

PEER TUTORING ON AN VIRTUAL COLLABORATIVE INTERNATIONAL ENVIRONMENT

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Abstract

The present paper offers a description of the first partial results of a work-in-progress research project on collaborative learning in virtual environments. The project is located at the University of La Rioja (SPAIN), and it involves collaboration with a group of professors and students from Pennsylvania State University (USA). It has been designed to take place throughout the academic year 2015/2016. The main purpose of the project is to assess the functionality of the use of mobile applications (e.g. Celly@) and virtual collaborative tools like Google Docs in a peer tutoring experience between two groups of students from the two aforementioned universities.

One of the main difficulties and challenges faced by undergraduate students is the task of writing essays and dissertations in a foreign language. The present project tackles this issue and looks into the potential benefits of working in a virtual collaborative environment, where students from two different countries (i.e. Spain and the USA), who are native speakers of two different languages (i.e. Spanish and English respectively), join efforts to help one another to improve their essay writing abilities in a second language.

Simultaneously, the project aims to assess the potentiality of such virtual international collaborative settings in extending the learning experience beyond the physical classroom and leading the students in the acquisition of the necessary academic and professional competences, including (1) ability to coordinate and collaborate with their peers; (2) autonomous learning capacities; and (3) use of mobile and technological tools.

By the end of the academic year, the participant students will be assessed as to their degree of achievement in written language skills and essay writing in the respective foreign languages. At this stage, the present paper provides a first assessment of the progress of the project in terms of the degree of participation and satisfaction of the students, and the number of problems and difficulties encountered in its implementation.

Keywords: Ubiquitous Learning, Google Docs, Celly@, Peer Tutoring.

1 INTRODUCTION

Writing assignments in English is one of the most troublesome tasks for students in the Modern Languages and Business & Administration degrees at the University of La Rioja. One of the main difficulties that these writings assignments in a second language pose for undergraduate students is the need to make use of academic English and to use the editing and referencing conventions of this type of essays in the Anglo-Saxon world.

In this context, the present project aims to offer the students of the University of La Rioja the chance to twin themselves academically with English-speaking North American undergraduate students who need to write similar assignments in the Spanish language.

The project encourages the students to make use of online collaborative editing tools, which are made available freely by Google Docs, and academic mobile apps (i.e. Celly@), in order to overcome the geographical distance between their universities (i.e. Universidad de La Rioja-Spain & Pennsylvania State University-USA) and to help each other to improve the linguistic, editing, and citation quality of their assignments in a second language.

In particular, the aim of the project is to implement a pair-tutoring experience between English-speaking American students and Spanish-speaking students from La Rioja, so that they make use of their native language competence and their knowledge of the editing and quoting conventions in their respective academia to help their counterparts improve their academic writings.

2 ANTECEDENTS AND JUSTIFICATION OF THE PROJECT

The implementation of Google Docs for the purpose of carrying out collaborative projects and essays by university students has been explored within the context of students belonging to one specific level and/or degree, usually within the scope of one institution (Delgado and Casado, 2011). To the best of our knowledge, however, there are no documented studies about the potential of use of Google Docs in the context of collaborative educational projects that go beyond single groups. In this connection, given its virtual nature and the software ease of access from virtually any country in the world, it seems interesting to explore its advantages in relation to educative projects based on collaborative work between students of diverse degrees, educational institutions and countries.

Peer-tutoring is a didactic tool based on a collaborative methodology. It is meant to be used with students with a similar level of academic achievement and parallel learning interests, but also displaying different specialization profiles, in such a way that the knowledge of some of them could be of use to the others and viceversa (see a detailed description of the potentialities of this didactic tool below in the section devoted to the methodology of the project).

The use of this methodological tool between undergraduates students of a similar level of educational achievement, but belonging to two different countries, and with two different cultures and languages in connection with technological resources like Google Docs and Celly@ has not been explored to date. For this reason, it seems justified to carry out this project, whose general aim is to assess the strengths and weaknesses of the combined use of these methodological and technological resources.

