

TILA Research Results on Telecollaboration¹

Chapter 4

THE ROLE OF LINGUISTIC SELF-CONFIDENCE AND LANGUAGE ANXIETY IN TELECOLLABORATION AMONG SECONDARY SCHOOL PUPILS

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1 SUMMARY

The main aim of this study is to explore the motivational dimension in secondary school pupils' foreign language interactions. A total of 202 foreign language learners from Spain, France, the Netherlands and the UK took part in this study between September 2013 and June 2015. All participants completed an average of four foreign language interaction sessions either by written chat or by video communication. They worked in either lingua franca, tandem or mixed constellations. A questionnaire including 21 items to be rated on a 5 point Likert scale was circulated to all participants after every session. A small number of pupils were also interviewed on aspects related to motivation and anxiety when using the foreign language in their exchange sessions. The data collected shows relevant findings that provide new insights to this particular field of research. Pupils that interacted via chat and in tandem constellations tend to show higher self-efficacy beliefs. With regards to anxiety levels, they seem to decrease significantly as sessions progress. There are also statistically significant differences between the different language constellations, with the lingua franca group presenting systematically the lowest anxiety scores. The chat environment seems to be less anxiety-provoking as compared to video communication. Regarding the use of webcam, participants seem to feel more at ease when their partner cannot see them through the webcam only during the first sessions. The data gathered shows that as sessions progress the privacy offered by not being seen does not impact to a significant extent on the pupils' anxiety levels.

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2 OBJECTIVES AND METHODOLOGICAL APPROACH

2.1 OBJECTIVES

This study intends to analyse the motivational dimension involved in telecollaboration by looking at pupils' self-efficacy and anxiety levels as well as their attitudes towards native speaker (NS) and non-native speaker (NNS) interaction in the foreign language either via written chat or via video communication and with or without a webcam. Pupils will work either in a tandem (with a NS of their target language, who was in turn learning their partner's mother tongue), lingua franca (interactions between NNS of the target language) or mixed constellation (tandem with lingua franca) and all three conditions will be compared in the study. It is expected that the qualitative data gathered will support the quantitative data obtained via the pupil surveys circulated.

2.2 METHODOLOGICAL APPROACH

Participants

We got a total of 321 reactions from pupils from 3 secondary schools in Spain, 2 in France, 2 in the Netherlands and 1 in the UK². The participants' ages ranged from 11 to 17 years old and they were all learners of English or Spanish at A2, B1 or B2 level according to the Common European Framework of Reference for Languages (CEFR) (Council of Europe, 2001).

Instructional methods

Every pupil was paired up with a peer from another country in order to carry out regular telecollaboration sessions during class time. 44% of the survey reactions came from pupils' telecollaborating in a Lingua Franca constellation (see Figure 1). 17% of the reactions belong to pupils interacting in Tandem constellations. In those cases, teachers could choose between asking pupils to practise both languages during the same session, therefore dividing the session's time between both languages, or focusing on one language in alternate classes. Finally, 39% used a mixed approach. A group of Spanish pupils interacted in English with a group of Dutch pupils who played the role of "English experts". Despite the fact that Dutch pupils are not NSs of English, their high proficiency in this language compared to that of the Spanish group enabled them to play an "expert" type role in this partnership. For the Dutch pupils, the interaction mode was the tandem approach, as they practised their Spanish with NSs of that language.

Figure 1: Language constellation in which pupils telecollaborated (LF: Lingua Franca)

² Participating schools in this research study:

Spain: IES La Garrigosa, Colegio Apóstol Santiago & IES L 'Eliaana.

France: Pierre et Marie Curie & Collège De La Montagne Noire.

The Netherlands: Nijmeegse Scholen Gemeenschap Groenewoud & Willem de Zwijger.

UK: Leicester High School.

