

E-tivities with a Wiki: Innovative Teaching of English as a Foreign Language

Andreja Kovacic¹, Goran Bubas², Miran Zlatovic³

University of Zagreb, Faculty of Organization and Informatics, Pavlinska 2, 42000 Varazdin, Croatia.
¹andreja.kovacic@foi.hr ²goran.bubas@foi.hr ³miran.zlatovic@foi.hr.

Keywords

Social software, wiki, e-tivities, computer aided language learning, English as a foreign language.

1. EXECUTIVE SUMMARY

The Engwiki project started in November 2006 at the Faculty of Organization and Informatics, University of Zagreb, Croatia. The most important goals of this project were: (a) to test the applicability of wiki technology in teaching English for Special Purposes (ESP) and English as a Foreign Language (EFL) at the university level; (b) to innovatively use a wiki by engaging the students in various types of individual and collaborative online learning activities (e-tivities); (c) to evaluate each e-tivity so that other second language teachers could choose the most suitable e-tivities for use in computer-aided language learning with wiki or other internet-based technologies; and (d) to disseminate project outcomes over the wiki website, as well as through participation in international conferences and publishing of research papers. The open-source MediaWiki (www.mediawiki.org) was used for this project. This paper describes the following elements of the Engwiki project: theoretical background, technology, pedagogy and instructional design, selection and examples of online pedagogical activities (e-tivities), evaluation of e-tivities and peer evaluation of the project.

1.1. E-tivities with a wiki in language learning

Interaction between the content creators and the users of a wiki can enable collaborative writing, create a social dimension in online learning and facilitate group creativity and critical thinking. Social software like wikies and weblogs can be used in language learning to encourage student interaction and discovery while helping the students acquire the linguistic content of the language course. The flexibility and relative ease of use of wikies make them suitable for the implementation of learning paradigms like collaborative learning spaces and peer-to-peer learning.

Traditional learning paradigms, such as cognitivism and constructivism, and novel learning paradigms can be implemented through the design of online learning activities or e-tivities. A total of 23 e-tivities were (re)designed for use in the Engwiki project. These e-tivities can be categorized as: (1) predominantly open-ended or extensive, with tasks that are apparently non-linguistic and tend to have a prominent communicative profile (e.g. activities with "free writing" like discussions and short essays); (2) less open-ended e-tivities, with predominantly intensive (controlled) tasks, characterized by focus on accuracy (e.g. vocabulary-related e-tivities and structure-related e-tivities); (3) information-gap simple e-tivities or 'session openers' (through them students both get to know each other and become familiar with using a wiki as a tool). Groups of approximately 10-30 students were engaged in three separate studies to perform one to four of the analyzed e-tivities during the 2006/2007 and 2007/2008 academic year. Examples of these e-tivities are presented in this paper, as are the results of their evaluation by students.

1.2. Project outcome

Most of the 23 analyzed e-tivities with a wiki were positively evaluated by students of the ESP/EFL course. Furthermore, the overall use of the wiki was evaluated comparably to other traditional in-class exercises and out-of-class activities such as home assignments. The open source wiki technology proved to be easy to use, simple and efficient, as well cost effective.

2. ENGWIKI PROJECT BACKGROUND

The Engwiki project (Engwiki, 2007) started in November 2006 at the Faculty of Organization and Informatics, University of Zagreb, Croatia. The study programs at the Faculty of Organization and Informatics are predominantly oriented toward information systems design, business informatics, and software engineering. Most of the students have a high level of computer/information literacy and broadband access to the Internet from home.

Social software (wiki, weblog, del.icio.us) was first used in the blended course "Psychology and the Internet" in April 2006 (Bubas and Kermek, 2007; Bubas et al., 2006) after the second author of the current paper (Goran Bubas, associate professor of Communication Science) attended a workshop on instructional design led by Frank Miller¹ from the University of British Columbia, Canada. The second author had also developed a workshop on the pedagogy of e-learning with a lesson on online pedagogical activities (e-tivities). The idea to use e-tivities with a wiki in teaching English came from the first author and project leader (Andreja Kovacic, lecturer) who also predominantly contributed to the Engwiki project with ideas for e-tivities, preparation for their use in class, actual use in teaching groups of students, and evaluation of student work. Technical support during the project was mostly provided by the third author (Miran Zlatovic, teaching assistant). Darko Grabar (webmaster) helped with the design of wiki Main Page, and Kresimir Kudumija (system engineer) installed the wiki and maintained the server. In addition, one student in each school year helped the project leader in creating instructional web pages and organizing the wiki. The limited amount of financing (less than EUR 1,000) came from other e-learning projects led by the second author. The outcomes of the Engwiki project were evaluated by student surveys which were developed by the second author, and the conference reports on the project were written by all three authors of this paper.

