# How working collaboratively with technology can foster a creative learning environment

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#### **Abstract**

Research has shown that collaborative learning is a very powerful methodology as it ensures interaction among students, humanises the learning process and has positive effects on academic achievement. An activity based on this approach can also benefit from the use of technology, making this task more appealing to our students today. The aim of this paper is to present a project which combines both ingredients so as to develop a successful creative learning environment. The project we are talking about is called PopuLLar², a European Union funded innovative educational project designed to harness music and Information and Communications Technology (ICT), the primary social interests of youngsters, into their language learning. The paper will describe the project goals together with the methodology and results obtained in the initial piloting of the project carried out in Spain before being launched around Europe.

Keywords: ICT, music, language learning, writing lyrics, videos, cooperative work, creativity.

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<sup>2.</sup> Parts of this article were used in a written report written by the author and sent to the European Commission at the end of the PopuLLar project. Although the report was intended for internal use and never published, it can be found online at the following address: http://popullar.eu/files/DLV-25\_Annex-a--6-Best-Practice-Case-Study-Report.pdf?&session-id=51f a21504bb360e2cbadd7b186ef260e

# 1. Introduction and background to the project

New research findings show that students are motivated when they feel in control of their learning, that they are learning something which is relevant to their lives, connected with others and that the activities they are doing are interesting and fun (Biggs, 1995; McCombs, 1994). Thus, as Deci and Ryan (1991) noted, knowing how to meet the individual needs of each student for control, competence, and belonging in the classroom is the key to unlocking students' motivation to learn.

PopuLLar: Motivating Secondary School Students to Learn Language with Relevant Media (Ref. EU Project PopuLLar 518346-LLP-1-2011-1-UK-COMENIUS-CMP) is a European Union funded project in which seven educational institutions – The Mosaic Art And Sound (UK), Pelikan Language School (Czeck Republic), Cukurova University (Turkey), Kulturring in Berlin (Germany), Kindersite (UK), Opera Bazar (Italy) and University of Valladolid (Spain) – have been working together in an innovative educational project designed to harness music and ICT into language learning.

The idea and methodology behind the PopuLLar project is simple, but it has proved to be very powerful and motivating at the same time. Thus, students work autonomously and collaboratively on the melody of the song of their choice and create new lyrics both in their mother tongue (L1) and in a foreign language (L2). Then they record their final products as a video and/or as audio files and upload their productions in the project Wiki<sup>3</sup> so that students from all around Europe can see their work and interact with each other on the forum available or the Facebook group<sup>4</sup>.

A step further, students from other countries take these songs and translate them into their L1, so that the same song can have different language versions sung in different European languages, therefore making the project a multilingual and multicultural experience.

<sup>3.</sup> http://popullar.wikispaces.com/

<sup>4.</sup> https://www.facebook.com/PopuLLar.Music.and.Languages

Working with popular songs and ICT, especially Web 2.0 tools, fulfils all of the above mentioned requirements for engaging students and foster their motivation: they are interested in songs and technologies and they work independently of the teacher in groups. This fosters collaboration and autonomy, builds wholesome social connections, and helps students to use an L2 in a real context. As they work in groups, they are responsible for their own project and they are fully in control of the shape of the final outcomes, being the ones who 'own' the project from the very beginning; they can work on their own by using the materials and guidelines available online.

Considering all these issues, we can say that the project supports research done so far which accounts for the positive effects of using music (cf. Sposet, 2008; Taglialatela, 2012), ICT (cf. Prensky, 2001; Wang, 2005), and new technologies to foster cooperative work for language learning (cf. Carrió, 2007). But the project goes beyond this; the most important goals of the PopuLLar project are: (i) to help students to combine their love of music with creativity, literacy, digital competencies, group collaboration and use of foreign languages through creative writing in an L2; (ii) to enhance the ability of young European students to apply creative thinking, curiosity and enquiry, social and communications skills, and achieve a positive change through innovative approaches to teaching; and (iii) to ultimately promote language learning together with linguistic and cultural diversity.

The project partners have created a set of materials, to be used by both teachers and students, which are available for free in six languages on the project website www.popullar.eu. These include printable, interactive and video guides that explain how to develop the project step by step:

- Teachers'materials: http://www.popullar.eu/teacher-materials.html
- Students' materials: http://www.popullar.eu/student-materials.html
- Video guide (set of 12 how to videos describing the different steps and activities for the project): http://www.popullar.eu/video-guide.html

Before the project was launched around Europe, it went through an initial piloting phase in six different countries, and Spain played a key role in this phase and the development of the large-scale piloting, as we will analyse in detail in the following sections.

# 2. The piloting of the project:research methods

The partners from the project – experts in the fields of language education, music, ICT and video production – have been working on the development of the materials for the project for over a year, after which time, these materials were piloted. The piloting phase was crucial as it is a way to test the sustainability of the project materials for the target groups, to receive feedback for improving the materials and to gain experience for the long-term implementation of the project.

