Raising environmental awareness in an English language classroom via WebQuest

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Abstract

The present paper delves into the creation of an English language lesson that promotes environmental awareness and enhances the reading skill via WebQuest.

The sixth graders of a Greek state primary school read an article about Dian Fossey in their English language classroom, where English is taught as a Foreign Language (TEFL). They were emotionally affected by the fact that Fossey had devoted her life to the protection of mountain gorillas in South Africa, and they wondered if there was a way to help these animals despite living in a faraway country. The emotional impact of the article, along with the students' poor reading skill in the English language and the need for the promotion of digital literacy, whose enhancement is required by the Unified Curriculum for the Foreign Languages (OGG, 2015), made the construction of a lesson through WebQuest the most appropriate teaching strategy employed by the English language teacher.

After the presentation of the teaching situation, the author discusses the rationale for the use of WebQuest based on the relevant literature. Moreover, she analyzes the teaching procedure in accordance with the pedagogical framework of WebQuest and describes the relevant teaching materials. Lastly, she justifies the choices made and suggests further modifications.

Keywords: TEFL, WebQuest, reading skill, environmental awareness

Introduction

Karagianni (2020) points out the dominance of technologies, which have established their

presence in the 21st century. "Digital Literacies" comprise one of the categories into which Chu et al. (2017:21) have classified some 21st century skills and ensure, according to them, a thriving professional life. Research on the use of technologies in education focuses on the immense evolution they have brought about in the learning process, which is no longer classroom- or time-bound (Karagianni, 2020). Technology cannot account for efficient learning by itself, but it rather boosts learning when it is meticulously incorporated into teaching practices (Ollivier, 2018). The integration of new technologies into teaching practices turns the teacher into a facilitator who organizes, guides, and supports the learning process, whereas the learner becomes the center of the learning process through their active engagement in motivating learning activities, which promote their collaborative and digital skills and lead them to learn how to learn (Atkinson, 1998; Bacigal, 2002). New technologies have tremendously changed not only the way in which knowledge is constructed and delivered to learners but also the way it is gained and drawn on by learners (Karagianni, 2020), and they have eventually offered language learners the opportunity to authentically use the foreign language being learnt, which had always been a demanding need (Sifakis, 2014).

This paper presents the creation of an English language lesson that aims to raise the students' environmental awareness through the use of new technologies. To this end, the construction of the lesson relies on the principles of the pedagogical framework of WebQuest, which promotes Inquiry-based Learning through online sources. Four web pages are effectively used for the enhancement of the English language in general and the development of the reading skill in particular by means of authentic material.

1. Description of the Teaching Context

1.1 Teacher's profile

The teacher is of Greek origin, and she has graduated from the School of English Language and Literature of the Aristotle University of Thessaloniki in Greece. She holds a Master's Degree in the Teaching of English as a Foreign/International Language from the School of Humanities of the Hellenic Open University. She has worked at state Vocational Training Institutes, a Second Chance School, a state Kindergarten, and state Primary Schools in Greece.

1.2 Learners' profile

The learners, eight boys and eight girls, are the 6th graders of a Greek state primary school. Their L1 (first language) is Greek, and they learn English as a Foreign Language. Their competence level is A2.1, according to the Common European Framework of Reference for Languages (2001). They appear to have a positive attitude towards English, and their willingness to devote time and effort to achieving classroom goals demonstrates their high motivation.

2. Rationale

WebQuest is chosen to be implemented in the particular teaching context. One of the assets its integration into the learning process involves has to do with the crucial increase in learners' motivation and self-directed learning (Koutsogianni, 2014). Another benefit it offers refers to the development of higher-level thinking skills relating to the analysis and synthesis of information and the application of newly acquired knowledge to everyday life situations (Irafahmi, 2016; Kelly, 2000; Lamb & Teclehaimanot, 2005).

March (2004: 43) argues that the "scaffolding" of WebQuest in individual stages aims at progressively developing learners' strategies, life-long learning skills, and autonomy. Vlachos (2020a) pinpoints that WebQuest not only encourages cooperative work since students are assigned roles so as to collaborate in groups by searching for and retrieving information and thus be prepared for their future academic and working lives, but it also enhances creativity since learners use the gathered information of the sources they access and their imagination in order to create intellectual outputs like presentations and posters.

The activation of mechanisms of language acquisition takes place when the linguistic content of the texts used is one level higher than the learners' level (Krashen, 1982), which could be the case with the online sources that WebQuest employs. Online sources promote discovery learning; develop deep thinking processes through their rich linguistic input and the new vocabulary encountered in their texts, and get learners to learn the language while reading by having a close look at its use as they read (Vlachos, 2020b). Fisher et al. (1999), Goodman et al. (2017), and Morrow et al. (2009) point out that learners' reading strategies and skills are enhanced through processing authentic texts; their motive for reading more challenging texts is increased; their world perception is reinforced; and their coping with complex or unfamiliar syntactic and grammatical structures is improved.