The most important goals of the Engwiki project were: (a) to test the applicability of wiki technology in teaching English for special purpose (ESP) and English as a foreign language (EFL) at the university level; (b) to innovatively use a wiki by engaging the students in various types of individual and collaborative online learning activities (e-tivities); (c) to evaluate each e-tivity so that other second language teachers could choose the most suitable e-tivities for use in computer-aided language learning with wiki or other internet-based technologies; and (d) to disseminate project outcomes over the wiki website, as well as through participation in international conferences and the publishing of research papers. Even though Engwiki is an ongoing project, all of the goals have been achieved to a considerable degree. The project outcomes have been presented at conferences in Croatia (Kovacic et al., 2007b) and Italy (Kovacic et al., 2007a). The paper on the project was also accepted for the EDEN 2008 conference in Portugal, and in June 2008 the project will be presented to teachers interested in e-learning at the *Center for e-learning* of the University of Zagreb, Croatia. A further intention is to disseminate the outcomes of the project to teachers of foreign languages since it is assessed that the need for resources to implement this project (finance, technology, time/effort) and the required level of computer literacy for this type of e-learning in blended courses is rather low in comparison with the potential benefits for both students and teachers. The design of a set of suitable e-tivities and their evaluation, as the first step of effective implementation of blended language learning courses, has already been made with the Engwiki project.

The open-source MediaWiki (www.mediawiki.org) was used for the Engwiki project. Due to limited resources, the wiki system was placed on a server purchased for another e-learning project. The installation of the wiki system, the design of the wiki Main Page, and the work of the student who administrated the system for the course activities were financially compensated very modestly, and the rest of the work was performed on a voluntary basis by the project leader and the other co-authors of this paper.

¹ Information on another related workshop of Jeff Miller delivered in Croatia (and his brief biography) is available on the following web page (retrieved May 10, 2008):
http://www.carnet.hr/CUC/cuc2005/program/tutorials/list/ws2_miller_absbio.htm

3. TECHNOLOGICAL ASPECTS OF THE ENGWIKI PROJECT

Wiki technology is rather easy to use for those with basic computer/Internet skills. Wiki websites are a form of a content management system which allows users to add, edit, or remove the content of a website (web pages, text, illustrations, etc.) and also enables tracking of all the changes of these web pages over time. The wiki is an efficient tool for collaborative writing, with a potential for interaction between the content creators and users/readers (**Wiki). As a collaborative platform, wiki systems enable writing, editing and discussing online educational content, creating online glossaries and repositories of supplemental educational material, etc. (Reinhold, 2006). Wiki technology is often used to support various online teaching and learning activities and it can replace the traditional linear approach of presenting the course content with, for certain fields of knowledge, a more appropriate networked approach (Bruns, 2005). Wiki can be used for the development of Internet-based communication literacy, the collective creation of course content and peer-to-peer learning, and can contribute to students' learning experience (Bubas et al., 2006; Majchrzack, 2006).

Wiki systems may overcome isolation in distance learning and help connect students through synergy in the co-authoring of online documents, in creativity and critical thinking during collaborative group activities, and in increased participation in the creation of learning content and in problem solving (Bruns, 2005; Majchrzack, 2006).

As a collaborative writing system the wiki manifested following advantages and disadvantages in the Engwiki project (see also: Wei, 2005):

- The advantages were associated with simple use and collaboration, low technology requirements for use by students (a web browser), and centralization of created documents which supported users' mobility.
- For those with insufficient computer/Internet related skills the major disadvantages of a wiki were the necessity to learn the wiki syntax to fully exploit the potential for content creation and formatting, non-intuitivity of the more advanced functions for content formatting (headings, tables, navigational structures), as well as lack of automated content structuring since the hyperlinks and hierarchy/structure between wiki pages had to be manually formed (the latter was also a disadvantage for the instructor).

The usability of the wiki tool was evaluated with a student survey of the Engwiki project. One such analysis indicated that, for most participants in the ESP course, the user interface was easy or very easy to use (in fact, 81% or 62 out of 77 students rated the user interface this way). Similar findings related to simplicity of wiki use were reported in another study (Désiletes et al., 2005) in which the identified problems of wiki users were associated with the comprehension of the concept of hypertext documents and the process of creating and maintaining the hyperlinks between them, image uploading, creating and editing of wiki pages, and collaboration within the wiki environment. In the Engwiki project some of the students had problems with image uploading and creation of new wiki pages, while the evaluation survey also revealed a rather low level of collaboration within groups and between groups who used the wiki environment to perform various e-tivities. Some of the potential problems were avoided by initial training with a simple wiki-based e-tivity of all students who attended the ESP/EFL courses in the use of wiki for online content creation. However, training focused on the social aspects of wiki usage (collaborative content creation, teamwork, online communication, etc.) was not performed even though it could have considerably contributed to the pedagogical outcomes of the Engwiki project.

