
Moodle as a Supporting VLE in ESL Secondary Education

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Abstract (200 w)

With new technologies being daily added to the field of education, a completely new educational paradigm is forming itself. More interactivity is shaping this new paradigm with more flexibility for both the teachers and the learners. In this paper, I am suggesting a blended learning approach to motivate students to learn and practice English language skills for both course requirements and independent self-study. A brief demonstration of Moodle as a supporting VLE will be reported as a case study.

Using a Virtual Learning Environment (VLE) in my own context, findings from a blended learning course are introduced and discussed. Due to both the flexibility and huge potentials found in BL modes of study through VLEs, PLEs, and other CMSs, better venues for interaction and collaboration among learners seem possible where many of their current educational challenges are overcome. Opportunities for increasing motivation and engagement in learning through online independent self-study and other related new technologies will also be discussed.

Keywords

Educational technology, Virtual Learning Environments, Blended Learning, Moodle

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1. Teaching Situation and Challenges

In this section, a detailed description of my teaching situation will be introduced with reference to its main challenges and current issues in my groups of learners.

1.1. Teaching Context

I teach two groups of G12 male secondary school students in a new career-oriented school in UAE. The vision of the school is more into preparing highly qualified calibers for the Emirati market place. My students are generally low-level users of both English and computer (beginners). Students are normally introduced to General and Communicative English between 6-10 periods a week i.e. “*Skills in English*” along with other project requirements and Common English Proficiency Assessment (CEPA) preparation. CEPA was first introduced a year ago where all G12 students are required to pass a language proficiency

exam before being accepted in UAE higher colleges. CEPA and IELTS as university placement requirements show the importance paid to English in this small cosmopolitan community.

1.2.Learning Challenges and Possible Solutions

Some of the social and individual factors that make the teaching and learning of my students rather challenging will be introduced for further analysis and discussion of suggested solutions.

1.2.1. LACK of Motivation

The UAE is a wealthy small community where learners of different ages may quit school to work in the business field or for some other socio-cultural reasons. Motivating students in this case is a hard process even for teachers or institutions due to this phenomenon, (Zureik 2005); *“Too many students are failing, dropping out of school, or are poorly prepared at the point of graduation.”*

The low language level is one example why students struggle to learn and participate in class. Therefore, they feel less motivated. Due to that, their level of involvement in class interaction might be negatively affected. In some cases, they even resist participating in classroom tasks or home assignments. Because of the complex nature of this problem, students should be involved in deciding the way that would make their classroom more “motivating” as an initial remedial process (Sass et al., 1985; Bialo et al., 1996).

Students need to feel that they are capable to do the task. They should also find some interesting elements to be engaged in learning. Recent studies suggest using familiar instructional technology tools to improve students’ self-efficacy and self-worth (Heafner, 2004).

1.2.2. STUDENT Attrition (absenteeism, drop-out, or failure)

Due to most of the previous factors discussed in the lack of motivation section, and according to Zureik’s (2005) report, which was prepared for the UNESCO in collaboration with Sharjah Women’s Higher College of Technology in UAE, the percent of students’ attrition (absenteeism, drop-out, and failure) is very high among the Emirati community. It is again another socio-cultural problem that has its impact on local students. In my case, students fall mainly under the first category of ‘absenteeism’ with reluctance to be present in school. This leads to a high percent of absenteeism for many students with the risk of losing more opportunities for involvement and engagement in the learning process.

1.2.3. TECHNOLOGY and Motivation

Students usually lose motivation when they do not feel they can perform a task or when they feel it is boring. In the contrary, they would feel excited if they participate in technology projects (Heafner, 2004). Their level of involvement increased tremendously due to this new experience. In Barsie’s (2004) description of Keller’s ARCS model of motivation, he states that attention, relevance, confidence and satisfaction are the four conditions of motivation in an instructional situation.

For instance, students who are going through an interactive task in their electronic course will pay great deal of attention to details, meaning of words, the required task and the way to go through the process. By understanding the task instructions, and asking for more help from the teacher, they will be more confident when working on a task. They will definitely recognize their weaknesses and strength when working

independently. Finally, learner satisfaction is essential for maintaining motivation, Barsie (*Ibid*).

2. Pedagogical Approaches in My Context

The pedagogical approaches suggested in our institution focus on interaction, communication, and creativity as key skills. Technology is strongly supported with the affordance of some state-of-the-art high-tech facilities and other vocational equipment e.g. welding, mechanics and pneumatics labs. Accordingly, two main approaches are adopted in the curriculum and textbooks presented; the communicative approach and project-based learning approach. A third approach is then suggested through the use of Blended Learning (BL).

