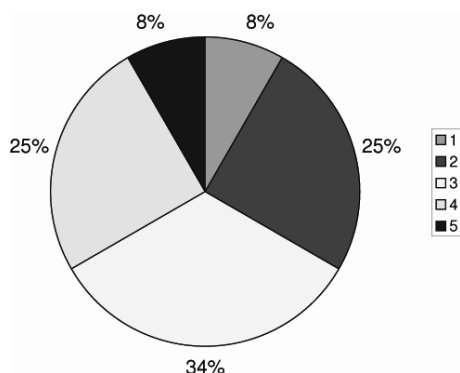


Chart 3: Degree of control/domination

If we look at the last pie chart, we can see that this time the highest points occupy much less space than in the previous ones. The middle points are the ones that predominate. These results could have a positive aspect as well. If all the pupils had wanted to answer all the time and they had not ceded control, the atmosphere would have been very competitive and inappropriate, and they would probably not have learnt in the same way.

As far as behaviour and atmosphere in the class is concerned, it is the teacher who should provide a good, flexible and co-operative atmosphere.

5. PUPILS' INTERVIEW

In order to have a better understanding of their behaviour during the proposed activities, we constructed a questionnaire to interview the pupils. The questionnaire we prepared for the pupils was adapted to their level from Cooper and Brna (2002) and it was written in Spanish so that they could understand the questions clearly. The questions which were asked and the answers which the pupils gave can be seen below. Several important answers were given to these questions. However, we have summarized the answers which best illustrate the study:

- a) What do you think about having all this new equipment in the classroom?
The general answer to the first question was very positive. There was only one girl who told us she did not like the IWB.

- b) What do you like about it?
What they liked most was drawing and writing on it, seeing films and short stories, and also touching it.
- c) How does it make you feel?
All of them felt happy and enthusiastic with everything.
- d) What do you find easy?
The general opinion was that it was easy to use it because they did it with their own hands and with pens, so if they made a mistake they could erase with the digital eraser.
- e) Is there anything you don't like about it?
There was a large percentage of pupils who did not find anything that they did not like. Nevertheless, there were also pupils who did find something negative. For example, some of them found their classmates got very excited at times, and this disturbed them. Some of them found it difficult to write on the whiteboard or move the elements, so sometimes they got disappointed.
- f) What do you find difficult?
In general they did not find it difficult to use. Some of them found difficulties in writing and touching it, or moving the elements as we commented before. At the same time, they also found difficulties related to contents.
- g) Do you need the teacher's help with anything?
The common answer, although with exceptions, was that they needed help to solve doubts or difficulties and they used the teacher as a guide.
- h) Is it better when you work on your own or when there is a teacher around to help?
They recognized that the teacher was a help and with the exception of three pupils, they preferred the teacher to be near in case of doubts or difficulties. There was also one child's answer which attracted our attention: this answer recognized that both situations were good.
- i) What do you think about the giant touch board? Is it easy to use?
They liked it. They thought it was funny and entertaining. Moreover, two of them thought it was modern and forward looking.
- j) Have you used the pen on the whiteboard – how do you find that?
They liked it. There were different answers about the difficulty of using pens, however. Some of them thought it was easy; there were others who found it difficult to write on the board; and in the third group of answers, they felt they could use it completely normally.
- k) Are you able to help each other?
On the whole, their answers were that they helped each other, but there were some answers which admitted that they only did this sometimes.
- l) Are there ever any arguments? If so why?
They said that they argued sometimes. They recognized it was because all of them wanted to answer or touch the whiteboard at the same time.
- m) What do you like best about the IWB?
They liked everything related to the IWB. But what they liked most was the fact that it was interactive and some of the activities related to 'The Ugly Duckling' and 'Jack and the Beanstalk' stories. They were delighted when they watched a film or a short story on the whiteboard.

n) Do you think you learn anything when you are using the IWB?

Most of them recognized that they were learning and enjoying themselves at the same time. And some of them said that although it was more fun, it was the same as being in a class.

o) If you could change anything about the computers or the IWB or the way you use them, what would it be?

They preferred being in the IWB room rather than in the computer room. If they had been able to change anything it would have been to spend more time doing activities on the IWB; they would have liked the IWB to be located in their usual classroom. They would have liked to do everything with their hands and not to need the pens or the rubber.

p) From 1 to 10, what mark do you think that the IWB deserves?

All of them answered 10.

q) Draw a picture about what you like best about the IWB and write a title.



6. TEACHERS' INTERVIEW

Not only the pupils were interviewed. Teachers were also interviewed within the scope of this study. We prepared and adapted a questionnaire from Cooper and Brna (2002) for some teachers at Doctor Tolosa Latour School in Madrid. Through these questions they give their opinions about ITC and especially about the IWB. Here we have some of the answers of two teachers who were interviewed.