Figure 1. Pictures from Spanish students participating in the initial piloting



This initial piloting (also called small-scale piloting) was carried out in the school Nuestra Señora del Pilar in Soria (Spain) and in five other schools around Europe which correspond to the partners' countries.

The piloting period started in October 2012 and finished in May 2013. It was a complex and long piloting as this phase was crucial for the success of the project, but the methodology used gave light to improve some aspects of the project and was the first chance we had to confirm our hypothesis, i.e. that the use of music, ICT and cooperative work can definitely foster a creative learning environment and therefore has positive effects on language learning.

The methodology used to carry out the observations for our piloting process was varied, as will be explained below, and it was implemented in the same way in the six different European schools.

#### 2.1. Questionnaires for students and teachers

Students' and teachers' questionnaires, prepared within the PopuLLar set of pedagogical materials, reflect the students and teachers perspective towards the project, the materials and the implementation in their classes.

The questionnaires were divided into a pre-questionnaire (before the beginning of the experience), including information on the expectations of the students and teachers about the proposed new approach to learning, and a post-questionnaire (after the end of the activitie), where they could reflect on the process, results and compare them with their expectations. Google Forms was used for this task and the links are the following:

- Students' pre-questionnaire: http://tinyurl.com/d3hkpo7
- Students' post-questionnaire: http://tinyurl.com/cd75fm3
- Teachers' pre-questionnaire: http://tinyurl.com/cw2h8kz
- Teachers' post-questionnaire: http://tinyurl.com/cwcqf39

After all the participants filled the questionnaires, a summary of the answers was created using the application available on Google Forms to this effect, and

results (statistics, opinions, graphs) were analysed accordingly. Both closed and open questions gave the project team very useful information to reflect on possible changes for the large-scale piloting.

#### 2.2. Observations

Before meeting the students and the teachers, we had prepared a series of questions and descriptions of situations to observe during the initial piloting. Moreover, a logbook was created on Google Drive, so as to gather all the information and coordinate the work, tasks to do, meetings, visits, comments, etc. with the participants. This document was very useful as it allowed us to work very effectively, do a closer and more efficient follow up and have everything centralised in one single document. On top of that, several visits were paid to the schools in order to feel and be immersed in the process of this initial piloting phase.

#### 2.3. Interviews

Informal interviews were arranged with students and teachers to clarify and illustrate some answers from the questionnaires, get a deeper knowledge of specific points which needed further explanation, etc. Questions to be asked were sent to the respondents beforehand so that they could prepare them in advance, and the information obtained here was very useful, especially to understand the implementation of the project in a real situation.

## 2.4. Filming

We filmed part of the experience carried out during our visits to highlight important aspects of the students' performances. We recorded the students working in groups and some of the interviews in which participating students and teachers share their experience in working in the project<sup>5</sup>.

 $<sup>5.\</sup> http://www.youtube.com/watch?v=XfmaX\_v\_H20$ 



Figure 2. Filming in the piloting school

## 2.5. Review of students' video clips

The important milestones for students regarding the development of the project are their final productions: video clips showing the performance of the song with their own lyrics.

The project team used the following criteria to analyse the students' video clips: (i) do students get to match their lyrics with the rhythm, melodies and timing of the instrumental part?; (ii) do students work collaboratively as a team?; (iii) do the L1 and the L2 version of the lyrics show a similar level of quality?; (iv) do students show motivation and enthusiasm while working in the project?; (v) are students familiar with ICT, especially with the use of Web 2.0 tools?; and (vi) does the final project (lyrics writing, video/audio recording/editing) show a high level of creativity?

## 3. Findings

The initial piloting proved that the PopuLLar project is an excellent way to motivate students to learn and practice languages in a real context, develop their

IT skills, trigger their creativity and promote teamwork, something which has also been supported later on in the large-scale piloting.

During the initial piloting in Spain, there were eleven students – 8 girls and 3 boys – aged between 12 and 17, and three teachers – English teacher plus two Content and Language Integrated Learning (CLIL) teachers – on board. Results from the questionnaires, interviews and observations showed that they liked languages and they also loved music, as most of them either played instruments or sang in the school chorus. Regarding the use of ICT, they felt confident when using the Internet and new technologies, especially Web 2.0 tools. They had positive expectations for the project and thought it would be fun, but there were different opinions as to whether it would be difficult or not.

On top of practising foreign languages, working with new technologies and using their music skills, they thought from the very beginning that the PopuLLar project would give them the chance to work with their peers, get in contact with other countries, meet new people and have fun, overall accomplished by the end.