2.1.The Communicative Language Teaching (CLT)

2.1.1. DEFINITION of CLT

CLT is simply an approach of teaching a second/ foreign language with emphasis on interaction (Wikipedia, 2008). In defense of this approach, (Xiaoju, 1984 & Medgyes, 1986) describes it as one where situations have to be from real life, global or multidimensional, and authentic at the same time where the need and purpose of

communication are clearly visible in the interaction occurring. Xiaoju (*Ibid*) also shows the outcomes in that case as motivated and boosted classroom.

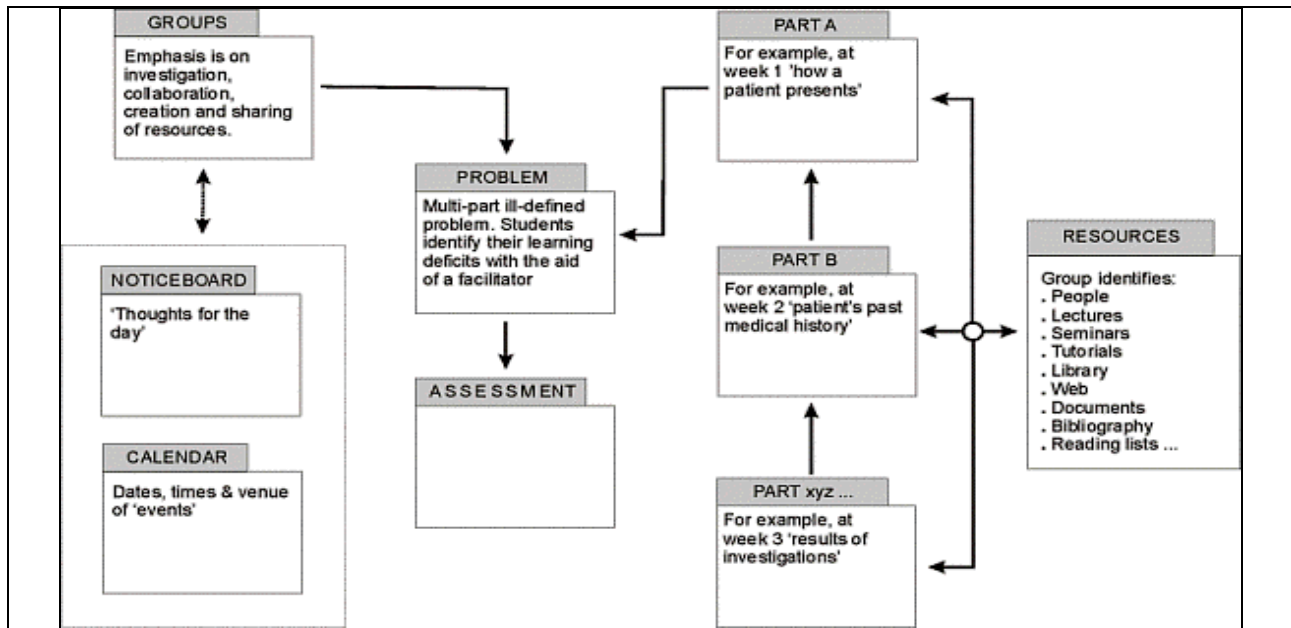
2.1.2. CLT in Action

CLT as a pedagogical approach is not focused only on listening and speaking skills, but also on reading and writing skills (Takagaki, 1997; Kim et al., 1999; Rao P'eich'ung, 2000; and Quann et al., 2000). This should make CLT a great tool in teachers' hands. In the course I teach, all macro language skills (e.g. listening, speaking, reading, and writing are adopted). This variety makes the language more vivid and learners more interested and encouraged by meeting their different needs and learning styles. In addition, these language skills are presented in various interactive settings and environments.

2.2.Project-Based Learning (PBL) Approach

PBL is first used as case-based to decide on patient cases for medical students. In that respect, I use it for my students with a task to finish or a question to answer within a deadline and through certain steps, see (figure 1).

Figure 1: PBL Model, adopted from "e-learning@bath"



2.2.1. DEFINITION of PBL

PBL is also called the problem-solving approach. However, PBL is more general and was a more flexible term with a variety of activities of different natures. Wikipedia's (2006) definition adds the elements of deepness, inquiry-based and relevance to the learners' lives. It is also described as 'contextualized' learning (Thomas, 2000). It promotes intellectual inquiry in real-world standards and enriches students' engagement in meaningful learning experiences (Hung et al., 2004). In general, the potentials of PBL, as an instructional method in class, are great (Zahn et al., 2006). Because of all these elements, building dynamic, motivating, and interactive learning can be granted using PBL.