6.1. Teacher 1

About ICT resources:

- a) What do you think worked well, and is there anything that could be improved in the way the Project was carried out?
Technologies are very important in the learning process because through them, the pupils can be in contact with real life and they are learning at the same time they are enjoying themselves.
- b) Do you think that you have learned or gained anything professionally through doing this project?
I have learned to use the interactive board, which is very useful as it allows me to present information in different ways.
- c) Has it had any impact on other members of staff?
Some teachers, especially the older ones, seem to be afraid of using ICT, maybe because they do not know how to use them and so they do not consider them important.
- d) Do you think there is any other way in which you have gained personally from the project?
After using technologies I feel more confident with them and I can adapt my lessons to my pupils' needs.
- e) Do you feel any particular confidence gains from having to manage all that in the classroom?
Well, pupils are more motivated because with this method they learn while using their senses: touch, hearing and sight.
- f) What is it about this classroom, – can you identify things that are helpful for the teaching process?
Technologies offer a wide range of information in just some seconds and put the pupils in contact with real life.
- g) Prompts – Big screen? Wacoms and pens?
- h) Do you think that having this equipment has changed anything in terms of atmosphere or attitudes to the children's work in the classroom?
The pupils feel more motivated and they are more attentive. With technologies our pupils play an active role in the class because they have to participate, although sometimes they talk more than they work. However, they do not realize they are learning, they think they are just playing.
- i) Do you think that using these things in the classroom has given them any sort of raised self-esteem or confidence?
My pupils are more confident now as they realize they are able to use technologies. They also feel important because they participate in class.
- j) Do you think it has changed the way you work in any way?
I just need more time to prepare my lessons, but I do not mind because I know that my pupils learn more effectively.
- k) Have you got any comments on the parental reaction to the classroom?
The parents are very happy because they notice their children are making progress. They are also conscious of the importance of technologies and because of that they support the use of them in the school.

- l) Do the children work any differently when they are using the whiteboard compared to when they are working in other areas? Has it changed the way they work at all? With computers they can work on different areas because there are programmes adapted to the different subjects. The only change is that this way of teaching is more active than the traditional way of learning.

6.2. Teacher 2: (a trainee teacher on teaching practice)

About ICT resources:

- a) What do you think worked well, and is there anything that could be improved in the way the Project was carried out?
I think the project worked very well, and the children have learned and enjoyed themselves at the same time. But I think more time is needed to investigate properly and train teachers. Besides, I could not use cameras, so the observation was more difficult and less objective.
- b) Do you think that you have learned or gained anything professionally through doing this project?
I did not know how to use an interactive board before. Now, I can prepare lessons and activities without problems. Besides, I have enriched my teacher training period. With the IWB you can discover some features of children that in other contexts you can not see.
- c) Has it had any impact on other members of staff?
I think so. When other teachers see activities I do with the children and they think they are interesting, they invite me to their classes to do the same or new activities with their pupils. Afterwards, they try to prepare activities by using the IWB on their own.
- d) Do you think you have gained personally from the project in any other way?
I have realized that there are many resources we can use in our classes and we should learn to use them. All teachers should have the opportunity to learn to use ICT and the will to use it effectively.
- e) Do you feel any particular confidence gains from having to manage all that in the classroom?
Perhaps. The pupils are more interested in the tasks and more motivated. If you feel that they are paying attention and listening to you, you are able to carry out lessons better.
- f) What is it about this classroom, – can you identify things that are helpful for the teaching process?
We use the IWB for some activities, not for all of them. It is possible that with appropriate teacher training we might be able to use it most of the time in any class, but we would also need more equipment for that.
- g) Prompts – Big screen? Wacoms and pens?
We have been using pens. I think they are very attractive. The pupils always want to write with them although they have some difficulties because they lean their hands or arms on the board. Pens are also useful for teachers because they save time and they make it possible to improvise and make the lesson richer.

- h) Do you think that having equipment in there has changed anything in terms of atmosphere or attitudes to the pupils' work in the classroom?
Yes, I think so. When you are working with the Smart Board the atmosphere is very different. Sometimes you can take advantage of this resource and teach a better class. Although on other occasions there is too much excitement to carry out the class as planned.
- i) Do you think it has given them any sort of raised self-esteem or confidence to use these things in the classroom?
Children participate more and they do not feel so embarrassed when they are doing an activity on the Smart Board. In that way, I think it is a powerful tool.
- j) Do you think it has changed the way you work in any way?
Yes, it is obvious that if I had not had this material I would not have been able to do many of the activities I had planned for this period.
- k) Have you got any comments on the parental reaction to the classroom?
They notice that their children learn and besides they arrive home happy. So if they learn and they enjoy themselves at the same time, all the better.
- l) Do the children work any differently when they are using the whiteboard compared to working in other areas? Has it changed the way they work at all?
Usually, the children who participate in other areas also participate with the IWB, and the ones who are shy, continue to be shy. But they try and since they often do not have to talk when using the Smart Board, they like it and I think they build up their confidence. Besides, I think that the relationship with the teacher changes as well; they feel more confident to ask questions too.
Moreover, they know that if they do not behave properly, they cannot do the exercises with the IWB; so it is like a prize, and they encourage each other to be quiet.