As far as students are concerned, further justification for the project lies on the:

- 1 the need to provide students with a system of peer-tutoring which complements the traditional (both physical and online) teacher-student tutoring schedule, in order to enhance their chance to improve their writing and editing skills in a second language.
- 2 the need to offer students an international learning context, which should be autonomous and proactive, in which they can develop a number of general and specific competences of relevance to undergraduate students, including the following:
 - Ability to adapt to new learning contexts.
 - Ability to apply theoretical knowledge to specific real world situations.
 - Ability to carry out autonomous learning.
 - Ability to plan and manage study time autonomously
 - Ability to understand and respect other cultures.
- 3 the need to offer the students of the Universities of La Rioja and Pennsylvania State University the chance to establish a virtual exchange with each other, so that they can take advantage of each others competence as native speakers of Spanish and English, respectively, to improve their essay writing in a second language. This is expected to allow students to develop the following specific competences:
 - Ability to communicate and explain the knowledge they have acquired in relation to the second languages that are the object of their study.
 - Ability to received, understand, and communicate their scientific and academic production in a second language.
 - Ability to analyze and summarize information in a second language.
 - Ability to make use of specific technological and computer resources for text editing.
 - Writing ability in a second language.
 - Ability to write texts of different types in a second language with linguistic correction and structural coherence
 - Ability to use software specifically designed to ease the learning, teaching, and assessment of a second language, language translation, text analysis and text editing.
- 4 the need to develop the students basic competences required by a professional context: ability to coordinate themselves with specialists from other institutions, use of computer software and mobile applications, autonomous and collaborative work ability, etc.

In the present context of education, the project finds justification in:

- 1 the need to assess new experimental teaching strategies based on the combined use of peer-tutoring and technological resources (e.g. Google Docs, Celly@)
- 2 the need to integrate the use of information technologies (Internet, Google docs, mobile apps) in the learning and teaching processes.
- 3 the need to explore the benefits and shortcomings of the use of some e-learning tools (mobile app Celly and collaborative editing tools) in the process of learning a second language.
- 4 the need to promote the creation of international interdisciplinary research groups which analyze new teaching strategies and learning models from different perspectives, as well as new learning experiences which bring the students closer to professional settings. For this reason, the present project incorporates researchers from three different universities (University of La Rioja, Pennsylvania State University, and University of Toulouse II-Le Mirail).

3 OBJECTIVES

The main objective of the present project consists in exploring the potentiality of the use of mobile applications (i.e. Celly@ [<https://cel.ly/education>]) and online collaborative editing free software (i.e. Google Docs) with a view to improve the writing and editing process of essays in a second language by undergraduate students of the University of La Rioja (Spain) and Pennsylvania State University (USA).

In order to do so, we shall carry out an experimental project with a limited number of students (5 North American and 5 Spanish students), who will be evaluated at the end of the academic year in order to assess the benefits brought about by the didactic and methodological actions implemented during the project. In particular, it will be assessed whether these actions result in an increase in the quality of the linguistic and editing aspects of the participant students' essays in a second language. Additionally, we will also assess their degree of satisfaction and subjective perception of learning achievement.

This general objective translates into the following specific aims:

- 1 to make it possible for the participating students to establish a regular academic rapport with their matching pairs in a foreign country, supervising and teaching them how to connect via Celly and to plan their online collaborative work on Google Docs.
- 2 to encourage the participating students to make use of both English and Spanish in their interaction, so that they can profit from the chance to practice and improve their fluency in their second languages.
- 3 to make students aware of their counterparts' mistakes in their writings in a second language. Observing the linguistic mistakes of their counterparts in a second language will allow them to discover the most common mistakes made by second language learners of their own native language, which in turn will also allow them to realize which are those areas of grammar and vocabulary in which the two languages differ (e.g. false friends, grammatical constructions specific to just one of the two languages, etc.). This should help them to improve their own competence in a second language.
- 4 to create the appropriate virtual context for participant students of both universities to compare the requirements that each institution/country establishes in relation to (1) formal presentation of essays, (2) plagiarism in academic writings, (3) the editing of academic texts, (4) referencing, and (5) required linguistic correction in undergraduate academic writings.

