



# Designing a Language Project to Promote Digital Resilience to Greek Students

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**Abstract:** Digital technology gave Greek teachers an invaluable tool to respond to the unanticipated shock of COVID 19. However, teachers of all levels in Greece raised the concern of lack of media literacy, critical thinking and lack knowledge on the dynamics of internet of both teachers and students. They reported the feeling of failing to prepare their students for this online world. The aim of this article is to show how through language teaching teacher can raise students' digital resilience and prepare them for the new "digital child" world.

The methodology followed is based on the theory of WEB QUESTS and project learning. We employed these pedagogical methods to promote critical thinking skills, extensive reading skills and writing skills, using the spectrum of digital awareness. We wish to pinpoint that language teaching can effectively assist the teachers aims and objectives in preparing positive digital citizens. Four high schools of Greece participated in the study and approximately 150 14-16 year old students with high computer skills. Ten teachers also coordinated the project 6 English teachers and 4 IT teachers.

The findings of our study concluded, that this language project had a positive impact in increasing students' sense of their actions on line; a skill critical for a safe and resilient use of the Internet.

**Keywords:** Digital resilience, WEB QUESTS, Greek schools, English language project.

## I. Literature Review

The development of digital resilience and the promotion of digital citizenship remains highly under researched area of Greek education. However, with cybercrimes on the rise worldwide digital resilience is a key skill that all students should develop. Newman 2004 defines the resilient child as child that can deal with trauma caused through its online activity and maintain positive wellbeing. Drawing from his definition we can understand that it is crucial for education to build digital resilience to future citizens of the world so as to safeguard their emotional and physical wellbeing. The aim of our project is to engage students in depth learning of how they can critically perceive the material they encounter online adopt positive behaviors. We do not wish to provide basic protection skills rather we aim in empowering responsibility and awareness of the new digital world and online communities they find themselves into. We wish to alert the students through this guided language project on how to act responsively, collectively and have desirable online behaviors.

For the purposes of our research we made use of WEB QUESTS as teaching tool.

Employing authentic web pages in a second language classroom can be motivating and not unduly daunting to learners since as Kienbaum, Russel and Welty (1986 cited in Chappelle) found, from an attitude survey, elementary and advanced level foreign language learners express a high degree of interest in authentic, current event, materials. Furthermore, as Guariento (2000) account makes plain, students are more motivated when studying with lessons based on the latest news and current events, than when using the

relatively dated materials of course books. Moreover, as Dudeney (2000) illustrates students' interest and genuine response increases, when they are studying with lessons on events that are unfolding around them (even when their knowledge of the information item presented is sparse) because as Dudeney (2000) points out, there is an additional element of "prestige value" in the lessons, as students feel they are learning more than just English. Accompanying this argument Eastment (1999) also notes that authentic web sites give students the sense that they are learning the real language; that they are in touch with a living entity, the target language as it is used by the community that speaks it, and this is considered to be one way of maintaining or increasing students motivation for learning the target language. In a similar vein, we can argue that using real world sites in classroom is often more interesting than using a sterilized coursebook not only because they are more authentic and context rich, but because they can bridge the gap between classroom knowledge and students' capacity to participate in real world events (Wilkins 1976, cited in Beatty 2003). Otherwise, learning is less likely to engage intrinsic motivational processes, since as Beatty 2003 notes when learners are unable to make meaningful connection between what is learnt and what is experienced in life outside, their intrinsic motivation dwindles. Moreover, Beatty (2003) argues that, we need to expose learners to authentic texts so that they may have the immediate and direct contact which reflects genuine communication in the target language. In this respect, and since every piece of writing brings with it the culture of the country from which it originated, students through the use of the authentic on line materials are also given the opportunity to study cultural contents, current events, trends and new developments in various areas from various viewpoints, thus their cultural awareness is cultivated. A further advantage of the use of authentic web sites in classroom is that, as Levy (1997) emphasizes, students may be empowered by the self directed work, with the international and real world resources found on the WWW, and become more confident and autonomous learners.

