
‘Italswebquest’: a wiki as a platform of collaborative blended language learning and a course management system

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Abstract: The advent of Web 2.0 has caused a significant change in the way the technology is used in all the fields of education as it is characterised by social learning, active participation and easy to use tools. Web 2.0 could offer a turning point in language teaching methodology. Wiki is a major component of Web 2.0 and can particularly involve language learners in their construction of knowledge. This paper presents a case study in which a wiki was used both as a platform of collaborative blended language learning and as a course management system in an Italian course of future Italian language teachers. Results have confirmed most of the research questions of this study and one of the major findings was the increase of students’ interest, motivation and participation during the whole project.

Keywords: blended learning; collaborative learning; language learning; Web 2.0; wiki; webquests.

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1 Introduction

The way of transmitting knowledge to new generations has undergone changes throughout history and it is probably safe to say that the major change has taken place with the advent of the internet. Many studies have shown that internet technology provides equal opportunity in knowledge to all learners. (Everett and Ahern, 1994; Ortega, 1997; Pratt and Sullivan, 1994; Seidel, 1997; Warschauer, 2000) Currently, many believe the web has entered a second phase, where new services and software – collectively known as Web 2.0 – are transforming the web from a predominantly ‘read only’ medium to one where anyone can publish (O’Hear, 2008). The advent of various information and communication technologies, and moreover the amazing capacities of emerging technologies (like the semantic web, free and open source software, knowledge management, mobile and wireless technologies, new media), certainly provide a fruitful basis for a new era in teaching (Lytras, 2007). Web 2.0 opens a whole new world of social interconnectivity in which academics, experienced professionals and students alike can now much more easily network with each other for life-like collaborative knowledge construction. Nowadays, research and applications of Web 2.0 are rising in education, and there is a growing number of Web 2.0 tools that enable and empower online personalised learning environments to support student’s collaboration, communication and reflection mechanisms (Richardson, 2006). Web 2.0 could also offer a turning point in language teaching methodology (Eijkman, 2008). In fact, the new era of web has already an impact in class, as teachers start exploring the potential of wikis, blogs, media-sharing services and other social software, which, although not designed specifically for e-learning, can be used to empower students and create exciting new learning opportunities. These same tools allow teachers to share and discuss innovations more easily and, in turn, spread good practice.

This paper describes how a wiki has been used in an advanced level Italian language course of future Italian language teachers. This case study took place at the Department of Italian, and Spanish language and literature, School of Philosophy of the University of Athens. The next section (Section 2) provides a wiki’s definition, an analysis of its basic features, as well as its general and educational uses. It is referring also to previous studies in which wiki was used in foreign and second language learning. Note that there are very few wiki’s applications on foreign language learning and none on Italian language learning. Section 3 describes the case study. Finally, section 4 presents the conclusions.

2 Introduction to wiki

2.1 Wiki’s definition and features

Wiki is one of the major components of Web 2.0. The first wiki (<http://c2.com/cgi-bin/wiki>) came online in March 1995. According to Leuf and

Cunningham (2001) creators of the original wiki concept, '*a wiki is a freely expandable collection of interlinked Web pages, a hypertext system for storing and modifying information – a database, where each page is easily edited by any user with a forms-capable web browser client*'. The most known wiki is the Wikipedia (2001) the 'free content encyclopedia' – the largest public wiki with nearly 2,608,305 articles in English alone until 2008, with thousands of new articles added and tens of thousands of edits made every day (Wikipedia, 2008)

Wiki has a variety of features that makes it a powerful Web 2.0 tool of information sharing and straightforward collaboration. Wiki pages are controlled – created, linked, edited, deleted, moved, renamed and so on – by a programming or scripting language, and stored either as plain ASCII text files or in an external relational database. Wikis usually use e-mail notification for every change. One of the positive features of the wiki is the faceless contact; anyone can interact with everyone with no limits of place or time. A wiki is a server software that allows users to freely create and edit web page content using any web browser with no knowledge of HTML coding (Augar et al., 2004). Wiki can also be a collaborative tool limited only to a selected group of users (Bruns and Humphreys, 2007). On the other hand, there are also some disadvantages of wikis, one of them is that they do not allow multiple users to edit the same page at the same time. If that happens, one user's edits will be deleted. Wiki employs a page locking system, so a notice appears if another user is editing the page when you select the 'edit' button on that same page (Theony, 2005). Also the page is too long to scroll and there is a lack of real time communication (Augar et al., 2004). But which are wiki's most common and educational uses?