Some other disadvantages of classic wiki technology (see: Elrufaie, 2005) could also apply to the Engwiki project: (a) no possibility to deny the right to modify certain pages - Main Page, pages with description assignments, and similar pages that must remain static; (b) no possibility to make a student page private until the student decides that the content is ready for publication; (c) no possibility to make the content in a wiki environment visible only to students who are enrolled in particular courses. The lack of control over published content is another potentially negative aspect of introducing wiki technology in a university environment (for an example, see: Battle, 2006). In the case of the Engwiki project there were no cases of misuse of wiki for publishing inappropriate content, except for a discovery that a malicious web robot had opened a new wiki page and repeatedly placed inappropriate advertising content on this web page.

4. PEDAGOGICAL RATIONALE BEHIND THE ENGWIKI

The technological aspects of a wiki tool in e-learning can not be analyzed separately from its pedagogical potential and in the Engwiki project this tool was used in accordance with following guiding principles and potential outcomes of constructivist learning (adapted from: Iverson, 2005; Seitzinger, 2006):

- Multiple perspectives were supported with diversity of representations of concepts.
- Cooperative and collaborative (peer-to-peer) learning was achieved in order to expose students to alternative viewpoints.
- Objectives of learning activities were at least partly identified by students.
- Relevant and authentic learning content and tasks were used.
- Interactivity was achieved with active engagement with online course elements.
- The learning was problem-based in many e-tivities.
- The instruction was learner-centered and the instructor tried to assume the role of guide and facilitator.
- Students' self-analysis, self-regulation, reflection, and awareness were encouraged through the use of stimulating e-learning activities with a wiki.
- The emphasis was on knowledge construction instead of knowledge reproduction.
- Independent exploration, knowledge search and presentation was as a favored approach.
- The students were sometimes engaged in language tasks that slightly surpassed the limits of their ability.

Some cognitive principles and models of instruction (see: Schaffert, 2006) were also present in the Engwiki project like concept development, reflection, cognitive apprenticeship, story telling, and integration of knowledge.

However, the basic pedagogical intention of the Engwiki team was to use, design and evaluate various online learning activities or e-tivities. The term, "e-tivity", was coined by Salmon (2002) to denote pedagogical activities designed by e-moderators. Several collections of e-learning activities or pedagogical strategies have been recently published (e.g. Iverson, 2005; Watkins, 2005) and specific online activities were designed for teaching English as a second language (Marco, 2002).

Some of the e-tivities for the Engwiki project were selected from web resources or literature (Iverson, Marco), but most of them were (re)designed especially for the purpose of this project by the first author of this paper (Andreja Kovacic). It must be noted that the design of e-tivities can support various forms of cognitive and constructivist principles of learning.

The pedagogical background for using a wiki system (Engwiki project) for teaching English in our EFL/ESP courses was somewhat different from the basic pedagogical intention. With regard to the principles involved in designing e-tivities for the Engwiki, some of the traditional guidelines for creating learning activities for EFL were also observed, for instance: choice of topic (non-linguistic content of the activity), visual focus, open-endedness, information gaps, personalization, pleasurable tension, entertainment, play-acting, etc. (Ur, 1988, 17-25). In order to address the demanding learning environment and effectively cope with the dynamic changes in the subject matter, which especially applies to ICT (Information and Communications Technology), every foreign language project ought to draw on the current developments in this field. Owing to the characteristics of its target audience - first- and second- year undergraduate students of Business and Information Technology - the Engwiki project has been designed so as to adhere as closely as possible to the principles of ESP (English for Specific Purposes), CALL (computer-assisted language learning), CLIL (content-integrated language learning) and project-based language instruction. The language learning objectives of the project were to respond to students' needs and expectations through a combination of these approaches, intertwining them with concepts such as student autonomy, the student-centered approach, collaborative learning, the negotiated syllabus, and others. Since the technological platform for the introduction of this e-learning module was provided by a wiki system, the effectiveness of its implementation, as perceived by the students of the course (both its linguistic and extra-linguistic aspects), as well as its role in the acquisition of the content, was investigated.

