

International online Peer Tutoring to promote modern Language Development in Primary Schools

Sílvia Blanch Gelabert, Universitat Autònoma de Barcelona (Catalonia, Spain)

David Duran Gisbert., Universitat Autònoma de Barcelona (Catalonia, Spain)

Allen Thurston. University of Stirling (Scotland, UK)

Keith Topping. University of Dundee (Scotland, UK)

Abstract

The present paper presents an eight-week project which promote the language learning of primary school children using reciprocal peer learning with the support of the ICT .The project connected Spanish-speaking English-language learners in Catalonia with English-speaking Spanish-language learners at a Scottish primary school. Each week, the children wrote or corrected a text, depending on their role, tutor or tutee, and sent messages to their peers. Before, during and after the intervention, data was collected in order to analyze the children's improvements. The results of this study show how Internet technology can be leveraged with reciprocal peer tutoring to enhance first and foreign language learning. The project has given the children the opportunity to exchange cultural knowledge and to see the differences as a positive resource for learning.

Key words: Peer tutoring, peer assisted learning, foreign language learning, information and communication technology (ICT), intercultural learning

Introduction

In our modern society, it is almost indispensable to employ the use of technology for foreign language teaching (Sotillo, 2000), but is necessary to develop innovative methodologies in order to integrate successfully computers into the foreign languages curriculum. It is also important to find authentic contexts where the children can practice and make a natural use of the foreign language with native speakers. Internet and its tools combined with the peer assisted learning can make this ideal situation possible.

This project is intended to investigate how reciprocal peer tutoring using internet communication promoted the language learning of primary school children in Catalonia and Scotland.

The project allows the children from different countries to get to know each other's cultures better. It helps them to be more concerned about the existing cultural differences and to understand them as a way to enrich their knowledge and thus as a positive value for learning. Children from both countries have the opportunity to teach and to learn from

others in a real context that promotes significant learning in their own language and the foreign language skills.

Conceptual foundation

Peer tutoring is a form of peer-assisted learning characterized by specific role taking as tutor or tutee, with high focus on error correction and clear procedures for interaction, in which participants receive training (Topping, 2001). Untrained tutoring behaviors tend to be primitive (e.g., Person & Graesser, 1999), characterized by infrequent correction of errors and giving of positive feedback when inappropriate. When peer tutoring is used with reasonably high implementation integrity, results are typically good (e.g. Duran & Monereo, 2008; Topping, 1987; Topping & Ehly, 1998).

Methods

Aims

The paper reports data from an on-line peer tutoring project that was implemented during the summer term 2007, after a pilot project was run on 2006 with two different schools in Catalonia and Scotland (Dekhinet, Topping, Blanch & Duran, 2008).

The project aimed to:

- Identify suitable schools for study in Catalonia and Scotland who are studying English and Spanish as a second language respectively.
- Develop activities aligned to the modern language curricula in each school to facilitate the practice of language skills learned by the children in class.
- To establish a managed on-line learning environment to act as a vehicle for peer feedback from a peer tutor to develop second language capability.

Measurements

During the project a quantitative analysis is being carried out in order to detect changes in the language competence before and after the project. A qualitative analysis is being done also with the aim to explain the changes detected with the pre and post test. The instruments used in the project are the following ones:

- Observations during the sessions
- Pre and Post test on :
 - ✓ Test of English (15 item multiple choice)
 - ✓ Test of Spanish (15 item multiple choice)
 - ✓ Attitude towards Spanish/English (10 item Liker scale)
 - ✓ Self-worth as a language learner (10 item Liker scale)
 - ✓ Peer-learning evaluative form
- Process analysis
 - ✓ Analysis of the text
 - ✓ Patterns of use by pupils
- Semi structured interviews with the children and the teachers involved

The data obtained was used to investigate the language improvement of the children throughout the project, as we will show later in the paper.