Therefore, as Chapelle (2001) stresses, teachers should endorse to promote such an attitude towards learning, that encourages the possibility of students „learning to learn“, solve problems on their own and hence, assist students to match, on the one hand, the challenge of individual difference and on the other hand, the complexities of the modern world, for which school is an attempt at preparation. Web Quests. A way to instill such attitudes and create autonomous, lifelong learners that will be both literate and fluent in the target language is, as Dodge (2000) proposed, to engage learners in meaningful, motivated activities using the target language. In a similar vein, recent trends in language teaching, as summarized by Eastment (1999), challenge the traditional/ structural way of teaching that is based on the mere presentation of fundamental ideas and transmission of knowledge from the teacher to the student. They put forward the argument that, in order for effective learning to take place, it is crucial for the teacher to assist students become autonomous, life long learners. A way to establish such an attitude, as Rakes (1996) notes, is by leading students in seeing themselves in the discovery mode in order to form the basic concepts that will enable them to understand the subject field as it currently is, and to understand some of the attitudes and conventions of the language, that are determinant for internalizing the forms of the new language at a high level.

Moreover, as Gruender (1996) notes, students must also have a sense of excitement about the discovery of the regularities, of previously unrecognized relations and similarities between ideas and values incorporated in the language examined. Influenced by these theories, educators have sought to establish this attitude-students as „discoverers“- in the L2 class, by the implementation of Web quests in language teaching. A Web quest, as defined by Dodge (1995), is an „instructional strategy“, using carefully selected internet sites and purposefully designed questions and activities to move learners to a fuller understanding of the topic/ problem at hand. Their mission is to engage students in tasks that would ultimately cause them to learn while attempting to achieve a preset goal.

The concept of the web quest, as an effective instructional/learning strategy, also draws its strength from several decades of cognitive science research. In particular, Caine (1994) argued in favor of the natural

acquisition of knowledge saying that knowledge is what results when „information felt“ meaning and, deep meaning“ come together. Drawing from this theory, we can claim that a further advantage for the implementation of Web quests, lies in their structure. A Web quest's structure, models the cognitive and physical process the learner must go through to perceive and produce the new language. Thus, it is clear that Web quests, by modeling an implicit process through which new language and linguistic rules can be acquired, can assist learners to naturally internalize and automatically reproduce the process of learning. This argument is also endorsed by March (1998), who notes that , Web quests present information at a pace that matches a natural acquisition order and as March(1998) further reports, they also allow learners to have their own workplace where they can take risks and experiment in ways that are not psychologically threatening in a classroom environment. This slowing down of the process can be extremely beneficial for language learners especially, shy ones that are afraid of losing face in class and tend not to participate in class discussions. Another key issue that Web quests address is learners“ mindful engagement with instructional materials. While engaged in the Web quest students are active contributors, to their language learning, than passive recipients of knowledge, since they are cognitively involved in seeking answers, making generalizations and testing hypotheses that they have generated.

In this way, knowledge is constructed by the learner in the sense that he has to relate new elements of knowledge to already existing cognitive structures (Grueder 1996). The creation of such a constructivist environment according to Dodge encourages, action knowledge, critical reflection on new information and leads learners to exert a conscious effort for learning and hence, as many researchers argue (Pennington 1996, Warschauer& Kern 2000) ,promotes better learning. Since as March (1998) supports learners learn better when they are presented with a problem of genuine interest and have to develop knowledge and understanding and analyze it via forming and refining concepts using the resources available.

In addition, as Dodge (2000) observes , this method (Web quests) is highly motivating, since learners have the sense that they are doing something real and useful, as well as extremely beneficial. This inevitably leads students to put to more effort, greater concentration and a real interest in task achievement and become more independent and confident language learners.

## II. Method

The course suggested below is designed by 6 English language high school teachers in collaboration with four experienced IT teachers in Greece and it will, approximately, take 5 teaching hours to be completed. The schools that participated in the study were well equipped, has a modern computer lab with internet access and both the teachers and students are competent users of the internet and computer literate. Also the headmasters of the schools are open minded and willing to give students a variety of tools to assist them in their learning thus no government permission was needed since actions as this are often and welcomed by staff students and parents. The principal aim of the institute is to produce competent, autonomous learners, that actively participate in their own development. Learners, therefore, are encouraged to experiment with ideas, try out different solutions to problems, and be active learners and users of language. Moreover, the politics of the schools also support that students should be actively involved with new technologies and the WWW, so as to develop their critical thinking skills, and thus assist them in succeeding in their exams and also, help learners improve their understanding of the complexities of modern life, enable them to grapple with new ethical and practical issues and thus become responsible and successful members in the society. The age of the learners in the class, ranges from 16- 18 years old ,their language level is advanced and hey are preparing for the C2 language examination. They came from diverse backgrounds. Just over half of the students 47% were from a migrant background with 12% being first generation immigrants and 41% being second generation immigrants. These surveys included 16 impact measures, presented as 1-7 Likert scales, which indicated agreement in range of statements, ranging from strongly agree to strongly disagree. Individuals' pre- and post-surveys were anonymously matched through the The participant surveys also