3. The Lesson

3.1 Aims and Objectives

The aim of the present WebQuest is to supplement the coursebook with a language approach that promotes digital literacy, whose enhancement is required by the Unified Curriculum for the Foreign Languages (OGG, 2015), and raise environmental awareness.

The individual objectives intend to develop the students' 21st century skills by fostering interaction through engagement in motivational group work; cultivating digital skills; promoting presentation skills, justification ability, and ability to support choices; enhancing critical thinking and objective evaluation; fostering application ability of the newly acquired knowledge to the real world; and engaging in active global citizenship. In addition, they target cultivating skimming, a reading sub-skill, and developing the writing skill.

3.2 Teaching Materials

Four online sources are at the learners' disposal, along with relevant task sheets, one for each web page, so that different pieces of information are searched for and gathered about gorillas. An online dictionary to help the learners cope with unknown words, a website with copyright free images, and an online bulletin board for their presentations to be placed in the form of a poster are also exploited.

3.3 Teaching Procedure

WebQuest is based on Project Based Learning (PBL), where students learn by performing a project (Thomas, 2000) applied in real-world situations.

PBL is learner-centered, as learners gain knowledge and skills by collaborating in groups in order to investigate, solve problems, and synthesize information.

Table 1: The lesson plan

- **Aim: Raising environmental awareness**
- **Age: 11-year-olds**
- **Level: A2.1**
- **Time: 5 teaching hours (225 minutes)**

Task	Procedure	Interaction	Objectives	Time
● Materials & Teaching Aids: 4 web pages about gorillas **1 online dictionary** **1 copyright free images website** **1 online bulletin board** **4 task sheets**				
PLANNING STAGE				
1	"Introduction": T introduces Ls to the topic.	T-Ls	To stimulate interest in the topic	5'
2	"Task": Ls are informed about their learning objectives.	T-Ls	To assign roles To engage in investigation	10'
IMPLEMENTATION STAGE				
1	"Sources" and "Process": 1. Ls are divided into groups of four and access different web pages with the use of an online dictionary in order to collect various information: • Group A focuses on gorillas' characteristics and way of life and fills out a table. • Group B chooses the five most interesting facts about	Ls	To foster interaction To engage in motivational group work To cultivate skimming, the real-life reading sub-skill	50'

them and notes them down on a task sheet. • Group C discovers the various dangers to their lives and answers questions. • Group D prioritizes easy ways of helping them, starting with those that can be more easily followed due to their home place, and completes the relevant task sheet.				
	2. Each group posts their findings, namely the information in their task sheet along with images and/or drawings, on a common online bulletin board. The aim is the creation of a poster about saving the gorillas, which will be exhibited on their school blog. So, each group also comes up with an appropriate title for the final poster.	Ls	To foster group collaboration To promote harmonious cross collaboration To enhance the real-life writing skill To cultivate digital skills	45'
	3. Each group presents their part of the poster and explains the reason(s) why they have chosen the specific font size and color;	Ls	To develop presentation skills To enhance justification ability	45'

	the icon(s) / image(s) / drawing(s); and the title.		and the ability to support choices	
	4. Ls vote individually for the most suitable title for the poster.	Ls	To foster critical thinking about what benefits their work the most	5'
EVALUATION STAGE				
1	"Evaluation": Each group evaluates another group on four specific criteria.	Ls - Ls	To promote evaluation skills	10'
	The teacher also evaluates all groups on the same four criteria.	T - Ls	To establish objectivity in evaluation	10'
2	"Conclusion": Ls come to the conclusion that action must be taken and public awareness should be raised.	Ls	To develop the real-life writing skill To engage in active global citizenship	45'

The individual steps of WebQuest, namely Introduction, Task, Sources, Process, Evaluation, and Conclusion, are incorporated into the three stages of PBL, which are Planning, Implementation, and Evaluation.

The lesson is structured in Zunal, a web 2.0 tool for the creation of WebQuests. The link to Zunal is http://zunal.com/webquest.php?w=777843.

3.3.1 The planning stage

After an article about Dian Fossey in the learners' coursebook has been read and the learners have been informed about her devoting her life to the protection of mountain gorillas in South Africa, the teacher sets a question stimulus to raise their interest and motivation.

Next, all methodological issues are clarified as the teacher explains all the instructions to be followed, the learners get to know what they are expected to do, and the criteria for the evaluation of their work are clearly stated.