Sample

The project involved a total of 34 students based in two schools in Catalonia and Scotland. The schools were selected after an invitation from the local education authority to participate although the sample schools volunteered their involvement in the project. Each school had students who were studying English or Spanish as a second language in addition to an IT infrastructure that would support the intervention. In the project, 10-11 year old students from Scotland and Catalonia peer tutored each other in English and Spanish via a managed on-line environment during a period of eight weeks.

In each school, the Spanish teacher and the English teacher were involved. Each of them worked with the children to improve both their own language and the foreign language.

Intervention

The schools worked on the project around four hours per week, two of them during an English class and the other two during the Spanish one. The project lasted over an eight week period which was very intense for the children and the teachers. The intervention used both near, in the classroom, and far paired peer learning to promote development of first and second language capability.

Children in each country were matched on the basis of attainment in Spanish and English. A rank order was produced of the class from best to worst in Spanish (Catalonian students) and English (Scottish). The best at Spanish was paired with the best at English, second best at Spanish paired with the second best at English and so on until each pupil was matched in a pair.

The training is a very important factor for the success of the project. Children needed to be trained in order to learn the basics before starting to work with their partners. Initially, they needed to have a very structured activity to be able to promote learning but, after a few sessions the pairs could make some adjustments with the teacher supervision. Each school spent between two and four hours training their children in different aspects of the project. The training involves explanations about the different aspects related to the project and the participants. Teachers trained the children about the aims of the project; the different roles and how to play them; the writing and correction of the messages procedures; on how to provide positive and encouraging comments to their peers; and the basic use of the Blackboard website (a Virtual Learning Environment hosted by the University of Dundee) where the messages were encrypted and housed in a password protected site with discussion boards available.

As we mentioned before, initial tests were completed in order to monitor the improvements of the children in different aspects throughout the project. After completing the initial test and assisting to the two sessions of training, the children started the project.

The students conversed in a managed learning environment where they were motivated to write and correct messages using the different resources available such as other peers in the class, the teachers' assistance, the dictionaries or other online tools.

Every week, the students wrote messages in their second language and corrected messages in their first language following within a structured procedure (see table1.) and a correction template.

Every week the children were writing and sending a text. The teachers suggested different themes such as "the traditional dresses of my town", "my birthday" or depending on the knowledge of the children, the pupils could choose the subject they wanted to write about (favorite music, holidays, etc). In some cases, vocabulary was being worked with the teacher in the previous teaching lesson.

Every week, the children acting as tutors needed to correct their pair's text. They were told to mark the word or sentence that needed to be changed, specifying the type of mistake or error that the tutee had made (spelling, syntactic...). It is advisable to ask the children to mark the mistakes but not to correct them straight away in order to encourage the tutees to reflect about it before finding the correct answer. The children also needed to make some qualitative comments about the improvements of their pair or aspects that should be worked on, such as to write a longer text or to be aware of such spelling mistake that is repeated in every message. These comments help to keep the children focused and motivated throughout the project.