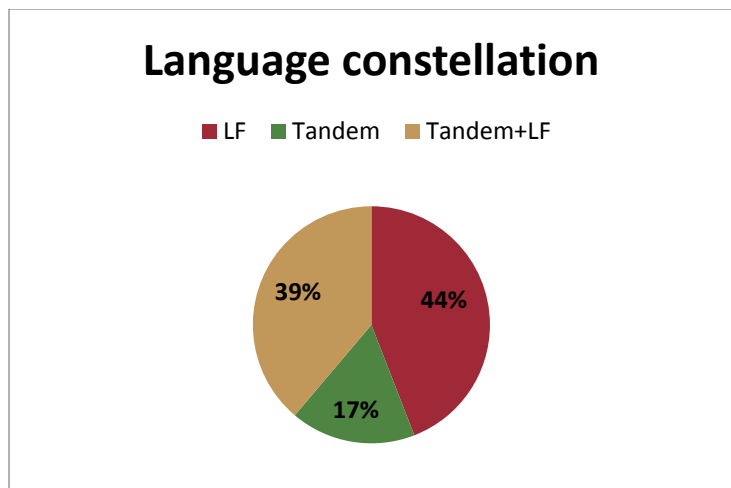
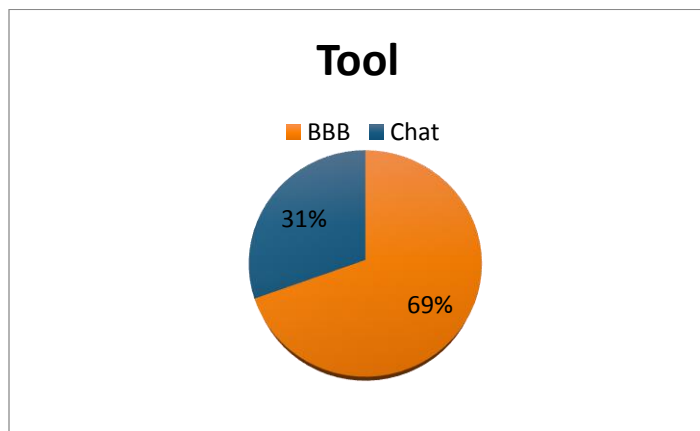


Figure 2: Tools used in the telecollaboration exchanges.



Instruments

The questionnaire distributed, which includes 21 statements, is an adapted version of the instrument used in Jauregi *et al.* (2012). It includes 8 items that refer to demographic and background information such as age, gender or languages practised, 3 items on pupils' self-efficacy beliefs, 3 items about their attitudes toward NS and NNS interaction, 4 items adapted from Horwitz's Foreign Language Classroom Anxiety Scale (Horwitz *et al.*, 1986) regarding language anxiety and, finally, 2 items about the use of webcam during their interactions. Most items were to be scored by participants on a 5 point Likert scale, where 1 is "strongly disagree" and 5 is "strongly agree". Pupils were instructed to complete this questionnaire after every session.

Questionnaires were devised in English and translated into Dutch, French, German and Spanish so that all participants could take them in their mother tongue. They were circulated electronically via the platform SurveyMonkey.

A small sample of pupils was interviewed following a list of guiding questions.

Data analysis

The quantitative data collected was coded for analysis and imported into SPSS. Descriptive statistics were obtained, including tendency and distribution values. Significance checks were carried out in terms of language constellation (tandem, lingua franca and tandem+lingua franca) as well as the mode of communication used (BigBlueButton video communication versus chat).

The qualitative data was analysed by identifying different coding categories (Bogdan & Biklen, 2006) related to the topics being researched in the present study.

3 RESULTS³

We will first present results of the survey analysis per category: (1) self-efficacy, (2) willingness to communicate with native or non-native speakers and (3) communication anxiety. We will present under each category the total results across sessions and differences according to language constellation and tool being used for the telecollaboration exchanges.