After the piloting<sup>6</sup> was finished, they realised all their expectations had been fully and successfully achieved, both from the students' and teachers' perspectives:

- Teachers invited students in the school to participate in the piloting and a team was created with volunteers.
- Instead of choosing a song, they created their own musical theme and played instruments, a new challenge they dared face, which was their own initiative
- They wrote the lyrics for their song in Spanish (L1).

<sup>6.</sup> The Spanish school participating in the initial piloting carried out all the different steps from the project, which are described below, and can be viewed in the PopuLLar project wiki at http://popullar.wikispaces.com/Nuestra\_Se%C3%B1ora\_del\_Pilar

- They recorded themselves singing their song and edited two different videos: (i) http://www.youtube.com/watch?v=vhP8P34GIMA; and (ii) http://www.youtube.com/watch?v=vv4vPAQmFxc.
- They translated their song into English, the main L2 they were learning.
- They video recorded themselves singing their song in English: http://www.youtube.com/watch?v=n65a9djuA6U.
- They shared their recording through the project wiki and got very active
  in the forum, sharing multiple messages with students and teachers
  from all over Europe (this information can be checked at http://tinyurl.
  com/n5b6sru).
- They chose a song created by the Italian school -the partner school for the piloting- and translated the song from English into Spanish.
- They used their instruments to play this new song, did the recording in Spanish, and created a video clip with the new song: http://www.youtube.com/watch?v=Jyai3os4rbc.

Images and videos are very illustrative and are worth a thousand words, so in the following videos we can see (i) an interview with students participating in the piloting process talking about their positive experience while working on the project<sup>7</sup>; (ii) students being interviewed by journalists on the news<sup>8</sup>; and (iii) official launch of the PopuLLar Project in Spain – after the piloting was over – with interviews of teachers and students participating in the project<sup>9</sup>.

As well as the powerful and illustrative messages we get from the previous videos, we can also say that through the pre- and post-questionnaires, plus

<sup>7.</sup> http://www.youtube.com/watch?v=XfmaX v H20

<sup>8.</sup> http://www.youtube.com/watch?v=UaxrTfKo1kk

<sup>9.</sup> http://www.youtube.com/watch?v=frk1jhsNCNs

several interviews carried out during different visits we did at the school during the piloting phase, we could see and feel how enthusiastic the students were with this project from the very beginning to the very end, and how they encouraged other students to take part. They loved the project: creating the lyrics, playing their instruments for an original song, and especially watching other students singing the song they had created in other EU languages, which made them feel really special:

- Italian (http://www.youtube.com/watch?v=8vhcU3bzYd4);
- Norwegian (http://popullar.wikispaces.com/Tromso);
- Basque (http://www.youtube.com/watch?v=gtxyni4HtQ8); and
- Arabic (http://popullar.wikispaces.com/Redzek).

Figure 3. Feedback videos



The initial piloting in Spain got a big coverage in the press, with many pieces of news on the printed and digital press, TV and radio about the project and also about the excellent results from the piloting. All the different publications have been collected in the following online document: http://tinyurl.com/n9sxjuv.

## 4. Conclusions

The initial piloting phase has been very beneficial for the project, as we could test the materials with different schools around Europe and get very useful feedback to improve it before the large-scale piloting.

Students and teachers participating in the piloting process in Spain were really involved and pleased to know that they were the first group participating in their country and that they would be role models for other European students. That is why they put a lot of enthusiasm and hard work on this process, did their best and the final products they created were very good for the project, for dissemination purposes and for reference. This school was chosen as an example of good practice, as it can be seen at https://www.youtube.com/watch?v=ZnyOxSJ-F9g and http://www.youtube.com/watch?v=7u120FsYnGI.

The results obtained went beyond our expectations, first because they created their own melody and played their own music (something which was not a requirement and implied harder work), and also because they created several very interesting feedback videos where they share their experiences and tips with students from all around Europe.

The success of the initial piloting was even bigger for the large-scale piloting, as Spain has been the country with the most schools participating in the project – up to 65 –, and the quality, variety and creativity of the videos created have surpassed the partners' expectations.

After a close follow up of the whole process, not only through the initial piloting phase but also through the large-scale piloting which started after May 2013, my experience as a project coordinator in Spain is that the best way to approach students to become involved in the project is to show them that the goal is not to become an expert in music or languages, but to be creative and have fun. After this, language learning and language practice will flow automatically. It is also very important to show students that they play a crucial role in the project, that they own it, that they can work on their own, and that they can challenge

themselves to create something new and original with freedom in their choices, showing them the powerful meaning behind the word TEAM (together each achieves more).

As a final conclusion, and after the huge success and excellent feedback from all the European students participating in it, we can conclude that the idea behind the PopuLLar project is very simple but extremely powerful. It is full of energy, enthusiasm and group work, so it goes beyond language learning and offers students a very humanistic approach to teamwork and creativity, therefore something definitely worth considering for any teacher who is after a successful new learning experience.

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