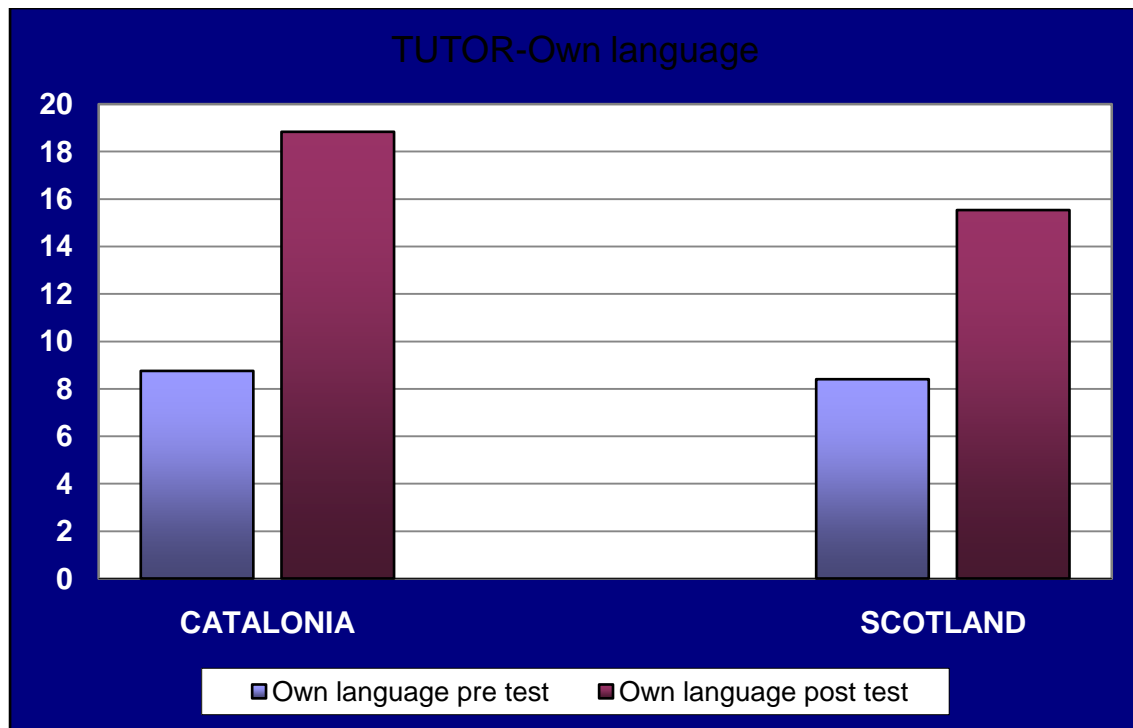
Once the tutees received their text's corrections, they wrote the text again with the comments or other suggestions in order to improve it and then sent it back to his tutor.

In both schools, the children and the teachers created a bank of mistakes which help them to detect and improve the most commons errors made by them or by their tutees. These common mistakes help the children to reflect about the languages and its uses.

Structure procedure

1. **Write a draft of the text** (Version 1)
 - Read the suggested activity (or propose some alternative theme)
 - Think about ideas
 - Write a draft using support (dictionary, grammar book, help form your partner, other peers or teacher)
2. **In front of the computer**
 - Type the text
 - Use the computer tools (Spelling and grammar, synonymous...)
 - Proof-read the text and send it (Version 1)
3. **Receive your peer tutor's comments**
 - Carefully read the comments
 - Think about how you could improve your text
 - Ask your teacher/peers if you need further information or help correcting errors
4. **Write a new version of your text and send it again** (Version 2)

Table 1.