2.2 Wiki's general and educational uses

Perhaps the most common use of wikis is as a web-based environment that supports collaborative writing. Wikis are collaborative environments by design and can serve a variety of purposes for collaborative online projects such as active online communities on the web (Mattison, 2003; Bruns and Humphreys, 2007; Duffy and Bruns 2006; Beldarrain, 2006) professional network with continuing access to the content for an indefinite period of time (Slykhui and Stern, 2008), site of collaborative authoring of a document development, collaborative communication forums and collective content management (e.g., DocuWiki) (Lund and Smørdal, 2006). Wikis are also commonly used as knowledge bases or knowledge management systems (Godwin-Jones, 2003), as personal information managers (PIMs), and content management for academic instruction (Mattison, 2003).

Currently, there is a growing interest in the educational uses of wikis. As Lamb (2004) contends, the beauty of wikis is that their structure is 'shaped from within not imposed from above. There is a variety of uses of wikis in education; Tonkin (2005) proposes four different types of educational wikis:

- 1 Single user wikis give the opportunity to a person to collect and present his or her own thoughts over a period of time using a web-based environment.
- 2 Lab book wikis can be an ideal way for students to keep their notes online. The interesting feature is that every fellow student can have the possibility of implementing peer review, add a comment or more material to the published notes.

- 3 Collaborative writing wikis are ideal for group writing work.
- 4 Knowledge base wikis can be used as a group's knowledge repository.

In fact, wikis can be used to change the individual focus of traditional instruction to one of collaboration and a shared construction of knowledge (Mejias, 2006). More specifically, wikis can be used for education as class communication sites, collaborative knowledge bases, places to post assignments for peer review, a tool for process writing, a place for co-authoring professional books and an environment for group projects (Chao et al., 2007). Another common collaborative use of wikis is for problem-solving in small or large groups (Collaborative Software Lab, 2000). Their structure offer an activity space in which wiki's features make it possible for the teacher to trigger, stimulate, monitor and guide online as well as offline activities conducive to learning (Lund and Smørdal, 2006) and also increase participation and student involvement (Schuler et al., 2007). This is a natural tool for distance education (DE), because wikis enable instructors to create interactive activities for their students, and to present course information such as resources, external links, project information, and frequently asked questions. Instructors may also wish to monitor wiki discussions to determine problem areas for students (Schwartz et al., 2004). In fact there are several reports that favour wikis as effective platforms to help electronic and online learning (Augar et al., 2004, Schwartz et al., 2004, Choy and Chi, 2007). A wiki can also be a learning environment that fosters social constructive learning, an ideal place for learning, and an effective tool for building virtual learning communities (Augar et al., 2004; Schuler et al., 2007; Doolan, 2007).

2.3 *Wiki's use in foreign language learning (FLL)*

During the past two decades, the use of multimedia for language instruction has expanded rapidly. Studies of the influence of technology-enhanced instruction on language learning have also appeared in growing numbers (Yang and Chen, 2007). Recently, wikis have experienced increasing popularity as teaching tools. Although wikis have been utilised in many areas of education, including composition, literature, distance education, philosophy, design engineering, symbolic logic, and mathematics, they have untapped potential in many other areas as well (Chao et al, 2007). However, there are few empirical studies of investigating the use of wikis in English as a second or foreign language courses in higher education and almost none in other language courses.

Penn State's national foreign language resource – the Center for Advanced Language Proficiency Education and Research (CALPER) supported a wiki named *L*wiki*. Different language courses, including Chinese, Russian, Spanish, English composition and ESL used *L*wiki* for individual and collaborative student authoring, course project, management and multiple running commentaries (Thorne and Payne, 2005).

At Georgia Institute of Technology, wikis have been deployed in English classes and learning outcomes shown to be significantly better for students using the wiki environment to collaborate and comment on each others work. Also, the use of the wiki tool CoWiki is reported to be a successful tool in supporting learning at freshman-level English classes with low costing (Rick et al., 2002).