Getting to know first hand the conventions followed by other academic institutions in other countries should come as useful information to last year undergraduate students who will soon enter a global professional context or a research programme in a different university/country.

4 METHODOLOGY

The methodology chosen for this project hinges on two main fundamental pivots: a system of peer-tutoring and the use of free technological, mobile, and online collaborative applications and tools.

Peer-tutoring is a teaching methodology in which students take on the role of tutoring their own classmates (Boud, Cohen y Sampon, 2005; Gordon, 2005). In order for peer-tutoring to be effective, it is necessary that those students who take on the role of tutors are in possession of some type of

specialized or higher-order knowledge that can be of use to the academic development of the rest of the students.

In the present project, we shall be matching Spanish students of English as a second language with North American English-speaking students of Spanish as a second language, so that each of the students who makes up a pair are native speakers (L1) of the language which his/her counterpart is learning as a second language (L2). This symbiosis should help them support each other to solve linguistic doubts about their respective academic writings and essays, as well as to correct the mistakes which they may make in their L2.

Simultaneously, both students within each pair are aware of the requirements about formal academic writing, editing and text formatting in their respective academic contexts, and are also familiar with the requirements related to the expected quality of academic writing and plagiarism at work in their institutions. Students will thus be able to compare the requirements about this general aspects of academic writing that are at work in their respective countries and/or universities.

As pointed out by Piqué y Forés (2012: 30), peer-tutoring requires that the students adopt an active role as far as decision-making and collaborative work with their peers are concerned. In addition to this, peer-tutoring, according to the aforementioned authors, helps to develop the students ability to work in a group, to build up their mutual trust, and to understand the benefits of collaborative work. It therefore contributes to the shared construction of knowledge through a democratic, supportive, and at the same time autonomous behaviour in the development of their own learning process.

The present project combines the methodological technique of peer-tutoring with the use of mobile devices, and specific software and applications belonging to the realm of Mobile Learning and E-learning. More specifically, we shall make use of an academic mobile application (Celly@) and a free online software for the collaborative editing and creation of documents (Google Docs).

The mobile application Celly [<https://cel.ly/education>] has already been successfully assessed in relation to the performance of academic debates between students of diverse degrees in a previous innovation project (Pérez-Hernandez, 2015a, 2015b), which was carried out at the University of La Rioja during the academic year 2014-2015. In the present project, we shall make use of this mobile application with a different purpose in mind, namely, to provide the students from the distant universities of La Rioja (Spain) and Pennsylvania State University (USA) an inexpensive and effective communicative channel to get to know each other, in the first place, and to plan and organize their collaborative work meetings on Google Docs, in the second place.

The mobile application is available in Android and IOS versions. It is free for academic purposes and can be downloaded through Google Play or iTunes. It is similar to Whatsapp, but with some useful options for academic and teaching contexts. Thus, it allows supervision and moderation of the students communicative interactions by the teachers in charge. Teachers can, in this way, filter information and guide the students interactions towards a successful outcome.

In the present project, the use of this mobile application is expected to be intense at the beginning of the project, when it will be use to break the ice between the students from the two participating universities. Later on, it will also be of use to the students in order to plan and schedule their peer-tutoring meetings on Google Docs for the mutual revision and editing of their assignments in their respective second languages.

As far as teachers are concerned, Celly@ will also be used to send notifications to the students, to filter their interactions, and to supervise and guide their progress.

The free online software for collaborative writing and editing of texts provided by Google Docs will allow our students to simultaneously work online with their peers in the correction and improvement of their writing assignments in a second language. As pointed out by Leigh (2010), Google Docs makes it possible to work either simultaneously or asynchronously, which increases efficiency and facilitates communication between users living in different countries as is the case with the students participating in this project.

Google Docs allows two or more users to work online over the same document from distant places. It also allows them to make and save comments for their peers to read at a later time. The teachers can supervise their students work in real time, both passively, and also making interventions and suggestions if needed (Kieser y Ortiz-Golden, 2009).