included demographic questions, designed to provide insights into the background of participants, and process questions, designed to provide information about the participant experience of the project. Comparison group students were presented only with impact measurement questions. The C2 examination involves learners in writing

opinion and critical essays, either on universal themes like smoking or pollution or on events that had universal effect or impact. Moreover their reading skills (skimming, scanning ) will be tested, as well as their ability to identify the author's opinion in reading texts that appear neutral. Additionally, in the speaking section of the exam, students will be asked to express opinions, to think critically and examine an issue from various perspectives, challenge and report any possible assumptions that underlie the issue and to explore its possible alternatives.

We designed the quest and choose the topic of hate speech in online game platforms. We divided the project in 5 stages and delivered it in the course of a week. In the Introduction stage the teacher introduces the overall theme of the webquest. We provided background information on this major issue hate speech on the Internet and we introduced any key vocabulary and concepts that learners will need to understand in order to complete the subsequent tasks. The choice of the task, in my opinion, is likely to engage student's interest and willingness to participate and respond since, it is an event of genuine interest, on which they have sufficient background information. It is an authentic issue that has a broad appeal and moreover, students at this age tend to have a natural inclination to talk about news.

In this stage, the teacher also activates students schemata and background knowledge by having them brainstorm around the theme and express any initial opinions and feelings they have on the issue. The language teachers also created a meaningful context for students to communicate by triggering their curiosity to learn more and thus increased their motivation.

After the introduction the students move to the Task section of the webquest. This part explains what the learners will have to do as they work their way through the webquest. The task is highly motivating and intrinsically interesting for the learners, since it is firmly anchored in a real-life event. Furthermore at this stage students are also provided with an audience and a purpose for writing in a second language. Developing a sense of an audience, as Byrne (1989) points out, makes students more independent and confident to write since they feel that they use the language to fulfill a real life purpose . They are also presented with a original, motivating, real, task that provides students with an opportunity to express their opinion and achieve a broader goal . As a result, as Deci & Ryan (2000) report, this task, that students perceive as being tied to larger, more important goal, is likely to engender high motivation and serious engagement. Furthermore, they report that students pay closer attention to their language use during such motivating real life tasks, and that extra effort, results in more polished work and thus greater learning. Moreover, students feel as active agents, purposefully seeking and constructing knowledge within a meaningful context. This can result, as goal theories suggest, in raising students intrinsic motivation, capturing their attention and promote in depth learning. The Process stage of the web Quest, that follows guides learners through a set of activities and research tasks, using a set of predefined resources. The process is clear and well structured so that students will easily and accurately understand what they are expected to do and they will not waste any time searching for the resources needed. Firstly, students are divided into groups and are given a newspaper article to analyze. Then in groups they decide who will be in charge of filling in, which table (see segments ). In this way a democratic, open, collaborative, critical but not threatening environment is established. The teachers, moreover, have provided students with tables that can help them break down the long speech into manageable parts and thus recognize any instances of hate easier. Then, students have to work independently, at their own pace in order to fill the table assigned to them and draft some first notes on any instances of bias or implied meaning they noticed. Assigning students to work independently before they engage to group work has several advantages. First as a study in Bulgarian schools points out, individual work can raise students level of commitment to the task. In addition, this phase, engages students in active involvement with the texts, as well as, allows them to be self directed and contribute at their own time and pace. This can be beneficial in building

