

Assessing WebCT and Moodle for Collaborative Learning of ESP

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Abstract

Two versions of Moodle and WebCT have been analyzed considering their collaborative language learning tools and the instructional design of two ESP subjects. The instructional design is based on constructivist pedagogy and peer collaboration, as well as five systems adapted from the emerging mobile learning paradigm: *team memory*, *team communication*, *team awareness*, *team workplace* and *team assessment*. The results of the analysis are not quite satisfactory as none of the two Virtual Learning Environments provide enough tools to design efficient and satisfactory ESP team-focussed activities.

1. Introduction

Wu et al. argue that the event of the World-Wide-Web became a landmark in the development of Computer Aided Language Learning (CALL) early in the 1990s, as since then it has been possible “to augment, or even replace, face-to-face teaching by learning activities in the form of online exercises that were readily accessible to learners outside the classroom [and, furthermore] a plethora of language learning material [has become] available or use by teachers and learners” (2007: 1). These experts have classified existing web-based language learning resources into seven types of exercises: multichoice, matching, permutation (or ordering), fill-in-the-blanks, type-the-answer, spelling, and category (lexical grouping into specific criteria) (*ibid.*: 2-3). Instructors may use these resources when designing web-based language courses for both General English and for English for Specific Purposes (ESP henceforward). They are particularly useful for practising communicative skills together with vocabulary and grammar. Efficient as these kinds of activities may be, however, only instructors

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willing to practise autonomous language learning would select them as part of their Didactic Units (DU henceforward).

However, let us not forget that what matters when learning a second language is not its formal aspects, but how to use it adequately in order to communicate efficiently. With this point of reference, therefore, I believe that Virtual Learning Environments (VLE henceforward), where DU may be embedded, are needed whose learning tools can be activated to facilitate collaborative language learning and practice (in the form of peer-to-peer interaction).

In the present study, I analyse the collaborative language learning tools available in two VLEs considering the instructional design of two ESP subjects, for both of which the author of this paper was the instructor for the period 2006-07. The two VLEs are WebCT Campus Edition (version 4.0.2.4.) and Moodle (version 1.5.4.); and the subjects are *Inglés aplicado a la Informática* and *Inglés para Informática*.

These subjects share the pedagogical model and the technologically-based process of learning, but differ in terms of the educational setting. On the one hand, *Inglés aplicado a la Informática* is an optional subject within the Computer Science Engineering syllabus taught at Alcalá University, Spain (UAH henceforward). The instructor has been responsible for its tuition for the last two courses, and has evidenced the high motivation of those students enrolled at the course onset, on the assumption of how necessary English is for their future career. However, their interest and motivation in the subject declines as the semester progresses, and class absenteeism is pervasive: poor progress and a failure to attain expected objectives, mainly due to the high workload from compulsory subjects, but also because of professional commitments are just some reasons that account for this.

In order to partially overcome this situation, this instructor has made use of UAH's available VLE, *i.e.* WebCT, to design blended learning activities during the academic year 2006-07.¹ Consequently, despite students' non-coincidence in time and space, learning has been fostered, as the use of a VLE allows students to log in and continue with the learning progress at the place and time they wish (activity deadlines permitting).

¹ Blended learning is understood as the combination of face-to-face instruction and e-learning.

On the other hand, instructors from the Department of Modern Philology at UAH have designed an ESP subject which was offered within the educational setting of the ADA project during the year 2006-07 in its first edition.² As mentioned above, the subject is entitled *Inglés para Informática*; it is an optional part of the syllabus of all university degrees offered within the Spanish Autonomous Community of Madrid; and the institutional VLE is Moodle.

The reduced number of subjects specifically devoted to Computer Science English, within the syllabuses offered by Madrid universities (apart from Carlos III University³), and the need for continuing learning the same topic during the students' undergraduate period have played an important role in the decision to offer the subject.