Students at the Faculty of Organization and Informatics in Varaždin are familiar with working in VLEs (virtual learning environments) such as Moodle, and although wiki is one of the resources available within such systems, it is not sufficiently exploited. Engwiki is therefore quite a unique contribution to teaching, perceived as such by students who commented: *'The possibility of using a wiki to complement the English course, as a tool used so far in a fairly limited number of university courses, was on the whole positive for the course'; 'The wiki system that I have had the chance to work with these two semesters was a different experience from any I've had using any of the usual internet tools and applications.'*

Teaching pre-work ESP students often means developing two different motivations in tandem (Harding, 2007, p. 9): that in the English language and their core field of study itself, which calls for a cross-curricular (or CLIL-based) approach. On the one hand, an ESP teacher is no longer a 'primary knower' of the carrier content of the material and has to draw on students' knowledge of the subject matter (Dudley-Evans, 1998, 13) to ensure successful classroom interaction. In an ESP setting, the teacher acts as a consultant, providing 'expertise in communication practices', negotiating the ways of translating them into objectives with the students, and it is often 'the learner who asks the questions and the teacher who responds' (Dudley-Evans, 1998, p. 14). On the other hand, the expectations of students who come to class 'with increasing computer expertise and sophistication' (Szendeffy, 2007, p. 8) should by no means be neglected. Finally, apart from combining their computing abilities with the content, different levels of language proficiency, especially in large classes, need to be catered for. It is by involving students in team projects - such as those performed in Engwiki - in which individuals can participate 'at the level of their interest, ability and motivation' (Harrison, 2007, pp. 64-66) that the challenge of a (typically) mixed-ability ESP context can best be managed.

Engwiki has been designed to meet the requirements of project work in general (Szendeffy, 2007, p. 118), including writing clear instructions (which, although elaborate, are easy to follow), grouping students, orienting students to tools, scheduling, segmenting the project into manageable stages and providing assistance. Owing to the lack of face-to-face interaction in performing the activities, keeping momentum through feedback was critical in the course of each activity, as well at the end of each one. To orchestrate all the efforts effectively, flexibility and alertness are needed, especially in activities where teams depend on each other and where the continuation of the activity can be compromised because of a team's failure to do their bit. Never in her 15-year career as an EFL professional has the project moderator (Andreja Kovacic, the first author) engaged in so much reflection on anything related to her teaching experience. But, faced with such a complex and evolving organism, it is only through reflection that valuable insights can be gained and (future) pitfalls avoided. This particularly refers to her personal 'milestone review' at the end of each term, when a new stage in the project development (with new students, different subject matter, designing a new batch of activities) would begin. Needless to say, in reengineering Engwiki to make it a more meaningful and appealing resource, dialogue - with project collaborators, student assistants and, especially, students (in class, via email) - has been invaluable. It is its presence, accessibility, and, it is hoped, its relevance that explains why students, even those engaged in the project a year ago, claimed to *'still return to Engwiki ever so often'*, mainly for reference.

Wiki is among the range of recent tools exploiting the vast potential of ICT through CALL, with English as the key language used in technologically mediated contexts, providing exposure to authentic materials and tasks, including performance assessment (Dudeny and Hockly, 2007, pp. 7-8). While promoting collaboration and communication between learners, CALL has for almost two decades been focused on integrating technology into the process of language acquisition as content and not merely as a means of instruction, using multimedia, allowing greater student control and content production arising from immersion in the target language 'on screen, content and interface' (Szendeffy, 2007, p. 8). Intended to complement, rather than replace, conventional face-to-face teaching and materials, Engwiki has aimed to improve comprehension through incidental learning, deepen the knowledge of the subject matter (business and ICT, respectively) and awareness of its non-linear nature, make technical students perceive language not merely as a means of communicating content but also as a way of *'transforming the feelings, ideas and opinions of others'* (**English 15, 2008). Furthermore, Engwiki aims for computers to be used to teach language through word processing, internet browsing, insisting on the process as much as the product itself, equipping students with both language and computer skills as transferable skills necessary for their

continuing academic and professional work. It is exactly along these lines that the foreign language curriculum at the Faculty of Organization and Informatics has been redrafted, stating as one of its outcomes the *'students' ability to perform structured written tasks by using information and communications technology'*.