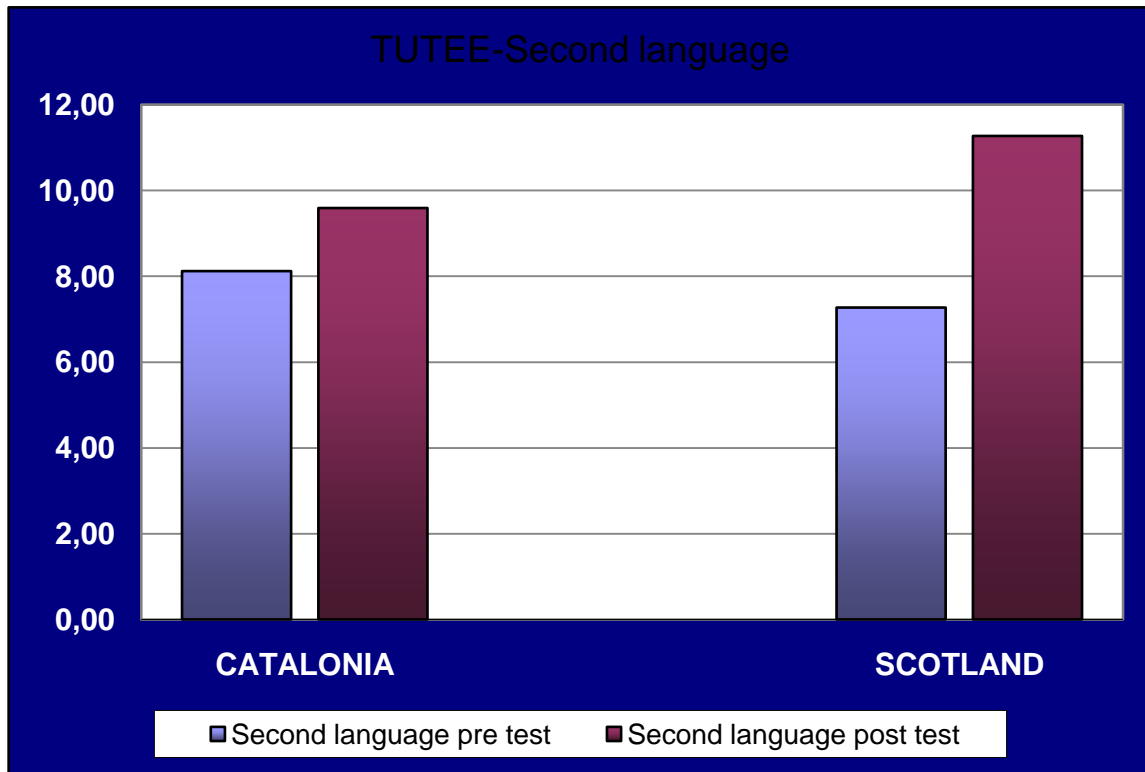
Graphic 1. Tutor results

The following table (table 2) resumes the activities and actions that all the people involved in the project are doing before, during and after the project.

The data obtained by the pre and post test indicated that the intervention was successful (graphic 1.) at raising reading attainment in first language of tutors (English $t=-2.377$, $df=15$, $p<0.05$; Spanish $t=-12.512$, $df=15$, $p<0.0001$).

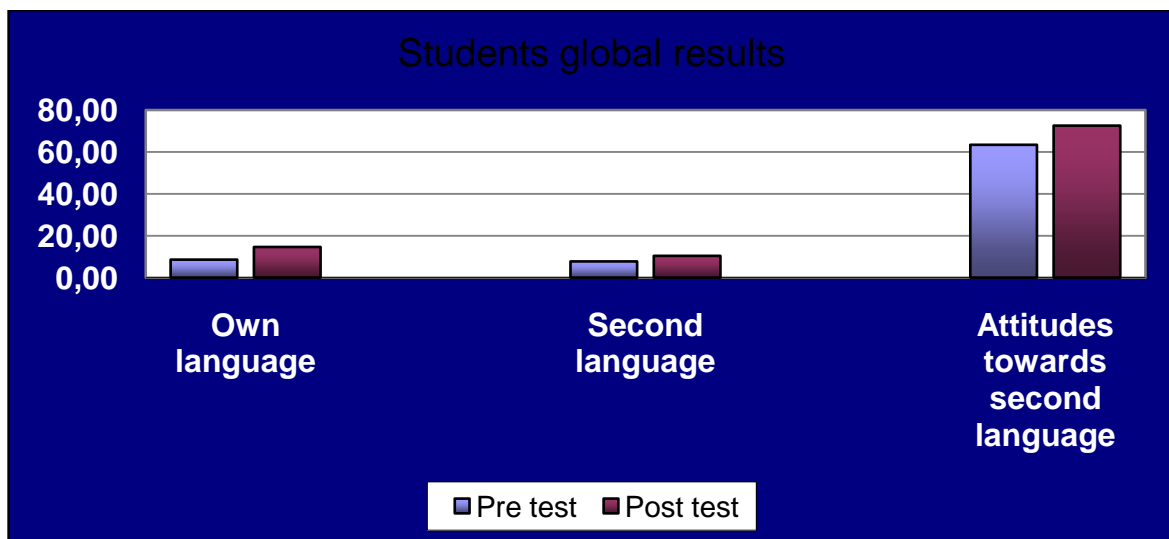
	BEFORE	DURING	AFTER
Researchers	<ul style="list-style-type: none"> • Arranging the pairs • Initial test • Teacher training 	<ul style="list-style-type: none"> • Observations • Support 	<ul style="list-style-type: none"> • Post test • Interviews • Data analysis
Teachers (English and Spanish)	<ul style="list-style-type: none"> • Training • Training the children 	<ul style="list-style-type: none"> • Supervision and assistance • Using the English and Spanish lessons to improve both languages 	<ul style="list-style-type: none"> • Interviews
Children	<ul style="list-style-type: none"> • Initial test • Training 	<ul style="list-style-type: none"> • Writing messages in modern language • Correcting messages in their own language 	<ul style="list-style-type: none"> • Post test • Interviews