The use of Google Docs as a collaborative learning tool in higher level education (undergraduate and postgraduate degrees) has already been amply documented, but the studies carried out so far have only explore the potentiality of this software in relation to groups of students belonging to the same level and/or degree, and studying within the same country/university (Delgado y Casado, 2012; Sanz Gil, 2013).

In the present project we set out to explore the benefits and shortcomings of the use of this software in order to promote collaborative work between groups of students from different degrees, universities and countries, thus making the most of the online nature of Google Docs. It is our objective, therefore, to carry out an innovative study of the potentiality of this type of virtual software in the task of transcending the physical and geographical barriers of traditional education.

A methodology based on the use of the aforementioned software and mobile applications is expected to have the following advantages:

- to allow the students to have instant access to the needed information, thus turning the acquisition of knowledge into a ubiquitous process which, far from being tied to the time spent in the educational institution, can take place everywhere and at any time. The learning process, therefore, is allowed to transcend the physical limits of a classroom (Geddes 2004).
- to allow students to take on an active role in the process of knowledge construction in order to be capable of generating a more spontaneous and contextualized learning.
- to allow universities and other types of educational institutions to connect their students with those of other foreign establishments, in a flexible manner free from time and space constraints, through the use of mobile technology and online software.

5 PLANNED ACTIONS

This section summarizes the actions that shall be carried out by the participants in the project throughout the academic year 2015-2016

5.1 Informative and organizing meetings

The following work meetings have been scheduled for the month of September 2106:

- a) During the first two weeks of September, the project participant members will gather to launch the project and to coordinate the actions and tasks that will be needed to secure that everything runs smoothly.

Those participant members who are external to the home-university (i.e. Dr. Karine Duvignau from the University of Toulouse II-Le Mirail) and Dr. Gloria B. Clark from Pennsylvania State University) will be able to attend these meetings via Skype or an equivalent video-conference application.

One of the most important actions that will be carried out in these initial meetings will be that of selecting the students who will be participating in the project. The selection criteria should guarantee that among the participants there are students with diverse capabilities and degrees of academic performance. This choice of students will later on make possible a finer grain analysis of results, and it will also allow the researchers to discern which students (low vs. high performing students) have benefitted the most from the methodological decision underlying the project and the technological resources that are the object of study.

- b) Two parallel informative meetings will be held in order to explain the objectives of the project to the participant students. Both of them will be held during the last two weeks of September 2015. One of them will be addressed to the students of Modern Languages and Business Administration degrees at the University of La Rioja, and the other to the students of Humanities degree at Pennsylvania State University.

5.2 Virtual workshops with the students participating in the project

During the month of October 2015 a series of online workshops will be addressed at the students who will be taking part in the project about

- a) the use of the mobile application Celly@
- b) the use of the text editing online software Google Docs.

These workshops will be completed with the necessary personal tutoring sessions by the participating professors at the University of La Rioja and Pennsylvania State University in order to solve doubts that may arise or problems that students may encounter in the initial phases of the project.

Brief tutorials about the use of Celly and Google Docs will be uploaded to a public folder in Google Docs for further details in case of need.

5.3 Launching of the project

During the month of November 2015, the participating students in both universities will be matched and put in contact with one another through the Celly@ app for mobiles.

One of the project participant members (Aneider Iza Erviti) will be in charge both of (1) offering some discussion topics that will help students break the ice and start interacting among them, and (2) supervising the exchange of messages at this initial stage to make sure that a context of communication, trust and compromise is promoted among the participants in the project.

These initial debates will also be directed to solving doubts that students may have about their role in the project, the tasks they should carry out and other related aspects which may be of interest to them at this stage.

5.4 Development of the online collaborative work between peers

From December 2015 to April 2016 the matched pairs of students from the University of La Rioja and Pennsylvania State University will pursue online collaboration through Google Docs.