Such a holistic approach has, we believe, been pursued through the Engwiki project. It seems to address appropriately the latest trends in modern education, emphasizing the use of 'open-source' content. One of our colleagues specializing in e-learning systems has reflected on the Engwiki project in the context of e-learning systems in the following way: *"The aim is just the opposite to the former use of e-learning systems and its content. One must try not to have an enclosed content in a system like Moodle. Users should be able to share the content easily and be able to comment on each other's work. On-line tests are no longer such a popular means of knowledge assessment. Instead, a more constructivist approach should be adopted. Wiki systems have an educational potential and could very easily replace LMS systems in the future. The Engwiki project is a milestone that confirms the above-mentioned claims."*

5. THE INNOVATIVE ASPECTS OF THE ENGWIKI PROJECT

The use of a wiki is novel in second language learning (Godwin-Jones, 2003; Chang and Schallert, 2005; Rueckert et al., 2007). The most innovative aspects of the Engwiki project are 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 CALL. Engwiki's innovative aspects as a manageable and sustainable supplement to traditional instruction can best be seen against other examples of the implementation of social software in education, recent examples of which in the area of language learning range from teacher-student blogs (Wicaksono, 2008, pp. 27-30), using Wikipedia as a teaching tool (Koniczny, 2008), a wiki created within a literature course (***Romantic Audience Project), to asynchronous discussion forums for teacher trainees (Casamally, 2008, pp. 58-60) an online Internet Classroom Assistant (ICA) conferencing forum (Batardière and Jeunneau, 2007), and others. The examples above are by no means limited to language instruction, or are they used merely for language practice, or restricted to EFL or, for that matter, to wiki as a tool. The titles of the papers presenting those projects reveal additional aspects of using ICT in education: 'challenging and transforming the second language learning experience' (Batardière and Jeunneau, 2007) or 'collaborative reflectivity' among teacher trainees (Casamally, 2008, pp. 58-60). Regardless of their variety, however, it seems that there is one particular area that has not been sufficiently exploited, which is using a wiki as a platform for interactive collaborative writing activities in the foreign language at the tertiary level. There is also a lack of consistent research into the implementation of a wiki in language learning at the tertiary level, although it has been suggested that 'the value of technological innovations in ESP lies in research possibilities' (Dudely-Evans, 1998, p. 209). To fill these gaps, and provide both a learning and community-building resource and a comprehensive (qualitative / quantitative) analysis of its applicability, Engwiki was introduced. Flexible, expandable and fairly easy to use, it has been used to perform e-tivities for varying purposes and with varying complexity (deliberately so), drawing students together to cooperate, stimulating their creative language production and comprehension (Szendeffy, 2007, p. xi). In e-tivity design and selection, all three possible directions of education coexist (Guerra, 2007, p. 4-5): the mono-cognitive, meta-cognitive and fanta-cognitive. Thus, in Engwiki, illustrations for each of them can be found. Consider two examples belonging to the second and third group, respectively: the meta-cognitive direction (defined as 'encouraging in a systematic way the use of different survey tools - attitudes, methods, techniques; leading to the possibility of conceptualization, generalization and transferability of produced knowledge') (Guerra, 2007, p. 4-5) (illustrated by an e-tivity in which flowcharts are designed to describe a non-technical procedure ('Translating a word') at http://cmc.foi.hr:8080/eng-wiki/index.php/14-E-tivity_2a); the fanta-cognitive direction ('aimed at stimulating in every student the ability and motivation to make original paths of understanding and culture); autonomous exploration in the world of knowledge' illustrated by a posting written by a student-wikipedian at http://cmc.foi.hr:8080/eng-wiki/index.php/How_I_became_a_Wikipedian, or one comparing the advantages and disadvantages (by using a language tutorial on linkers to group arguments) of technological options in which students creatively extended an English idiom and

produced a sophisticated analogy between tea, coffee and software preferences in the e-tivity called 'Not my cup of tea' at http://cmc.foi.hr:8080/eng-wiki/index.php/13-E-tivity_1.b.

We believe that through Engwiki another worthwhile contribution has been made: that of a taxonomy for language-learning e-tivities specifically devised or adapted for wiki. There are other classifications of e-tivities (including Iverson, 2005), a collection of e-learning games employing a variety of ICT tools (**Catalog, 2000), in which 4 classes of (non-linguistic) learning activities in Swiki were established.