2. Setting standards for collaborative language learning of ESP

I agree with Dudley-Evans when he says: “The key defining feature of ESP is that its teaching and materials are founded on the results of **need analysis**” (2001: 131). In fact, instructors who set about designing an ESP course first ask themselves about the kind of genre and discourse needed, specific vocabulary, the specific skills to master (comprehension or production, or both) (*ibid.*). To this I would add that all varieties of ESP have their particular situational traits. In fact, the communicative needs of English for Engineering differs greatly to those of English for Medicine when rhetorical functions, specific vocabulary, grammatical routines, and situational contexts are compared.

However, all varieties of ESP share common linguistic elements of General English. In fact, General English is essential for the understanding and production of both written or oral technical texts, as well as for the non-technical day-to-day interaction in any educational setting, especially in peer-to-peer communication. This kind

² The actual instructors are Dr. M^a Dolores Porto and the author of this paper. By visiting ADA's web-site, it is possible to read about the ADA project, its pedagogical model, the universities involved, and so forth.

³ Carlos III University offers a bilingual second cycle program of Computer Science Engineering.

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of interaction is considered important as it “provide[s] more opportunities for learners to initiate and control the interaction, to produce a much larger variety of speech acts and to engage in the negotiation of meaning” (Tsui, 2001: 122); that is, students feel less peer-pressure to communicate in pair work or small team work, so they express themselves much more freely, and even correct themselves and admit their errors and mistakes in a more natural way.

In all, I believe that face-to-face team-work and practice of both General and Technical English can raise learners’ awareness and self-confidence when using a foreign language to communicate. Likewise, facing a virtual scenario, asynchronous social writing tools and communicative tools may be regarded as their first-choice substitute for instructors to design collaborative language learning activities, as they may foster interaction and, most importantly, reflection on one’s linguistic production (see also McPherson, 2006, on using a wiki space).

3. Instructional Design Needs

We turn now our attention to the instructional design of virtual, team-focussed, ESP activities. Starting with the pedagogical model, it is argued that the pedagogical bases of such activities may be (1) constructivism, understood as the application and integration of meaningful learning into real contexts (Merrill, 2002) and real practice communities (Barab and Duffy, 2000); and (2) collaborative learning, seen as horizontal interaction, and the individual acknowledgment of a team’s common learning goals (see also Carrió Pastor, 2006: 9–10).

Continuing with our technological model, the following instructional systems are identified for the implementation of an activity with the characteristics mentioned above—the systems are taken from Ferscha’s proposal for mobile learning (2000): Information and Knowledge Management System (Team Memory), Communication and Interaccion Support System (Team Communication), Concept, Task and Social Awareness System (Team Awareness) (*cf.* Gutwin, 1995), Collaborative Production System (Team Workplace), E-portfolio Assessment System (Team Assessment). Some explanations follow suit: *Team Memory* is understood as a system which allows students to access

a server for file management; *Team Communication* as a system used to activate communication tools in a variety of options: private vs. public, synchronous vs. asynchronous, etc.; *Team Awareness* as a system which facilitates the uploading and supplementing of resources for the activity (instructions, links...), and the activation of project management application tools: calendar, Gantt charts, distribution of tasks among team-members, etc.; *Team Workplace* as a system which directs users to the social writing software needed for the production of collaborative learning outcomes: wikis, glossaries, spreadsheets, word-processor files, power points, etc., all modelled on social writing platforms, “which allow two or more people to edit a document in real time on the Internet” (Thompson, 2007: 2); and *Team Assessment* as a system which allows teams to store all the learning outcomes performed for continuous assessment in archives created for that purpose following an e-portfolio methodology.

4. Analysis of VLEs

The table below shows the analysis of the versions of WebCT and Moodle in reference to team work requirements plus comments.