Another empirical study of using wiki in a freshman – level English as a second language (ESL) course was conducted at a public college in Tapei, Taiwan. Students who attended this two-week study practiced English essay writing on a wiki website as the major task. The major findings shows that it may be inappropriate to promote students'

performance by simply using wiki in an ESL course and that building an instructive or constructive instructional model with Wiki in a rigorous manner requires more empirical evidence (Wang et al., 2005). Chang and Schallert (2005) investigated the use of wikis in English too. They proposed a wiki platform for peer-reviewing with link grammar for automatically checking the students' papers and a RSS reader to periodically retrieve these articles from the platform that is published in the blog system. They found that simplicity, openness and lack of structure facilitates wiki use in schools, while the lack of wiki servers, lack of instructor IT skills, lack of a WYSIWYG editor, and traditional instructors were the barriers to wiki use in schools.

Another interesting study was the Engwiki project at the University of Zagreb. A wiki was used in two tertiary-level english for specific purposes (ESP) courses. During these courses the students performed various web-oriented learning activities (e-tivities) designed to supplement their traditionally delivered language course. It is worth mentioning that the most innovative aspects of the Engwiki project were the use of wiki-based e-tivities for language learning and the evaluation of the e-tivities for other language teachers to use them in computer assisted language learning (CALL). The results of the evaluations indicated a positive outcome of the use of the wiki and the usefulness of most of the e-tivities that were examined (Kovacic et al., 2008a, 2008b).

A wiki was also used to a EFL classroom of eighteen Brazilian EFL students in order to develop their writing skills. Specifically, a peer-correction through wikis helped learners to develop not only their writing skills, but also their social skills in the sense that they cooperated instead of competing. The increasing interest in belonging to an online community was a major finding in this research. Also the levels of motivation and interest were very good (Franco, 2008).

Concluding this section, it is worth referring on a study for Spanish language learning supported by web 2.0 tools. This study investigated the effects of wiki and blog technologies on the students' performance when learning the preterite and imperfect aspects in Spanish. Results indicated that all the students had more or less the same performance level regarding their use of blog or wiki technologies when they were tested for their pre-existing knowledge and also there was not any difference in satisfaction levels between those students using a wiki and those using a blog (Castaneda, 2007).

3 Case study – developing *italswebquest*

Regardless of the studies reported there is a particular area that has not been sufficiently explored which is the use of Web 2.0 tools and especially of wikis in teaching and learning Italian as a foreign language in higher education. The fact is that there is a lack of research into the implementation of a wiki as a language learning environment of collaboration and as a language course management system at the same time. This study proposes the development of a blended language learning model which combines blog activities with webquest projects that take place in face-to-face lessons and online in a wiki as a language learning platform and course management system at the same time.

3.1 Purpose of the study

The purpose of this study was:

- a To test the applicability of wiki technology in teaching/learning Italian as a Foreign Language at the university level as an environment of collaborative learning that can increase motivation, participation, and collaboration among students.
- b To explore in what ways (to communicate, write in collaboration) and in what frequency the students used the wiki environment.
- c To explore the potentials of a blended learning model in a foreign language course which combines online warm up blog activities with webquest projects that take place online in a wiki environment and in face-to-face lessons. The results of the in-depth study also aim to shed light.
- d On the impact of this blended language leaning scenario (approaches and tools) on students' level of satisfaction compared with their prior learning experiences of traditional class teaching.

3.2 Research questions

The *research questions* that guided this study were as follows:

- RQ1 Can the wiki technology be used successfully in teaching/learning Italian as a foreign language at the university level as an environment of collaborative learning that can increase motivation, participation, and collaboration among students?
- RQ2 In what ways and in what frequency the students used wiki during the *italswebquest* project?
- RQ3 Have the students affronted any technical difficulties in using the wiki tool as a communication tool or as a tool for collaborative writing for their webquest projects and if yes how this affected the process of their language learning?
- RQ4 The idea of mixing online warm up blog activities and webquest projects using a wiki online environment in combination with face-to-face lessons had a positive impact on learners' satisfaction levels comparing to their prior learning experiences of traditional language class?
- RQ5 Could the *italswebquest* wiki be used as an effective course management system?