3.3.2 The implementation stage

First, each group accesses a different online source to gather different data about gorillas with the aid of an online dictionary. The reason why each group is assigned a different task is to engage motivation for listening to the rest of the groups present their part of the poster and ensure that all four skills are integrated and developed during the process.

Next, all groups create a collaborative online presentation on Linoit, an online bulletin board, bearing in mind that it should form part of a poster.

Finally, each group presents their part of the poster and their suggested title to the other groups. Each student individually votes for the most suitable title, except the one their group has recommended. The group which has proposed the selected title places it on Linoit. The final product is uploaded on the school blog to provide the local community with a stimulus for thought and action and the learners with a real-life end product.

3.3.3 The evaluation stage

Both peer- and teacher-evaluation are applied, reflecting the way quality is assessed in the real world by real audiences and accounting for the learners' accuracy and completeness. The members of each group individually evaluate the other groups by filling out an evaluation form. The teacher also evaluates so that the learners have to form objective judgements and not subjective ones based on friendships.

During the conclusion substage, the learners prepare a letter to persuade their teachers, parents, and influential opinion makers to help save gorillas from extinction, including information from all four group presentations.

4. Discussion

The choice of both the topic and the teaching methodology has played a crucial role in the construction of the lesson. Since the learners are emotionally affected by the article read about Dian Fossey, there is a demanding need for the extensive cultivation of their environmental consciousness, which will lead to the raising of public awareness. On the other hand, the PBL approach is highly appreciated for promoting both authentic and collaborative learning,

learner autonomy, higher-level thinking processes, and proficiency in the target language (Simpson, 2011).

During the presentation stage, the question stimulus is carefully selected so that it intrigues and challenges the learners to actively and enthusiastically engage in the project work. Group work offers many advantages to the learners as they get used to having a role in a team and working for its benefit, thus being prepared for their future career by acquiring and developing 21st century skills. Four participants in each group are proven, due to the teacher's experience, to be the ideal number for role assignment so that every member is active in one's given role. The random formation of groups is necessary so that friendships will not be an obstacle to the group work, which will not be distracted and drawn into chatting about irrelevant issues.

The tasks are carefully planned to support the objectives of the lesson and be in accordance with the learners' level without threatening them or being beyond their capabilities (Candlin, 1987, cited in Teeler & Gray, 2000).

Each instruction needs to be carefully explained, and the way Linoit works ought to be explicitly clarified in order for the learners to successfully reach the desired goal of the group work set. The criteria for evaluation are clearly stated from the beginning so that aspects like collaboration and presentation are not disregarded during the learning process. The reason why each group searches for different data is to present them in the most suitable and appealing way to attract the audience's attention, thus cultivating a real-life skill.

The suggested time is in line with these learners' competences and time organization skills as displayed in other group work activities.

The learners are asked to individually vote for the title of the poster to enhance their objectivity in the choices they make.

If the content of the web pages being one level higher than the learners' level proves to be too demanding for the learners and they start getting discouraged and demotivated, "Wordify", a web 2.0 tool, could be used to lower its linguistic level.

At the conclusion stage, the learners could be given the choice to write a poem or a song instead of the letter to their teachers, parents, and influential opinion makers. They could even be asked to investigate the website about Durrell Gerald, learn about another environmentalist who devoted his life to endangered species, including gorillas, and find out that his stay in

Corfu, a Greek island, during his young age made him so interested in nature. Ideally, each student could pick what they would like to do. Writing the letter, creating a poem or song, or investigating another website could be each learner's choice so that different learning styles and multiple intelligences would be accounted for (Gardner, 1983).

Conclusion

This paper has presented the creation of an English language lesson which exploits WebQuest. It has managed to illustrate the added value of the experience as the roles of the teacher and the learner change. The teacher becomes a facilitator of the process, organizing, guiding, and supporting it, whereas the learner is empowered through active participation in a dynamic learner-centered environment, which enhances their motivation, develops their team building skills, and leads them to learn how to learn.

In future lessons, the teacher and author of this paper would find it a challenge to implement the present WebQuest through the pedagogical framework of Blended Learning, with the students reading the online sources at their own pace at home and the rest of the steps being applied inside the classroom. In addition, it would also be challenging for the teacher to make more extensive use of new technologies by having each group work on a different web 2.0 tool for the creation of the final product of its research, such as Wiki for collaborative writing, StoryJumper for story making, PowToon for video designing, and Kahoot for online game development. Finally, the utilization of Artificial Intelligence (AI) would be the most interesting challenge to be met with the use of AI tools ideal for students striving for writing, such as QuillBot for enhancing the quality and versatility of the written content or Grammarly for real-time suggestions for the improvement of grammar, spelling, and clarity, as well as fluency, style, and tone.

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