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Table 1. WebCT’s and Moodle’s collaborative learning tools

	WebCT		Moodle	
Team Memory	Access to server: available		Access to server: not available	
Team Communication	Forum	Private: available	Forum	Private: available
		Public: available		Public: available
	Email box: available		Email box: not available	
	(synchronous) Chat: available		(synchronous) Chat: available	
Team Awareness	Resource uploading: available		Resource uploading: available	
	Calendar: available		Calendar: available	
	Project management software: not available		Project management software: not available	
Team Workplace (tools available)	(synchronous) Whiteboard		Wiki application	
Team Assessment	Offline and online assessment: available		Offline and online assessment: available	

4.1. Team Memory

Taking into account the possible need for team members to keep track of all offline created files and versions, the WebCT system is better than the Moodle system, as it allows the user to access the server, an option not existing in Moodle. This means that WebCT teams can upload their own files, download and edit them offline, create archives, and transfer files between archives, etc. However, Moodle teams wishing to create an archive to store all files have to use other online resources (such as the platform Google Docs, with the advantage that word files and spreadsheets can be edited online).

4.2. Team Communication and Support

Table 1 shows that both VLEs provide the public and private forum design option, together with a chat tool. While the latter may provide quick access to team-members, the former tool is essential for the creation and maintenance of a team communication network. Apart from that, an email tool is important for one-to-one communication (be that between team members, one member-instructor, or between teams). WebCT students can enjoy this option, whereas Moodle students have to use external e-mail providers.

4.3. Team Awareness

Appropriate team organization, with specific instructions and links for the activity, task-listing, task-distribution between team members and task-timing is vital for successful collaborative organization. It is argued here that access to a Gantt chart tool would suffice. However, neither VLEs offers a comprehensive project management tool, they only provide a calendar tool for students to edit. Again teams have to use an offline or online spreadsheet on other platforms to create their own Gantt charts. Both VLEs do, however, allow the user to upload resources with instructions and links for the activity.

4.4. Team Workplace

Both VLEs offer a very scant variety of online social writing tools. In fact, only Moodle has included the tool of a wiki. Though synchronous and class-centred, WebCT's WhiteBoard allows the user to edit files adding texts and graphics. The glossary tool in both VLEs is instructor-based as only s/he can expand it.

4.5. Team Assessment

Tools to assess the teams' offline and online learning outcomes are available on both VLEs but with certain limitations. Based on an e-portfolio methodology, where teams store all the activities designed for continuous assessment, both WebCT and Moodle allow teams to create

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a forum in which they can post their offline attachments for assessment. Nonetheless, (as seen in the *Team Memory* system) only WebCT allows teams to upload files created offline on the server. In order to assess individual writing skill development, instructors can use the linguistic production of Moodle's wiki. Finally, students' interaction on WebCT's Whiteboard and on the chat applications can also be used as part of continuous assessment.

6. Conclusions

Neither of the VLEs examined conforms optimally to the instructional needs of collaborative language learning in General English, and of ESP in particular. Whilst WebCT supplies the necessary tools for the *Team Memory* and *Team Communication* systems, it fails to provide a variety of tools for *Team Awareness* and *Team Workplace*. The instructional designer of an ESP subject has to look for these somewhere else on the Web. In turn, we have seen that WebCT's *Team Assessment* tools adapt much better to offline learning outcomes.

On the other hand, Moodle's *Team Memory* and *Team Communication* systems are not well equipped given the lack of access to Moodle's server and the absence of an email service. Additionally, it has the same shortcomings regarding the *Team Awareness* and *Team Workplace* systems, with the happy exception of the wiki application. Again, instructional designers of an ESP subject must turn to web-based applications instead. Taking into account the availability of Moodle's *Team Assessment* tools, offline learning outcomes seem to prevail again.

In all, neither WebCT nor Moodle have implemented tools designed for *Team Awareness* and *Team Workplace*; however, a variety of tools can be found on the Web with which we can overcome this need: basically Google Docs. Given the possibility of using free team-creation tools in the Google Platform, one wonders just how necessary VLEs are for truly collaboratively focussed subjects, where General English and ESP learning and practice is the final objective.

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