an effective classroom environment that promotes participation, since as Kroonenberg (1995 cited in Pennington) reports shy, introverted students tend to become more willing to join in subsequent oral discussions on the topic when they have the time to work and think in advance. Afterwards, students will have to discuss in groups their findings and form a first draft of their report on how culture and social context can influence the interpretation of an event. This activity draws its strength from the process writing theory. According to this theory, when students collaborate, draft and revise their papers in groups, the quality of expression of their ideas increases, since their work is also filtrated by additional lenses provided by their peers and thus, better papers are produced. Furthermore, students are likely to make informed and intelligent contributions to the discussion because they had time to consider their initial statements. Also, it is impossible for a student to dominate the discussion since they all have to contribute, in order to reach a result thus equality among group members is achieved. Moreover through this interaction with group mates, students are encouraged to restructure their ideas. For instance, they may need to summarize, elaborate, exemplify, defend, and explain their ideas. Thus, their communication and collaboration skills are likely to develop. Moreover, the discussion of these multiple students' perspectives, is likely to spark new ideas in students' minds, create a positive interdependence among students. In the last part of the course (Evaluation phase) students are involved in self-evaluation, comparing and contrasting what they have produced with other learners and giving feedback on what they feel they have learnt and achieved. This activity encourages learners to be responsible for their own learning and participate in their own development. This reflection on the process, also assists in depth learning as March (1998) claims. Moreover, students become more autonomous since there are given responsibility for their learning. Similarly, as Deci & Ryan (2000) claim, when students accept responsibility for their learning and believe that success or failure depends on their personal effort become more motivated to participate in the task. Finally, viewing the learning benefits ( see conclusion) can also increase students' motivation and sustain learning since they can be persuaded that this course is personally important for them as individuals in a society, they have a sense of achievement and feel more confident and competent language learners.

### III. Findings

The teachers' evaluation of the project was positive. After discussing with the students and seeing their projects on hate speech in online game platforms, report that they are confident that their students have now a more broad knowledge of resilience use of the Internet. The impact of the project was also measured by using pre and post surveys delivered to students before and after the project. While we have a limited sample size number that restricts our ability to measure statistical significance we feel that seeing the report our project managed to foster a sense of responsibility among the students that participated and that is the most critical component of digital resilience. Moreover 5 out of 10 students reported that they have gained new knowledge, new skills and that they would behave differently online. 87% reported that now understand the term scapegoating and its consequences for online communities. A 10 per cent mentioned that they feel that after the project they could recognise when a post or video is designed to emotionally manipulate students. A 5% felt that now they might more accurately recognize the motives post and the aims of a person that creates it. A 11% , which in our opinion is quite high for the level of the students, argued that now they would fact check a comment or a story before sharing it.

### IV. Discussion

We strongly believe that even with scarce teacher training projects as ours could have a positive impact on several areas for students and language learners. First and foremost it can increase critical thinking skills in an online context. It also assisted students in being able to recognise or challenge online emotional manipulation and hate speech. Moreover it increased a responsibility of the wellbeing of their online peers. Consequently they were given some skills through engaging with new language to become more active digital citizens. The benefits for language learning are also numerous. this course increases learners exposure to the

language and thus increase their knowledge of vocabulary. It also leads to improvement in writing, since not only students are engaged in process writing, but also reading all these provided resources as many L2 studies show, may have a positive effect on their writing skills too. It also motivates students to read in L2 and builds their confidence in reading and exploring extended texts. It, furthermore, facilitates the development of prediction skills and formation of a schema as well as their critical thinking skills. It also teaches them how to manipulate information to convey personal opinions, and allows to them experience the effects of relativity of truth first hand. In addition, it establishes a feeling, as March (1998) observes, of individual expertise. Moreover, a further advantage of this course, is that it assists retention, of the information since students have to process information, actively interact with each other to transform the new information, so as to meet the sophisticated demands of the task they have to fulfill (March 1998). Furthermore, the authenticity of the web sites language, familiarize students with a wide range of styles, registers of the target language, and thus their knowledge of cultural and linguistic conventions of the target language is expanded.

## V. Recommendation

This paper has demonstrated, the pedagogical value of the internet and has put forward a case for using the internet in class by showing the positive and elevating influence, it may have on language teaching and learning. Our web based course, succeeds in developing all four language skills (listening, speaking, reading and writing) without making artificial distinctions between them and thus making language learning appear set of vague skills, that students must master. In terms of literacy acquisition, this course encourages students to not only learn to read and write, but also to read and write to learn new concepts and better understand phenomena to which they have already been exposed or will be exposed in the future. Finally, students were allowed to practice their critical thinking skills in a course that encourages them to generate new ideas, problem solving through reasoning, focus on different aspects of form in the target language and make the best decisions possible in a given situation. All these merits, however, are very hard, even impossible, to be achieved in traditional course book based class. Thus, we believe that the advantages of using the internet in classroom outweigh the disadvantages and an attempt to implement it in classroom practices should be made. Finally, we strongly feel that more research in the area of digital resilience and high schools students should be done since it a crucial issue to prepare responsible citizens that will not be victimised believe fake news and employ or be manipulated by extremist groups.

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