7. CONCLUSIONS

With Internet and the IWB, the teacher has a lot of resources available in the classroom. So, if you have to improvise, at any moment, you can always have a game or some other activity to hand.

Secondly, the IWB saves time in the lessons, although quite a lot of time is needed to prepare the activities. It is also worth highlighting the fact that the teacher can present a wider range of activities and pay more attention to a variety of tasks which, in another different context, might be ignored. All these factors, undoubtedly, help improve the learning process.

If we observe the charts and their results, we can infer there is a perfect match between pupils' and teachers' answers to the corresponding questionnaires. Teachers and pupils agree on the main points and they consider they are all involved in the same learning process and working together to achieve the intended learning objectives. A special bond between pupils and teacher and even between pupils and pupils was created.

It is also necessary to say that, although the whiteboard is a great tool to work with pupils, we think that it should not be the only tool to work with in the classroom. Children have to get used to working with different materials and strategies and in different ways. We would like to point out that according to the children's observations, all of them except four,

were able to understand the story. Those four pupils were those with general difficulties in the class. As one of the main aims in the Unit was to understand the story, many of the activities were interactive games and the children showed great motivation and interest in them and paid a lot of attention, and because of that, nearly all of them were able to understand the story and perform other tasks with a similar level of achievement. But they did not behave in the same way in the normal class. Here there was a much greater division between those who paid attention and those who did not. We therefore concluded that there was a difference in their attitude depending on whether they were working with the IWB or not.

We also feel it necessary to mention that what makes the difference in the teaching and learning process is not only the tools the teachers use but also the way these tools are used. So teachers should be prepared to use this tool really efficiently. In our research, the use of the IWB increased the pupils' enthusiasm within the tasks and they got much more involved in the lessons, as can be seen from the teachers' questionnaire. Because of that, it would be very positive if teachers created, progressively, a resource bank on the Internet of possible activities to be done with the IWB. Today it is already possible to find many resources, mainly in the English language, for children. Specifically, there are some especially important ones related to stories for children, which are another invaluable resource in the foreign language learning process.

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APPENDIX 1**STORY: JACK AND THE BEANSTALK****Scene 1**

At Jack's home

Mum: Good morning, Jack!

Jack: Hello, Mum!

Mum: Jack, we haven't got any money...

Jack: Oh, no, Mum!

Mum: Let's sell the cow!

Jack: Oh, no, Mum, not Daisy!

Mum: I'm sorry, Jack. Can you take her to the market, please?

Jack: Yes, mum. Bye!

Come on Daisy, let's go!

Scene 2

On the way to the market

Stranger: Hello!

Jack: Hello!

Stranger: What a fantastic cow you've got!

Jack: Yes, this is Daisy! I'm taking her to the market.

Stranger: I can give you some beans for your cow.

Jack: Beans?

Stranger: Yes, magic beans!

Jack: Magic beans? Wow! Fantastic!

Stranger: Here you are!

Jack: Thank you! Here's Daisy! Goodbye!

Scene 3

At Jack's home

Jack: Mum, I'm home!

Mum: Oh good! How much money have you got?

Jack: I haven't got any money, but I've got some beans!

Mum: What? Beans? You've got beans?

Jack: Yes, Mum! Magic beans! Here you are!

Mum: Magic beans?! You silly little boy!

Scene 4

The next day.

Jack: Wow! The beans are magic!

Giantess: Hello, little boy!

Jack: Hello!

Giantess: What's your name?

Jack: I'm Jack! Who are you?

Giantess: I'm the Giantess! This is the giant's castle. What are you doing here?

Giant: FEE FI FO FUM

I can smell a little boy!

FEE FI FO FUM

Watch out, bad boy, here I come!

Giantess: Quick, Jack! Jump in the cupboard!

Scene 5

Giant: Where's my lunch?

Giantess: Here you are! It's your favourite – pizza and chips!

Giant: Where's my money?

Giantess: Here you are!

Giant: Where's my hen?

Giantess: Here you are!

Giant: Where's my harp?

Giantess: Here you are!

Giant: ZZZZZZZZZZ!

Scene 6

Giantess: Quick, Jack! The giant's sleeping!

Jack: Thank you, Giantess!

Harp: Aaargh!! Help, giant, help!

Giant: AAARGHHHHHHH! Here I come, you bad little boy!

Scene 7

Jack: Help! Help! Mum! There's a giant!

Mum: A giant?! You huge, horrible giant!

Jack: Chop down the beanstalk, Mum!

Mum: This is for you, giant!

Giant: ARGHHHH !

Jack: Thanks, Mum! Look what I've got!

Mum: What?

Jack: A magic hen, a magic harp and some money!

Mum: HURRAY!

Jack and Mum: I love magic!