2.2.2. CHARACTERISTICS of PBL

Although PBL research is still limited in theory and application according to Mousund (2007), most studies have focused on the outcomes of integrated PBL and CLT activities such as fostering higher-order thinking skills in the forms of analytical reasoning, synthesis, and evaluation (Hafner et al., 2004). PBL allows students to develop

both the content knowledge and the transferable skills required in the many roles of a teacher, Thomas (*Ibid*). In that sense, PBL is a good approach in raising student's interest, providing meaningful and authentic context, develop essential skills and knowledge, and building opportunities for reflection and self-assessment (The Autodesk Foundation, 2000).

2.2.3. CHALLENGES of Implementing PBL

PBL could be difficult to implement by some teachers. Furthermore, teachers has to plan, develop PBL activities, and effectively use these activities within the course, (Hafner et al., 2004). Students often resist BPL as they may find it problematic if they don't understand its nature. However, when they start realizing its potentials and outcomes, they enjoy it later.

Team work and other aspects of collaboration are maximized in PBL. It is argued that when PBL is associated with an online environment, there would be a lack of intimacy and immediacy of the F2F settings. However, Hafner (2004) assure that in some cases this close relation is still possible. In the past, the variety of practices under the

'banner' of PBL made it difficult to assess its applications and outcomes (Thomas, 2000). Anyhow, with the new VLEs and other web technologies, teachers have more opportunities and clear standards to assess students' performance, guide them to be independent in their studies, and keep track of their learning as well.

2.3. Introducing Blended Learning (BL) as a Suggested Approach

BL is becoming increasingly common with the availability of both synchronous and asynchronous online learning options, (WebJunction, 2007). This new technology-supported pedagogical approach seems to be a promising one with modern technologies growing every day.

2.3.1. DEFINITION of BL

In general terms, BL approach is a combination of online and face-to-face approaches. Both Bersin *et al.* (2003) and Det (2003) assume that BL is replacing e-learning. They argue that most institutions and educators ask for the best combination of tools and media that will give the biggest impact for the lowest investment. A teacher or a course administrator has then to choose the right combination of tools, media and types of instruction that fit for the institution and the needs of a group of learners.

2.3.2. BL Instructional Design and Delivery

BL is not only about the delivery of materials or activities, but also it is about

careful instructional design of the program and careful choice of tools to introduce it. It is important for both learners and teachers to be familiar with all different modes used in BL. If a certain technology is used like 'VLE', learners must first be trained on how to use it prior to any presentation of content knowledge or other practices. For that purpose, some key strategies could be used, in the points below, to design and deliver BL courses as suggested by WebJunction, (*Ibid*);

1. Clearly define your course objectives
2. Identify the needs and competencies needed for your learners
3. Match the defined objectives to the most appropriate content, learning methods, and environments
4. Design your program modules and units according to your earlier objectives and available technologies including the learning assessment required in the course
5. Reflect and evaluate the course for improvement and restructuring

2.3.3. BL Course Delivery Modes

When it comes to the technologies used for delivery of materials, WebJunction (2007) defines four main modes of delivery with possible activities and tools for each. These are based on the regular F2F presentation, Synchronous, and Asynchronous virtual collaboration, and Self-Paced Asynchronous mode, see (figure 2).

Figure 2: Four Modes of Delivery in an Blended Learning Environment, adopted from WebJunction, (2007)

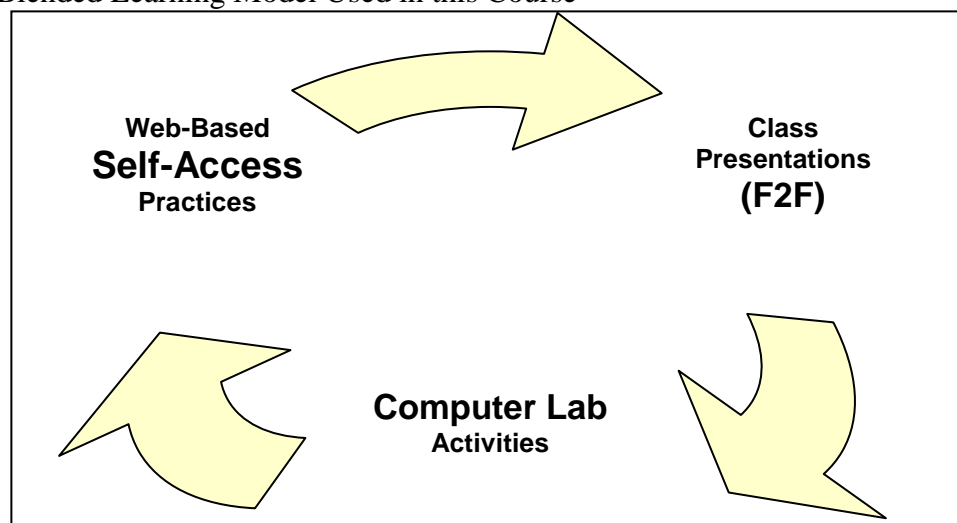
Live In-Person	Synchronous Virtual Collaboration	Asynchronous Virtual Collaboration	Self-Paced Asynchronous
<ul style="list-style-type: none"> • Instructor-led classroom training • Hands-on labs • Coaching/mentoring • On-the-job training 	<ul style="list-style-type: none"> • Live Online Learning • Online chat/IM sessions • Conference calls • Video conferencing 	<ul style="list-style-type: none"> • Online discussion boards • Listservs • E-mail • Blogs • Wikis 	<ul style="list-style-type: none"> • Online tutorials • Simulations • Online self-assessments • Archived Webinars • Podcasts • CD-Roms