3.3 Theoretical and technical rationale behind 'italswebquest'

“Learning is an active process of constructing rather than acquiring knowledge and Instruction is a process of supporting that construction rather than communicating knowledge.” (Duffy and Cunningham, 1996)

In this case study, using a constructivist approach to teaching, the emphasis is on a self-directed approach with the learner building knowledge through interactions with others in groups. Wiki has been chosen as a tool to support this learning language online community because it can be an ideal learning environment that fosters social constructive learning (James, 2004). Also, because of their low technological barriers yet very reach and flexible functionality, wikis afford the opportunity to offer collaborative, constructive learning more extensively in our educational environments (McMullin, 2007). Social constructivists believe that learning is a social meaning-making process,

and that the interaction with other people is essential for individuals to learn new things (E-learning, 2002) Wiki is also a motivational learning environment since it supports the three basic needs: relatedness, competence and autonomy according to a self determination theory (SDT) of motivation (Alm, 2006). As a collaborative tool, wiki also allows students to participate in the process of course management, information sharing, and content creation. For all these reasons, wiki may replace or complement the use of traditional course management systems as a tool for disseminating course information (Frydenberg, 2008). For all these reasons wiki seemed to be as the perfect choice for an online learning environment and as a course management system.

Regarding to webquests as the chosen type of web based projects, it seemed the perfect choice for the implementation of the Web 2.0 emerging technology in language learning. Webquests are inquiry-oriented activities in which most or all of the information used by learners is drawn by the web (March, 2004). A webquest has several component parts including an:

- a introduction
- b a task
- c a process
- d resources
- e evaluation (Dodge et al., 1995).

In the Introduction, which is the most important part of the webquest project, the teacher has as main goal to gain the attention of the students and introduce the activity, a real life problem. In the second step, the 'task', the students learn about the different roles that will take on and what the result or product should actually be at the end of their webquest project. In the third part, the 'process', is where will be provided to the students the step-by-step instructions and guidance in order the task to be completed. The 'resource' part is the area where the students can find the hyperlinks that will explore for the task's completion. Finally, at the 'evaluation' part is where the teacher informs the students for the way that they will be evaluated. One way for this is the creation of a rubric by using several online rubric makers (Jones, 2005). Webquests projects were designed to address this dilemma by bringing together the most effective instructional practices, theories and models into one integrated student activity: critical thinking, cooperative learning, authentic assessments, technology integration, scaffolding model, cognitive and constructivist theory (Dodge et al., 1995). For all these reasons, webquests have been chosen as the online collaborative projects for this research.

3.4 Methodology

The case study was conducted at the Department of Italian and Spanish Language and Literature, University of Athens. It was part of a course named 'Introduction of internet and Web 2.0 tools in the language classroom'. The participants in this case study were 25 advanced students and basically future Italian language teachers. Most of these students attended a different year of Italian studies but they all had an advanced level in Italian language. All of them before the basic technology training, they had none or limited

experience with technology. Regarding their gender, most of them were women (92%) and regarding their age, the 70% of them were in their early twenties, whereas there was a variety of ages from 25 to 50 years old in the rest of the remaining 30%.

Collection of data included both quantitative and qualitative methods. Pre and post questionnaires, informal group interviews, teacher's observation lessons diaries, wiki's history pages were the instruments that were used to gather the data of this study.

The course took place during the fall semester 2007–2008. The research was conducted over a four week period during the last month of the semester. The course was divided in two parts. The first part included the students' theoretical and practical introduction to the use of internet in education, the Web 2.0 tools and their educational use in the language teaching/learning. There was a focus on the instructional and learning approaches that can make the best use of this new technology. So, after the students practiced their basic computer skills and the Web 2.0 tools, they continued with a simple introduction in the creation of webquests projects.

The second part included the study discussed in this article: a series of blended lessons which focused on different cultural topics in which there were presented different aspects of Italian culture such as cinema, music, cities, art, cuisine, festivities and traditions. Each topic was completed in four lessons, two online and two face-to-face lessons alternatively. The duration of each course topic was two weeks. Before the beginning of the study the tutor divided the class into five groups of five members.