In the taxonomy devised by the first author (Andreja Kovacic), most e-tivities can be broken down into two principal types: predominantly extensive and predominantly intensive, terms reminiscent of intensive and extensive as used in receptive skills (reading and listening). Classifying an e-tivity as intensive / extensive depends on the level of involvement with the content and complexity: whereas intensive e-tivities are more focused, prescribed, and imply controlled input and guided output, their extensive counterparts are less overtly linguistic in nature, imply a broader use of resources, and open-ended output. Many e-tivities are a combination of the two, but are still predominantly intensive / extensive in character. Whereas the intensive group is further subdivided into vocabulary- or structure-based e-tivities, their extensive counterparts fall into the following subgroups: repositories / e-tivities with a prominent communicative profile. 'Session openers', a term devised by Iverson (Iverson, 2005), refer to the third main e-tivity type. A pool of Engwiki e-tivities, along with e-tivity descriptions and sample e-tivities, can be viewed at http://cmc.foi.hr:8080/eng-wiki/index.php/Pool_of_e-tivities. Some of the individual e-tivities were adapted from those described by Iverson (2005) and from other sources, but most of them were designed by the first author.

The usefulness of a taxonomy lies in the fact that through it the structure / complexity of each e-tivity can be more easily seen in relation to other (analogous) e-tivities from the same group or other groups. Its role within the system can also be seen, as can its applicability to other areas, classrooms, while taking parameters such as class style, content, activity type into consideration (**Catalog, 2000). Needless to say, it is on the basis of the existing e-tivities that subsequent ones are designed, wherein the taxonomy can be used as a point of reference.

It is, we assume, owing to the elements discussed in this section that Engwiki has been recognized by e-learning specialists at the Faculty of Organization and Informatics as a resource suitably accomplished to be referred to as an example in the wider context of e-learning tools. In the words of a colleague and peer-to-peer evaluator of the Engwiki project: *"Since I have been working as a Facilitator in the iCAMP project I've seen many wiki systems. Engwiki was a pleasant surprise for me. The design is very attractive and pleasant. I have recommended my students within the iCAMP project to visit this wiki project to generate some ideas for their future course and for the e-learning environment they will have to establish."*

6. USEFULNESS AND BENEFITS OF THE INNOVATION FOR LANGUAGE TEACHERS AND FROM THE STUDENTS' PERSPECTIVE

In the moderator's opinion, the major benefit of the introduction of the project has been galvanizing students' intellectual and creative potential, and their greater linguistic / technological involvement in the course.

The benefits need to be weighed against the challenges that a project applied on a fairly large sample of students inevitably imply. This section starts with a peer review focusing on the multi-faceted nature of the project. It is followed by a brief catalogue of a qualitative evaluation of Engwiki provided by students. *"On the Engwiki homepage a visitor can obtain relevant information about the importance of the project through links to papers in which the project was presented. Some quotes and related links are also elements that give richness to the introductory content. What is missing is a brief introduction to the project and its aim, so visitors could immediately know what to expect to find on the project pages. The idea itself is very good and encouraging. The system enables students to participate more actively in the course, to contribute by leaving their comments and to show (through personal reviews and team work) what they have learned and what experiences they have acquired. Those diverse elements of student participation are a better indicator for measuring the quality and quantity of students' activity and therefore the overall*

score for each student can be given more precisely and objectively. This is the future of e-learning and Engwiki is just a very good example of the new approach to learning based on a wiki system."

The most immediate function of Engwiki was to serve as a repository of articles, both whose creation and the result of which ensure exposure to a greater body of technical and other texts. This has been positively assessed by the students themselves: *"On a slightly larger scale, having such a "database" project at the Faculty only deserves compliments. Over a couple of years, this database could grow quite large, should the standards of English 1 remain the same".* The project's contribution to 'activating learners' (passive) knowledge of 'the conventions of communication in their community' (Dudely-Evans, 1998, pp. 209) - one of the objectives of ESP - has been described as follows: *"As I attended a school specializing in economics, my knowledge of IT words in English was limited to just a few, very common, IT words and phrases. When we started doing our weekly tasks for Engwiki, I soon realized how small my IT vocabulary was and how insufficient it was for my major study. The whole Engwiki concept gave me a strong impulse to improve my knowledge of English, to make it more refined. And the best way to do it was through practice. It is said that 'Practice makes perfect'. So, after working with Engwiki I felt a tremendous increase in my English skills and vocabulary. This new knowledge and skills turned out to be very useful in my later studies. I would like to thank you for making me a part of this mini project."*

Regardless of the large number of articles within it, Engwiki is work in progress, especially when we consider augmenting it as a meaningful database: *"In the second semester, with Business English 2, we tried to unify the topics a little bit more, creating more quality content within the wiki. From my perspective, such an undertaking is quite something."*

An ESP teacher should try to tap into, apart from the specific language involved, the students' individual preferences and abilities. The extent to which Engwiki has met that requirement is illustrated in the following words: *"In the two projects I worked on, I was able to use my creativity, the timeframe was sufficient, and the ability to choose our team members on our own was welcome. I really liked doing Engwiki projects, unlike other classes in which we have to do essays and presentations in which it is required to put forward facts without a personal opinion."*

