

Sustainable development goals in the English classroom: Tell me a different story

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Introducción

This study aims to present the results of the pilot project STOIRES+i3, an action research that infuses the sustainable development goals (SDGs) of the United Nations' Agenda 2030 into academics and the teacher training curriculum, via active methodologies (Project-Based Learning, PBL; and Research-Based Learning, RBL, mainly) and with storytelling as backbone. The project was developed by the five professors in the Foreign Language (FL) Minor of the Faculty of Education of Bilbao at the University of the Basque Country (UPV/EHU). The participants were undergraduates who were given the task of carrying out research to develop a collection of didactic resources and to produce a storytelling video to present it to the faculty in a poster session. The teaching methodology involved an introductory workshop by experts on the field and RBL activities through the seminars of the subjects, with emphasis on academic oral/written communication. Results of the students' evaluation evidence the irrefutable benefits of the project for their learning process, as reflected by their increased awareness and motivation to work on the SDGs; a higher developed competence to select, design and implement didactic resources and techniques; the notable improvement of their communicative competence in English and French; and the gaining of higher-order skills such as critical thinking, creativity or team work, among others.

State of the question

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This pilot project emerged from the need to adapt the syllabus of the FL Minor to respond to a series of educational needs that stem from the current educational context. Thus, in line with the UPV/EHU's (2010) IKD+i3 strategy, the project seeks to promote research, sustainability, and innovative and cooperative learning.

Integrating sustainability in the trainee teachers' syllabus is essential, since, as educators of future generations, they play a crucial role in ensuring inclusive, equitable and quality education and promoting lifelong learning opportunities for all (SDG 4, United Nations, 2015). In order to do so, it is fundamental to raise our undergraduates' awareness of the relevance of integrating the SDGs into the syllabus, and to equip them with effective methodological strategies (Conference of Rectors of Spanish Universities, CRUE, 2012).

One such strategy is storytelling, which was agreed on to serve as the axis of this project. Storytelling reveals profitable not only in terms of effective and attractive EFL teaching (Barreras Gómez, 2010; Dahlstrom, 2014; Ellis & Brewster, 1991; Fitzgibbon & Wilhelm, 1998), but also to promote young learners' social and emotional development (Dujmović, 2006; Ellis & Brewster, 1991), as well as competencies related to sustainability (Fischer et al., 2020) and multiculturalism (Hines, 1995).

In accordance with the university's commitment with active methodologies, we opted for two complementary teaching methods to serve as methodological platforms of the project: PBL and RBL. PBL can be defined by learners planning and designing projects that are to be implemented in a real context (Blank, 1997). This provides a learning experience that involves students into "solving real problems through asking and refining questions, designing and conducting investigations, gathering, analysing, and interpreting information and data, drawing conclusions, and reporting findings" (Blumenfeld et al., 2000, p.150). Similarly, RBL provides inquiry-based learning contexts that require designing and carrying out research (Griffiths, 2004). Through inquiry activities, students construct their knowledge actively to achieve the desired learning outcomes, and in doing so they develop higher-order skills such as critical thinking, which are considered essential to respond to the challenges of 21st century society (Frydenberg & Andone, 2011). Both methods share the principle of collaboratively working towards an end product (Lambert, 2009), be that in the form of educational interventions or academic texts, which would ultimately help engage undergraduates in the research culture of academia and in the project.

Methodology

Objectives

To respond to the above-mentioned educational needs, the project devised several objectives, all of them related to the SDGs.

First, we aim to promote quality education (SDG 4) for the prospective FL teachers of

primary and infant education; that is, students enrolled in the FL Minor are taught on how to integrate the SDGs in their teaching proposals. Particularly, by means of innovative methodologies, such as RBL and PBL, the students of the Minor will see their learning process transformed, which will be reflected in their proposals for each of the courses in the Minor.

Secondly, and in line with the first goal, we intend to reach a compromise of the prospective FL teachers with the SDGs. This is materialised in the students' selecting SDGs as the topic of their stories collection and their teaching proposals.