During the first on-line lesson, there was a series of blog warm up online activities where there was an introduction of the cultural topic for example cinema on which would be based the webquest activity of the next lesson. These activities had to be completed in a week.

Figure 1 Class blog: 'PROGETTO italsBLOG' (see online version for colours)



Figure 2 Students' blog: 'Italian cinema activity' (see online version for colours)

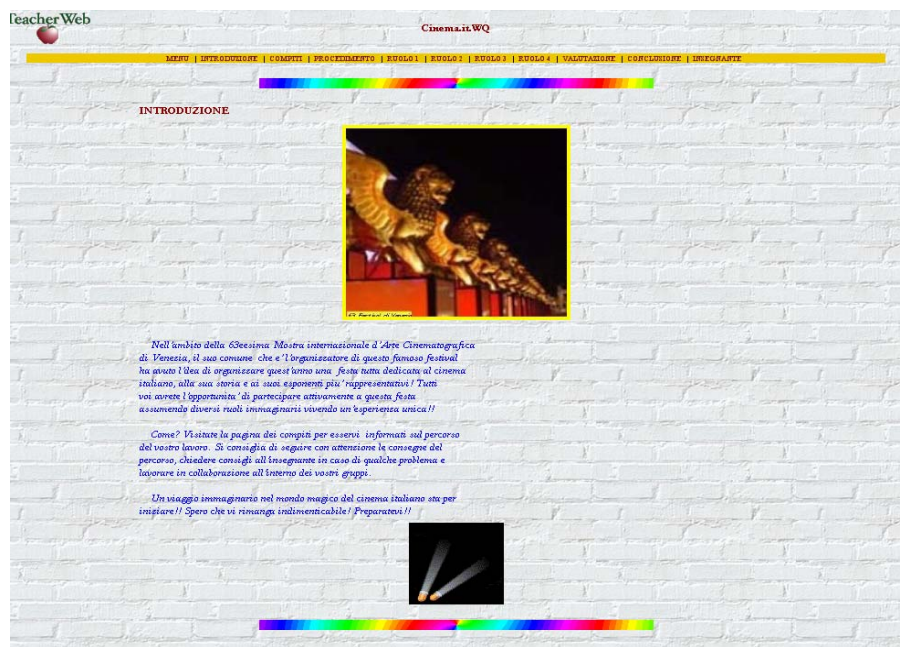
The students had to watch for example some video-scenes of very famous Italian films and then to post their comments at the class blog *italsblog* (Figure 1) expressing their opinions on which one they preferred and for what reasons. In this way a discussion was started on the proposed topic. In a second activity they had to create their own blog (Figure 2) that would be linked to the class blog 'italsblog' in which they would propose the film of their preference after having done a research to a series of Italian film databases, magazines, portals etc., proposed from the language teacher. Each of the students would post their comments at each student's blog and at the end they had to vote for the best proposed film at class blog.

In the second face-to-face lesson at the department's laboratory, there was an introduction to the webquest project (Figure 3).

Figure 3 Home page of the webquest project: 'Cinema.it.WQ' (see online version for colours)

Webquests activities had a beginning in class where there was a presentation of all the steps of the project, the division of the class in groups of four and the distribution of the different roles. Each member of the group had a concrete role to play separately in their project and all the members together had to create and present a final work at the end based on the personal findings of each member. The tool that was used for the creation and publication of the webquests projects online is called *teachersweb*.

Figure 4 Introduction page of the webquest project: ‘Cinema.it.WQ’ (see online version for colours)



The webquest tool *teachersweb* adds few steps to the webquest model. It gives the possibility of the creation of a page for every role separately, for the teacher's lesson plan and for the final conclusions of the webquest projects. In Figure 4 there is an example of the 'introduction' page.

3.4.1 Wiki 'italswebquest' as a language learning environment

The third on-line lesson had one week duration and it took place in the online wiki environment created with the tool *wikispaces*. Wikispaces was used as a safe closed environment where students could have access only with password and the tutor was the responsible administrator of the space. *Italswebquest*, a wiki class for the students of the Italian language, was created. Every group had its space in wiki's class where it could work collaboratively on its webquest project using the discussion area for communication. Each group could publish its final work in its own wiki space. The progress of the work could be easily controlled by the tutor and every student could ask the tutor any questions in the group's discussion area during the week.