Additionally, doing e-tivities offers the chance to build rapport with the students, and access to students' work posted in Engwiki is a means of getting to know their interests and 'scanning' their proficiency in English. It also allows for a balance to be struck with the students' expectations during the definition-article writing stage, where the first round of topics was defined by the teacher, and the second proposed by students. *"As each person is an individual, everybody has some hobby or interest that they know more about than other people on average. Why not just ask for topics that are within that area and write about them? Attempts to relate to the students' mindset is likely to be rewarded: I've noticed some more enthusiasm during the last e-tivity when the students had the option of choosing their assignments. That could be used to improve the articles as well!"*

It is evident that the relevance of topics is one aspect of Engwiki that worked particularly well with students. To make the 'transfusion of knowledge and mutual expertise' the ultimate goal of a successful course (Harding, 2007, p. 8), *"students need to understand that just by talking to the teacher more, they can input their ideas for topics, their ideas for e-tivities and with just that make the wiki experience a lot more fun for them. The wiki doesn't have to be just a source of points that go towards the sum at the end of the course, they can make the wiki a pastime that will earn them points in the end."*

"Engwiki has not only provided students with a chance to deepen their knowledge of the subject matter by merely writing about familiar subjects in English, but also by exploring areas: Some of the many subjects to be found on Engwiki I found particularly interesting, like the one I had to write, 'Paradoxes in communication'. Internet sources on that subject are not very numerous, so it is nice to have a subject like that covered." Besides, since in CALL students 'don't study language as much as use it to cooperate and solve problems not unique to the language classroom' (Szendeffy, 2007, xi), they had to 'step out' of the definition-writing pattern and engage in a number of tasks, including: developing a critical attitude toward positive and negative sides of information technology (My first encounter with Wikipedia) at http://cmc.foi.hr:8080/eng-wiki/index.php/My_first_encounter_with_Wikipedia; peer grading in choosing the best summary at http://cmc.foi.hr:8080/eng-wiki/index.php/Summaries_5 (see the comment on the discussion

page); an information gap activity leading to a virtual dialogue with a humorous undertone at http://cmc.foi.hr:8080/eng-wiki/index.php/22-E-tivity_1.b (see the discussion page).

Finally, among the features of Engwiki that made it appealing to work with was the sense of contribution, seeing a 'concrete product' of their work, visible in the comment accompanying the activity at http://cmc.foi.hr:8080/eng-wiki/index.php/22-E-tivity_2.b. In the case of students who accepted the project, the urge to achieve (beyond being awarded the necessary credits) was further intensified by seeing their work published, although with students uncomfortable with their writing skills this produced the opposite effect and made them perceive e-tivities as merely 'something else they are forced to do'. Also, although fairly simple to use, the overall experience of working with Engwiki also depended on students' ICT skills; its editability (on several occasions, revealing the vulnerability of the content) was controlled by giving wiki users passwords for editing.

Students for whom producing articles in wiki was a means of self-realization have given suggestions to make wiki's quality content even more available for public scrutiny by adding technical solutions and adding more transparent headings to articles, some of which, for easier administration, are presently quite abstract. The way in which hard-working students value their work can also be seen in the comment: "I can't really think of any objection to it, only that you should award more points for it because it really takes plenty of time to get it done properly". For the teacher, 'formative evaluation' in the form of an on-going needs analysis can lead to insights which can subsequently be built into the next stage of the course (Dudely-Evans, 1998, p. 17). In the future, even greater flexibility and modularity may be expected, moving away from firmly prescribed topics and instructions toward negotiated topics and execution and greater student involvement in e-tivity design. It has been proposed that students be involved in searching for technological solutions to expand the system's functionalities. It is true that even such improved learning conditions will not work with all students. In some cases, however, it has worked miracles and in many others changed the students' learning experience. We can therefore conclude that deploying Engwiki has been successful in taking 'the classroom into the real world that the students inhabit', and bringing 'their real world into the classroom' (Harding, 2007, p. 8).

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APPENDIX 1

Engwiki project - review by a wiki specialist and anglicist

"The Engwiki project of the Faculty of Organization and Informatics uses a wiki system as a platform to encourage collaboration and active participation in the instruction of English for Specific Purposes (ESP) for first-year students of Information Technology.