3.1 SELF-EFFICACY

Significant values were obtained for the three self-efficacy items comparing language constellation formats (see Table 1). Pupils participating in tandem exchanges showed the highest mean scores for language competence and expressing themselves correctly (3,8) closely followed by the Lingua Franca group (3,7). As for the last item, understanding the speech partner, the Lingua Franca group showed the highest mean scores (4,6), followed by the Tandem group (3,8) The pupils participating in the mixed language constellation (Tandem+LF) got the lowest mean values across sessions for the three items (3,1; 2,9; 2,9).

Table 1: Results for self-efficacy (significance levels at $p < 0,05$). In red the group outperforming the others

Item	General	Language constellation	Tool
I think that my foreign language competence is good enough to communicate with native speakers.	No significant differences across sessions	Significant differences: Tandem	No significant differences
I can express myself correctly in the foreign language.	No significant differences across sessions	Significant differences: Tandem	Significant differences Chat
I understand (almost) everything that my partner says in the foreign language.	Significant differences across sessions	Significant differences LF	Significant differences Chat

Regarding the differences in use of tools, significant values were reached for two of the three items: correction of expression and understanding the telecollaboration partner. Pupils collaborating in chat

³ The results will be further elaborated and published in an academic Journal.

were much more confident about being able to express themselves correctly (3,6) and particularly understanding the partner (4,5) than those interacting by video communication (3,3; 3,4 respectively).

The differences across sessions for the last item (understanding the speech partner) proved to be significant as well. In the first session the item scored average (3,5) while in the 6th session the mean values reached a 4,2 mean score.

3.2 WILLINGNESS TO COMMUNICATE WITH NATIVE OR NON-NATIVE SPEAKERS

Table 2 shows the results of pupils' attitudes towards learning by communicating with native or non-native speakers. Those communicating with native speakers in the telecollaboration exchanges got much higher mean scores for the first item (learn by communicating with native speakers) (4,1) than the mixed language constellation group (3,4), while the Lingua Franca group obtained the lowest mean values of all (3,1).

The differences according to the tool being used did also reach significant values for the same item. The pupils performing in BBB video communication, think that they learn a lot by communicating with native speakers (3,5) compared to the chat group (3,1).

Table 2: Results for willingness to communicate with (N)NSs (significance levels at $p < 0,05$). In red the group outperforming the others

Item	General	Language constellation	Tool
I learn a lot by communicating in the foreign language with native speakers	No significant differences across sessions	Significant differences Tandem	Significant differences BBB
When I communicate in my foreign language with students from other countries, I learn more than when I communicate with native speakers.	No significant differences across sessions	No significant differences	No significant differences

3.3 ANXIETY

3.3.1 Anxiety with communication

Significant differences were measured for most items across conditions (see Table 3). Anxiety diminished as pupils got more familiar with telecollaboration. For instance for the first item (I get nervous when I communicate) the first session got a mean score of 3,1, while the 6th session obtained a mean score of 1,5. The same tendency was observed for worrying about making mistakes (2,9 > 1,7) or getting nervous for lack of understanding (2,7 > 1,7).

As to the language constellation, differences were significant for the 3 anxiety items, the Lingua Franca group showing significantly lower anxiety scores and the mixed Tandem+LF group the highest ones.

Regarding the tool being used for the exchanges, significant values were booked for all items, the pupils communicating by chat showing significantly lower anxiety scores than those communicating by BBB video communication environment.

Table 3: Results for anxiety with communication (significance levels at $p < 0,05$). In red the group showing lower anxiety values.

Item	General	Language constellation	Tool
I get nervous when I communicate in the foreign language.	Significant differences across sessions	Significant differences LF	No significant differences
I worry a lot if I make mistakes when I communicate in the foreign language.	Significant differences across sessions	Significant differences LF	Significant differences Chat
I get nervous when I don't understand every word that my exchange partner says.	Significant differences across sessions	Significant differences LF	Significant differences Chat

3.3.2 Anxiety with the speech partner

It is interesting to notice that for pupils the idea of communicating with a native speaker does not seem to generate more anxiety than the possibility to communicate with non native-speakers as score differences do not reach any significant values (first item). Remarkably, the second item, the idea of being laughed at, does reach significant values for language constellation, [the Lingua Franca group showing the lowest anxiety scores (1,3) and the mixed group showing the highest ones (2,3)] and tools (learners interacting in chats feeling more at ease).