Figure 5 Wiki 'italswebquest' – introduction page (see online version for colours)

In the fourth face-to-face lesson at the department's laboratory, each representative of a group presented orally in Italian language the final group's work. The presentation could be supported by slides but it was not obligatory. After the groups' presentations the lesson closed with a class discussion. The final groups' works were available at the class wiki in a common space where the final webquest were published according to their topic. Anyone of the class could read them or add a comment or more material.

3.4.2 Wiki 'italswebquest' as a language course management system

The class wiki had a class discussion area and a class announcement space where the teacher could post information regarding the class on line and face to face lessons,

material, timetable, workshops, seminars. It included also the links of the WebQuests projects and the links of both class's and students' blog. There were also in students' availability several spaces in wiki class that were used as course's repositories for:

- 1 class material
- 2 multimedial materials such as videos, ppt files, listening files
- 3 supplementary Italian language activities of a great variety of all the levels
- 4 language tests
- 5 links (grammar, vocabulary, expressions, culture portals, dictionaries, etc.).

3.5 *Results*

Regarding the first research question, initial results indicated that there was observed a great collaboration attitude from the beginning of the study and a gradual increase of students' motivation and participation during the study. Students collaborated on writing the final report of the webquest projects using their group wiki space and had a communication regarding the process of their work on the discussion area of their groups. Italian language was the language that they used during all the on line interactions and this was a very good language practice for them.

Referring to the second research question, the tutor noted that the students used the wiki to communicate with each other and their fellow students on their group work, for downloading tutors' notes or getting informed on the course's activities, more than asking guiding questions for problems occurred. Some students used the wiki environment during the face to face lessons and many groups exchanged their ideas in class more than on line. Many of them were discussing within their group or other groups about some technical difficulties they had and this caused an impact on the frequency of their use of wiki environment. There was a bigger on line participation during the last day before the face to face lessons. Generally, most of the students managed to use successfully the basic potentials of wikis as it was asked; elaborating a group text and discuss in the group's discussion area. Even though there was a great motivation to understand and try most of the potentials (downloading videos for example) of this new environment for them, only the 15% was able to really use the most of its potentials.

As far as the third research question is concerned students affronted sometimes technical problems as logging in, simultaneous editing or loosing writing material at the moment that they were writing. That affected them sometimes negatively on their procedure of learning because they lost time and caused them a little bit of stress. Also it is worth mentioning, that blog was a tool that was characterised as more friendly in use for the 70% of them whereas the 50% of the total would continue to use it for personal reasons too. Despite all these problems they enjoyed the experience and they would like to experiment wiki tool in future classes too.

Referring to the fourth research question, it was found that satisfaction levels for the implemented blended learning scenario of the 88% of the students were very high, despite the difficulties occurred at the use of wiki. The possibility of having such an interesting collaborative class work and the potential to communicate with each other and the tutor in the foreign language without limits of time and space were the basic reasons. They had plenty of time to elaborate their work and learn from each other. Blog and wiki

tool and the webquest approach was a very good combination according to the students. The 85% of the students wouldn't change this learning experience with a traditional language learning lesson.

Concluding with the last research question first results showed that *italswebquest* has been used as a course management system almost efficiently. Students used the wiki environment more for getting information regarding the course, for downloading the course's material and for visiting useful links but less for adding material or links of their own. There are some reasons for these findings such as the lack of confidence of some students in their technical skills, the lack of experience in using a wiki tool, the difficulties in simultaneous editing and the lack of a search function in wiki.

4 Conclusions

This paper proposed a methodology for collaborative blended language learning using wikis. It presented an implementation of this methodology which combined blog activities with webquest projects for advanced level of Italian language students. It took place in face-to-face lessons and online using a wiki as a platform of collaborative language learning. Initial results were encouraging. Both the teacher's and students' attitudes were positive towards the use of wiki as an online language learning environment of collaboration. The students showed great interest and participation during the whole project. As a course management system wiki has been used mostly for students' information regarding the course, the material and the on line activities. Further quantitative results will be presented and analysed in a future paper.

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