In my case, my pilot BL course is built on three modes of delivery; the F2F class presentation, the computer lab activities, and the home self-access practices, see (figure 3), for more details on the expected integration among the three modes. The reason for using this approach is the nature of the themes presented, challenges discussed in part 1, and the low language level of my students.

2.4.Expected Outcomes of Integrating BL in My Courses

In Heinze *et al.*, (2004) presentation of the benefits of BL, they highlight Salmon’s (2000) model of e-moderation in BL starts with welcoming new learners and encouraging them to actively participate in the course. Heinze *et al.*, (*Ibid*) also add that BL is compatible with working life, suits

Figure 3: Blended Learning Model Used in this Course



different types of learners, and flexible where it solves my low-attendance initial problem discussed in part 1 of this paper. In addition, there are three main motives for using BL. According to Valiathan (2002), there are three models for using BL.

First, the ‘Skill-driven’ model which allows learners to acquire specific knowledge and skills as well as get the required regular feedback and support from their teachers and colleagues by creating group-learning long-term projects, self-paced learning, and online forums/ email support. Second, the ‘Attitude-Drive’ model which develops new attitudes and motivates students by the help of their peers and through the interaction of that risk-free environment. In that model, synchronous and other offline group activities could also be implemented. Third, in the ‘Competency-Driven’ model, which captures and transfers knowledge, learners are obliged to interact with and observe other colleagues doing the task. They can help from their peers and from self-practice of activities with instant feedback from peers or the teacher using the VLE.

3. Edu~Nile Moodle as a VLE in My BL Course

The proposed online course that I called, *Edu~Nile*, is a new personal experience in the way to develop and deliver more

interactive and beneficial learning opportunities for my students, *see appendix 1 for screen shots or the enclosed CD*. Educational research indicates that BL has advantages over both F2F and distance learning in the sense that when that combination exits better learning outcomes could be expected as long as social F2F and virtual groups are established, (Stahl *et al.* 2006; Krueger, NA).

3.1.Introducing Moodle as a VLE

For that purpose, a well-organized, fast growing, secure, and user-friendly open source platform was chosen to be the home of my new course. Moodle in comparison to other available VLEs seems to be a good choice as it is a good candidate to any commercial VLE. One of the best features of this VLE, as an open source, is that it has been adopted by many teachers and developers around the world. These educators and other programmers work to develop that platform in an ongoing huge social networking manner. Moodle offers a variety of Web 1.0 and Web 2.0 technologies (i.e. online discussion forums, journals, blogs, or synchronous chatting) as technologies that could increase interactivity and create a new sense of community for my group of students. You may find out more about potential integration of language macro skills in relation to Web 1.0 & 2.0 teaching in (figure 4).

Figure 4: Language Macro Skills in Web 1.0 & 2.0 Technologies

Web Generation	Environment Type	Web Technology	Listening	Speaking	Reading	Writing
Web 1.0	Synch.	Chat	√	√	√	√
Web 1.0	Asynch.	List serves			√	√
Web 1.0	Asynch.	Surveys			√	√
Web 1.0	Asynch.	Questionnaires			√	√
Web 2.0	Asynch.	Forums			√	√
Web 2.0	Synch.	Webcasts	√	√	√	√
Web 2.0	Asynch.	Podcasting	√	√		
Web 2.0	Asynch.	Wiki			√	√
Web 2.0	Asynch.	VLE (Moodle/ Webct)	√	√	√	√
Web 2.0	Asynch.	Voice boards	√	√		
Web 2.0	Synch.	Second life	√	√		
Web 2.0	Asynch.	Blog	√	√	√	√
Web 2.0	Synch.	SMS messaging (twitter)			√	√

3.2.Previous Challenges Impact on Students' Language Skills and Participation

Due to the previous two challenges discussed in part 1, some major language problems were very obvious in the process of teaching and learning for my students. Of the skills students tend to resist in class or in homework tasks are both the reading and writing tasks. They have that tendency to resist or ignore these tasks as they feel that they may be 'boring' or 'difficult' to achieve.