Each pair of students will tutor each other in the correction, editing and formatting of their written assignments in a second language. Simultaneously, their work will be supervised and monitored by the participant members of the project on a daily basis. Professors will be able to monitorize their students work on Google Docs. This monitorization will be carried out latently. Intervention will only occur in those cases in which students are not performing their tutor-roles correctly or in case further correction of mistakes of the written productions were needed.

Otherwise, the students will be allowed a high degree of autonomy in their learning process.

5.5 Analysis

During the month of May 2016, the members of the project will assess the results in relation to the learning objectives and the degree of satisfaction of the participating students.

This assessment will be carried out by comparing the linguistic and formal quality of the written assignments of two groups of students, namely, those who have taken part in the project, and a different control group of students who have not participated in it.

We shall also carry out initial and final surveys among the students in order to assess their degree of satisfaction with the peer-tutoring experiment, and the degree to which they have found this strategy useful in their learning process.

5.6 Summary of planned actions

September 2015 (first two weeks)	Coordination meeting via Skype with all participating members. Selection of participating students.
September 2015 (last two weeks)	Informative meeting with participating students
October 2015	Online workshop about the use of the mobile app Celly@ and the online editing and writing software Google Docs.
November 2015	Launching of the project. Students will be matched and put in contact through Celly@ Discussion sessions through Celly@
December 2015- April 2016	Online collaborative work by the matched pairs of American-Spanish students through Google Docs Monitorization of students work by the members of the project.
May 2016	Analysis and assessment of results

5.7 Summary of planned actions

It is expected that the tools and didactic strategies implemented in the present project will yield the following main results:

- 1 An improvement in the linguistic and editing quality of the written assignments in a second language produced by the students participating in the project. This improvement will be assessed by comparing the written productions of the group of participating students with those of a control group of students.
- 2 A relevant increase in the students' assimilation of basic competences, both technological (use of mobile applications), communicative (students' ability to explain and communicate concepts and ideas in a second language), and professional (students' ability to coordinate themselves with colleagues from different institutions to carry out a common project). These aspects will be evaluated by means of specific surveys which will be given to the students who have taken active part in the project.
- 3 An increase in the degree of implication and motivation of the students in their own learning process. This aspect will be assessed by monitorizing their frequency of use of the Google Docs software throughout the project.

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REFERENCES

- [1] Boud, D., Cohen, R. y J. Sampon. (2005). *Peer learning in higher education*. London: Routledge.
- [2] Delgado, V. y R. Casado. (2012). Google Docs: Una experiencia de trabajo colaborativo en la universidad. *Enseñanza & Teaching* 30, pp. 159-180.
- [3] Geddes, B.J. (2004). Mobile Learning in the 21st Century: benefit for learners. *Knowledge Tree e-Journal* 6.
- [4] Gordon, E. (2005). *Peer tutoring: a teachers' resource guide*. Oxford: R & L Education.

- [5] Kieser, A. L. y Ortiz-Golden, F. (2009). Using Online Office Applications: Collaboration Tools for Learning. *Distance Learning* 6, pp. 41-46.
- [6] Leigh, T. (2010). Wiki, Wiki, Wiki—WHAT? Assessing Online Collaborative Writing. *English Journal* 99(5), pp. 40-46.
- [7] Pérez-Hernández, L. (2015a). Celly@ y la enseñanza de modelos metafóricos en nivel avanzado. Proceedings of the IKASNABAR Conference. University of the Basque Country. June 2105, 26-41.
- [8] Pérez-Hernández, L. (2015b). Mobile learning for the teaching of theoretical concepts to undergraduate students. Proceedings of the 7th International Conference on Computer Supported Education (CSEDU-2015), pages 540-545
- [9] Piqué, B y A. Forés. (2012). *Propuestas metodológicas para la educación superior. Entorns i Materials per l'aprenentatge*. Universidad de Barcelona.
- [10] Sanz Gil, J.J. (2013). Construcción colaborativa del aprendizaje y del conocimiento mediante Google Docs en el ámbito de la Educación Superior Universitaria. *Revista de Formación e Innovación Educativa Universitaria* 6(2), pp. 109-119.