The advantages of wiki, as a tool which is simple to use, fast, open and encourages collaboration, have been put to excellent use in a broad array of online learning activities, i.e. e-tivities. For example, wiki seems ideal for activities such as "brainwriting" in which a quick exchange of opinions and the collaborative development of content are crucial. In addition to strictly English-teaching skills such as reading and writing, and vocabulary building, individual and group activities are designed in a way that seem to efficiently encourage the development of skills such as team work, critical thinking, debate, computer-mediated communication skills, technical skills, academic writing and research. All this also raises awareness of ownership and copyright on the Internet. By shifting attention from the teacher, as the provider of knowledge, to the students, as the ones constructing the content and collaborating on its development, the students are given room to improve all such skills they would likely not have in a face-to-face environment constrained by time and space.

Engwiki is a well laid-out and structured site, rich in content and powered by an active collaborative community of students and tutors. History tabs of almost all the pages within the system will attest to the high level of activity among the students. In addition to the designed online activities, the participants are provided with a network of links to other useful resources on the Internet. Since the tool might be new to at least some of the students, a very valuable addition is made with the detailed instructions on both the use and editing of wiki, as well as for the activities themselves, which makes orientation in this domain very much easier.

Based on my experience both as an Anglicist and a wiki expert and trainer (in my work I do research on the use of social software, including the wiki, in education, and also develop and conduct workshops on the topic), I find that the project's user-friendly interface, interactivity, active learning community and rich content have exploited the advantages of this social software tool constructively and efficiently. Finally, particularly commendable is the innovative use of this tool in a higher-education course to both promote the use of ICT and to develop new social skills in students."

Branka Vuk Koracak

Croatian Academic and Research Network, CARNet

Zagreb, Croatia

APPENDIX 2

Results of the evaluation of Engwiki e-tivities

(excerpt from a paper accepted for presentation at the EDEN 2008 conference, Lisabon, Portugal)

Table 1 The results of the general evaluation of e-tivities with a wiki system, and evaluation regarding the ratings for usefulness and interestingness by different groups of students in our study (N = number of students in a group)

EXAMPLES OF PREDOMINANTLY EXTENSIVE (FREE) INPUT AND OUTPUT E-TIVITIES			
Collections of online resources			
<i>Hotlist</i> M _u =3.44 ; M _i =3.44 ; N=16		<i>Media Scrapbook</i> M _u =3.19 ; M _i =3.25 ; N=16	
<i>Quiz</i> M _g =3.38 ; N=87			
Histories, biographies and analogies			
<i>Paradoxes</i> M _u =2.88 ; M _i =3.00 ; N=56	<i>Decades of the 20th Century</i> M _u =3.02 ; M _i =3.06 ; N=98	<i>Hall of Fame</i> M _g =3.35 ; N=79	
Narratives and role plays			
<i>Storyboard (Complaints)</i> M _u =3.71 ; M _i =3.83 ; N=7	<i>Debate (Globalization)</i> M _u =3.83 ; M _i =3.91 ; N=12	<i>(Not) Your Cup of Tea?</i> M _u =2.74 ; M _i =3.11 ; N=47	
Opinion-based e-tivities			
<i>Brainwriting</i> M _u =3.82 ; M _i =4.05 ; N=11	<i>Challenge</i> M _u =2.66 ; M _i =3.07 ; N=29	<i>Chain Letter</i> M _u =3.58 ; M _i =4.09 ; N=11	<i>Friend or Foe?</i> M _u =2.57 ; M _i =2.83 ; N=30
Experience-based e-tivities			
<i>Time capsule</i> M _u =2.69 ; M _i =2.98 ; N=45		<i>My First Encounter With...</i> M _g =3.39 ; N=87	
EXAMPLES OF PREDOMINANTLY INTENSIVE (CONTROLLED) INPUT AND OUTPUT E-TIVITIES			
Structure revision			
<i>Flowcharts</i> M _u =2.63 ; M _i =2.86 ; N=49	<i>Linguanimations</i> M _u =2.79 ; M _i =2.82 ; N=39	<i>Desktop Publishing</i> M _u =2.59 ; M _i =2.83 ; N=30	
<i>Compressing/extending the sentence - Unzip/Zip</i> M _u =3.50 ; M _i =3.86 ; N=14			
INFORMATION-GAP BASED E-TIVITIES / 'SESSION OPENERS'			
<i>True/False</i> M _u =3.10 ; M _i =3.67 ; N=8	<i>Picture That</i> M _u =2.62 ; M _i =3.10 ; N=50	<i>Every Picture Tells a Story</i> M _u =2.93 ; M _i =3.93 ; N=15	

* M_u - average rating of usefulness; M_i - average rating of interestingness ; M_g - average rating of general aspects of e-tivity

** the rating for M_u, M_i and M_g was performed on a Likert-type scale ranging from 1-very poor to 5-very good