Keeping the previous facts in mind and keeping the fact that some web technologies, like online bulletin boards, are more familiar and have great popularity among youth in general in UAE helped me think about integrating two motivating Moodle resources as components and major tasks in their language course. These two resources are online discussion forums, that act as a bulletin board, and journals.

3.3.Moodle Resources and Communication Skills

Students may feel confident to speak in the target English language in most situations due to their interaction with people from many other nationalities in the UAE. However, this fact is not the same when related to other written language forms. For example, in most cases students cannot write the words they hear or say to others due to their little awareness of the language written forms.

In a communicative F2F discussion, it is not a problem to work these issues out, but in other electronic environments, using language skills like reading and writing, as major language aspects, is a challenging task. The previous two Moodle resources proved to be helpful in my case as

appropriate and rather motivating communicative tools (Armellini, 2007).

3.4.Online Discussion Forums

Synchronous messaging proved to be popular as a means of communication. However, Wegerif (2006) argues that it does not support focused social dialogues since it is too fast for such focused shared thinking. In the contrary, other tools like asynchronous threaded discussion forums seem to provide this kind of shared focused thinking dialogues. In moodle, it is based on the creation of any number of thematic topics. Since most students already use it in their native language for non-educational purposes, discussion forums proved to be encouraging and of interest to most students. Their first writings were very simple with many language errors and no focus. After few practices with the different themes and questions offered as tasks for students, their level of contribution and participation in these forums seemed to increase and develop.

Another great aspect that found in Moodle was the ability to add a grading system for any of the forums you create or the posts sent by students. These grades will then be added to the general grading system found in Moodle, which is based on one big database for assessing students' participation in the virtual course. Again, that is another motivating factor where students know that their writings will be shared with everyone, other can reply and add to their discussions, graded by the teacher, and kept as components of the themes studied in the course.

3.5.Collaborative Online Journals

The second tool used for students is meant to help in the development of a project started in semester one called, "My Hero" and as a

motivating collaborative tool at the same time, (Suthers, 2006). Students in groups to nominate four different personal heroes are also asked to prepare an online journal and publish it in a Moodle journal. Students were able to have this free online space to write everything they know about their heroes and publish some pictures about them. Then, students are asked to prepare a class poster for their final presentation in class.

In this manner, the way collaboration is used to guide in this PBL task is not intrinsic to the technology itself, (Suthers, *Ibid*). Like the other tool, this tool is also supported with a grading system. Additionally, it can be limited with a deadline for submission and editing of the journal. Later, students can review each other's journals and comment on their colleagues' writings using the discussion forum.

4. Concluding Remarks

Most students have access to the Internet at home or in the computer lab. Those who may miss classes are still able to follow the flow of discussions and learning occurring in class using the Moodle resources. The discussion forum and journal along with many other Moodle resources or technologies that can be added to it as embedded html blocks were all of great outcome in motivating students and creating a sense of ownership and better rapport with their peers and their teacher.

Interaction and other form of collaboration

Edu~Nile VLE Main URL: <http://www.edunile.net/e/>

G12 Pilot English Course URL (in semester 1):

<http://www.edunile.net/e/course/view.php?id=18>

User Name: *demo*

Password: *demoM1*

Date Implemented: *October – December 2008*

are maximized and interest in learning and enquiring are developed in these learners. Students also had better opportunities to reflect on their learning and share their concerns or problems. Finally, they were able to keep track of their progress using Moodle electronic grading system and find out what is missing or going wrong in their learning or performance. By the end of the first pilot course, the percentage of students who became aware of this new learning approach and who managed to highly achieve in their final English exams increased dramatically. Many of them were able to use the portal on their own for interaction or sharing ideas with their colleagues.

For the next academic year, and after reflecting on my own experience as a facilitator of that first experience, I plan to improve the program to avoid some of the challenges faced during the first pilot program. Lots of attention to orientation, providing computer and other skills-related training should be introduced prior to the implementation of the program. Finally, studying students' perceptions and reaction to such a program would probably be an area of interest for further development of this study.

Appendices

Appendix 1: Courseware Exemplar Access Details

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