The third goal is to develop the multilingual and intercultural competence of the students participating in the project, which stands as SDG 18 at the UPV/EHU². The students' academic oral and written skills will be specifically fostered throughout the linguistic subjects to respond to the various challenges of the project: the elaboration of an academic report, the presentation of a poster reflecting the final product of their research, and the production of a storytelling video. Students are also expected to develop their metalinguistic and interlinguistic awareness by subsequently drawing their attention to formal linguistic aspects of the FL (Lightbown & Spada, 1999; Wright & Bolitho, 1993; among others), while analysing and diagnosing their oral production in the former tasks. Additionally, they will receive instruction by experts on interculturality and diversity to address the inclusion of cultural diversity in their collections.

Finally, our last objective is to develop those transversal competencies of the trainee FL teachers (SDG 4) relevant in their future profession, such as social compromise, team work, and critical thinking.

Context and sample

The present action research was contextualised in the Faculty of Education of Bilbao, in the Basque Autonomous Community (BAC). The selected sample for the development of this project was the intact class of the FL Minor, a total of 45 students in the 4th academic year of the Degrees of Primary and Infant Education (mean age= 21.4) who carried out the tasks assigned and participated in the research by expressing their perspectives through the following instruments.

Instruments

To perform the needs analysis for the years to come and to evaluate the learning outcomes of the pilot project implemented in the 2021-2022 academic year two main tools have been designed. On the one hand, a survey based research with quantitative and descriptive questions has been arranged. The questionnaire consisted in a Likert-scale based rating system where students were asked to self-evaluate their learning outcomes and their

² The 18th goal (or 17+1) is part of a programme for linguistic and cultural diversity organised by the UPV/EHU and the UNESCO Chair of World Language Heritage (cf. Idiazabal Gorrotxategi & Pérez-Cauel, 2019).

perceptions on the project using 14 questions, plus one last general open question to make further remarks. On the other hand, a focus group was organised to gather information in a semi-structured interview where a selected group of students talked with the professors in an amiable environment.

Data collection and analysis

The procedure followed to collect the data was to administer the questionnaire after all the tasks had been completed and graded. The students were given 10 minutes to complete the online questionnaire during one lesson with one of the professors of the Minor. Then, the qualitative results were tallied and means and standard deviations were calculated.

As for the focus group, nine students were selected to represent each of the teams in the class. Criteria for selection was decided by the professors in terms of communicative competence and degree of implication in the courses. The students were gathered during the exams period and three of the professors were present to guide the conversation. Based on the instrument developed by the Quality Commission of the Faculty, a data collection tool was created. The professors took notes of the conversation. Besides, the interaction was audio-recorded and transcribed to better analyse the nuances of the students' perspectives, which are presented in the following section.

Results

In what follows, we present the results of the questionnaire and the semi-structured interview concerning the students' perceptions about the project.

Table 1 shows the results of the survey for each of the items in the questionnaire completed by a total of 34 students.

Table 1- Rating of students' perception of learning outcomes

	Average	Standard Deviation
1- Before participating in the project I was able to work on SDGs through storytelling.	2.74	1.17
2- After participating in the project I am able to work on SDGs through storytelling.	4.47	0.70
3- I have acquired skills related to academic research.	4.15	0.71
4- I have developed skills to select suitable texts, stories and picturebooks.	4.26	0.62
5- The stories collection and the materials will be of use in	4.32	0.61

my near future.		
6- The project has made me aware of the relevance of using stories.	4.35	0.62
7- While participating in the project I have learnt about varied techniques to use stories.	4.24	0.68
8- The project has been useful to learn how to integrate contents and competences in storytelling teaching activities.	4.26	0.83
9- The project has been useful to develop my foreign language skills .	3.94	1.10
10- J'ai amélioré ma prononciation du français.	3.68	1.05
11- I have improved my pronunciation in English.	3.88	0.78
12- The project has been useful to develop my teaching skills.	3.82	0.82
13- The project stands as an appropriate platform to connect and apply the content of the five courses.	3.85	0.77
14- The workshop has made a positive contribution.	3.82	0.63

The next lines will analyse the responses of the convenient sample.

To begin with, the average reported value for all the items is 4.08, which strongly suggests that students evaluate the project positively as a whole. Participating in the experience has brought about an average increase of 1.74 points in the students' perception of their abilities to work on SDGs in the FL classroom through the storytelling technique. Interestingly, the next items in the highest-rated ranking are the ones related to the relevance of using picturebooks and stories in the classroom (4.35) and to the usability of the collection of stories, picturebooks and materials in their near future (4.32). Regarding the integration of contents and competencies in storytelling, teaching results show that students perceived the project as useful in this aspect too (4.26).