Data also indicated that the intervention raised attainment in modern language in both Spanish ($t=-7.611$, $df=14$, $p<0.0001$) and English ($t=-2.230$, $df=16$, $p<0.05$). See graphic 2.



Graphic 2. Tutee results

Both Scottish ($t=-2.787$, $df=14$, $p<0.0001$) and Catalanian ($t=-3.875$, $df=16$, $p<0.001$) students reported more positive attitudes towards language learning, as it shows the graphic 3.



Graphic 1. Student's global results

The qualitative analysis data was obtained by the pupils and the teachers' interviews, observations in the classroom and data from the process of writing and correcting messages, by analyzing the quality of text that peers sent to each other and their patterns of use. Pupils and teachers agreed that both tutors and tutees had improved their written language skills, especially vocabulary and grammar, in both first and second languages. The pupils felt more comfortable writing in a second language. They felt they had learned because they could see the improvements in writing messages in their second language with fewer mistakes. The data analysis gave support and complemented the evidence shown by the test data results mentioned before.

The results obtained by the pre and post test and the process analysis has given some evidence of the potential of the project for learning second language using peer tutoring in real contexts.

Conclusions

The use of peer learning strategies in combination with new technologies has a lot of potential, as the results show. The intercultural opportunity of learning was a big motivation for the students as well as the possibility to use a virtual learning environment, all in an authentic situation context. The results allowed the researchers to detect improvement of linguistic knowledge, improvement in textual production, the perception of learning and confidence in the second language. The data showed that the students obtained better results not only while performing their tutee role but also, they increased their level of knowledge in their own language when performing in their role of tutors, and in particular though the reflections made writing corrections of texts of their partners.

The project offered them also opportunities to strengthen relationships with companions of other countries. In this sense, projects such as this lead to other forms of virtual communication (chat, videoconference...) that improve linguistic competences and reinforce the knowledge of cultural aspects among European citizens.

The children and the teachers involved were happy with their participation in the project and with the results obtained. As evidence of that, both schools are happy to take part again in the upcoming edition of the project.

References

- Dekhinet, R., Topping, K., Blanch, S. & Duran, D. (2008) Let me learn with my peers online! Foreign language learning through reciprocal peer tutoring, *Innovate*, 4 (3). Available online at <http://innovateonline.info/index.php?view=article&id=479> (accessed 25 March 2008).
- Duran, D. & Monereo, C. (2008) The impact of Peer Tutoring on student self-concept, self-esteem and satisfaction, *School Psychology International*, In press.
- Sotillo, M. (2000) Discourse functions and syntactic complexity in synchronous and asynchronous communication, *Language Learning & Technology*, 4 (1), 82-119.
- Person, N. K., & Graesser, A. G. (1999) Evolution of discourse during cross-age tutoring, in: A. M. O'Donnell & A. King (Eds) *Cognitive perspectives on peer learning*. (Mahwah, NJ, Lawrence Erlbaum), 69-86.

- Topping, K. J. (1987) Peer tutored paired reading: Outcome data from ten projects, *Educational Psychology*, 7(2), 133-45.
- Topping, K. J. (2001) *Peer assisted learning: A practical guide for teachers* (Cambridge MA, Brookline Books).
- Topping, K. J. & Ehly, S. (1998) *Peer-assisted learning* (Mahwah, NJ & London UK, Lawrence Erlbaum).