Table 4: Results for anxiety speech partner (significance levels at $p < 0,05$). In red the group showing lower anxiety values.

Item	General	Language constellation	Tool
I feel more at ease communicating in the foreign language with someone who is also learning it, than with a native speaker.	No significant differences across sessions	No significant differences	No significant differences
I am afraid that my exchange partner will laugh at me when I communicate in the foreign language.	No significant differences across sessions	Significant differences LF	Significant differences Chat

3.3.3 Anxiety with the webcam

As to the anxiety caused by the use of the webcam only the first item, (the partner seeing myself through the webcam) showed a significant decrease comparing the first with the 6th session (3,3 > 2,4). No other conditions proved to be significant.

Table 5: Results for anxiety with webcam (significance levels at $p < 0,05$).

Item	General	Language constellation	Tool
I feel more at ease communicating in the foreign language when my exchange partner cannot see me through the webcam.	Significant differences across sessions	No significant differences	No significant differences
I feel more at ease communicating in the foreign language when I don't see myself on the webcam.	No significant differences across sessions	No significant differences	No significant differences

Notes from pupil interviews

3 pupils from Colexio Apóstol Santiago (Vigo, Spain) were interviewed individually following the interview guidelines designed for the TILA research studies. They are all 15 years old and they are learning English at B1 level.

Summary of comments:

- The TILA activities undertaken are highly valued by the pupils, who rate them 9 out of 10 in enjoyment. The specific activity that they completed on the day of the interview, on French and Spanish stereotypes, is rated by all three pupils with 4 points out of 5. In fact, one of the pupils said that sessions should be longer and more often.
- What they value the most is being able to get to know someone their age, from a different country, and who is also learning English. They are interested in learning about how other people from different countries speak English. One of them pointed out that this is very important because in real life they will not always have to interact with native speakers of English.
- None of the three pupils interviewed is worried about learning wrong structures from a non native English speaker. In fact, two of the pupils mentioned that this was a more challenging and interesting activity, as he would identify mistakes in his interlocutor's speech, which helped him reinforce the correct structures that he had learnt. None of the 3 pupils expressed a preference towards NS interaction.
- BBB voice seems to be more appealing to them, although they prefer to start with written chat. One pupil mentioned that he prefers to start with written chat and that, after a few sessions, they would feel ready to start using voice. Another pupil said that he would prefer to continue

using just written chat because he defines himself as a shy person. Two pupils expressed a preference towards not using a webcam, as they would feel more at ease when their interlocutor cannot see him. However, this does not seem to be connected to speaking in the foreign language but rather to shyness.

- One of the pupils interviewed said to be a little bit nervous because it was something new, but not too much. Another pupil said that he was nervous at the beginning but that he felt more confident in later sessions, as he already knew his partner.

4 CONCLUSIONS

The present study provides new insights into motivational issues related to self-efficacy, interactions with (non-)native speakers and anxiety.

Regarding the self-efficacy items, pupils interacting with native speakers seem to be the most confident as far as their perception of competence (communicate and express correctly) is concerned, closely followed by the Lingua Franca group, while the Lingua Franca group outperforms the other groups regarding their perception of understanding the speech partner. The confidence in their competence seems to be higher by those engaging in chat sessions.

As far as Willingness to communicate is concerned, those communicating in a Tandem constellation with native speakers are significantly more positive about the learning potential of communicating with native speakers than the other groups and so are the pupils communicating in BBB.

Anxiety: a significant decrease was noticed as sessions progressed across conditions. Pupils engaging in Lingua Franca constellation show the lowest anxiety levels while the mixed language constellation group shows the highest ones. The chat group shows significantly lower anxiety scores than pupils performing in BBB video communication.