As to the development of skills related to academic research, e.g. academic poster and papers, the assessment is 4.15, which means that the experience is considered appropriate also for this purpose. Results also show a positive perception of the improvement in FL skills, specifically oral, and in the development of teaching skills, where the valuations range between 3.82 and 3.94.

Even if the integration of subjects is also positively assessed, results seem to indicate that some improvements could be made with respect to French skills. It is not surprising that the evaluation of this particular item, while still high (3.68), is considerably lower than the rest, considering the difference in the level and amount of hours devoted to each of the FLs³.

Regarding the content of the workshop organised to offer them training for the project, it

³ Students take 6 ECTCs in French, starting at level A1, and 30 ECT in English, starting at B2.

seems clear that these sessions have contributed to the project from the students' perspective (3.82) and that the workshop is an effective way to enhance students' awareness of the topic of SDGs, as well as to acquire knowledge and competences related to interculturality, inclusion and diversity.

Concerning the feedback provided by the focus group, the students overall manifested considerable satisfaction with both the results and the process of the project, although they also mentioned some points susceptible for improvement. For example, in relation to SDGs, students believed to have gained knowledge and competences to integrate these in education. However, they suggested focusing narrowly on just a few of them.

As to the didactic competences, they mentioned that some contents were overlapped and that techniques other than storytelling could have been integrated, but they considered really valuable the fact that they had learned about useful FL teaching methodologies, scaffolding techniques and strategies to select and design resources. Regarding the multilingual competence, students were aware of their great progress in their pronunciation in English (and to a lesser extent in French) as well as their development of oral and written communication skills, especially in academic contexts. Transversal competences were also perceived to have been acquired, and students mentioned critical thinking, cooperative work, creativity, problem-solving abilities and digital competence as having been practised and developed through the different tasks.

As in the questionnaire, students also reported the workshop to have been interesting and useful, the same as the seminars and the elaboration of a storytelling video. The poster session was believed to have provided them with professional skills and self-confidence, besides the linguistic and teaching competences aforementioned. Finally, they highlighted three main strong points of the project: the interdisciplinarity, the link to reality, and its usefulness and they suggested that the organisation and timing of tasks could be improved.

Discussion and conclusions

The overall conclusion to be drawn from the results of the evaluation of both the questionnaire and the focus group interview is that students' perceptions of learning match the objectives established for this pilot project.

Regarding the first objective, to promote quality education, the highly positive evaluation of the participants highlights the effectiveness of using active methodologies (PBL and RBL) to engage students in a challenging and meaningful context-specific learning experience, in which they respond to real-word questions and problems by mobilising content and competences of the courses of the FL Minor.

As for the second objective, to raise students' compromise with the SDGs, not only have students manifested an added interest and ability to work on the SDGs, but also an increased knowledge of the existing didactic resources and techniques (storytelling) to integrate these in their classroom practice, as well as of the relevant criteria to select and adapt these to particular teaching contexts.

Moreover, the students' positive self-perception concerning, on the one hand, their development of their academic oral and written communication skills, and on the other

hand, their alleged improvement in pronunciation, is also to be taken as an indication of their increased multilingual competence.

In the students' view, the last objective of the project, to develop transversal competences, was also successfully accomplished, inasmuch as they believe to have acquired abilities to work collaboratively in problem-solving activities, to have developed critical thinking and creativity, and to have gained better digital competence.

As future considerations, we regard it essential to continue improving the coordination of the professors involved in the project so as to avoid overlapping, and to guarantee the optimisation of time and resources to prevent work overload of both students and teachers. We also consider it crucial to reflect on better ways of integrating French and to overcome the difficulties posed by the difference of level between the two FLs.

We would also like to extend the scope of the project, by having students take part in the school projects within the Agenda 2030 during their internship in the placement, and developing specific didactic contributions on sustainability through their end-of-degree projects. These future goals are expected to be pursued thanks to the instruction and funding recently granted by the educational consulting service of the UPV/EHU for the academic year 2022-23 (project i3kd22-35).

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