Essential Aspects of Blended Learning

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Abstract

My paper will focus on several basic features concerning blended learning, and it will build on the properties of digital technologies. In our contemporary world, students in general, and working students in particular, feel the need to use their digital skills to be successful in both the study and work environment. This means that our courses should be upgraded by resorting to the new technologies in the field of teaching and assessment. By doing so, the advantages would be multiple, starting with accessibility, affordability, flexibility and ending with inclusivity, self-empowerment and resource management. An example of such a 'fortunate' mixture between on-site classroom interaction and on-line activities is the case of flipped classrooms, where, as it is going to be discussed, student-time is increased and so is the quality of the interaction between the teacher and the learners.

1. Introduction

If we were to define blended learning, we could say that it represents a combination of traditional and digital technologies that are merged in a way may help learners learn more productively. If time is used efficiently, more can be achieved. Blended learning can take many forms, as are going to see, and it adds value for both learners and teachers. Since the properties of traditional teaching methods are well-known, we are going to focus on the basic properties of blended learning since they are quite important for learners' success.

2. Theoretical background: Blended learning and digital technologies

In a nutshell, for learning and teaching purposes, digital technologies store information and data very efficiently, we can have access wherever we want; they can present material in a variety of different media formats; they can respond to what students require based on the data you, as a teacher, put in. First, efficient storage is good because it means teachers can provide digital versions of videos, animations, documents at a far lower cost than their physical equivalent. And if we need to update a material, we revise it in just a few minutes and store it in the same place. Then, these assets can be made available for thousands of learners at the same cost as if we were running a workshop for just 15 people. That is the reason why MOOCs can run cheaply. Third, having remote access means we can organize our schedule as needed, watching the videos or reading articles whenever one wishes without having to work to a fixed timing. Therefore, the learner finds it flexible. Multimedia helps us with videos to show what blended learning looks like in action, which gives us a much better sense of ways it might work for us. In addition, having the opportunity to listen to the tutor's voice talk through a diagram is often easier for students to understand than reading about it. It is important to understand that multimedia and remote access bring digital learning to every learning environment: classroom, field trip, study room at a time of learners' choice. However, the most interesting feature refers to designing and making use of tailor-

made resources. For the teaching and learning purposes, storage technologies such as paper, dictionaries, and libraries or, for easy access, catalogs, indexes, content lists have always been used. Traditionally, different media like books, videos, maps, diagrams are common. The problem is that no methods that teachers used before can respond to a learner's personal needs. With digital technologies, learners can select the level of difficulty and the activity they need to do, they can choose to interrupt a video, to explore activities for later in the week, to browse a Wiki page, and to do as many interactive exercises as they feel necessary. In this manner, a very large amount of content is situated under learners' control in a way that impossible with physical technologies. Besides, interactive exercises have an additional aim as well—to give feedback on learners' decisions about which item to select. This is what it is meant by personalization.

All these properties of digital technologies combine to help the learner in several essential ways. What the learners appreciate is the fact that they are allowed to log into the network with their computers and have all their work previously done in class made accessible at home. Kinesthetic learners, who need to see things happen and who need to get involved, can benefit from being able to do things as the teacher is doing them because it is easier for them to understand how to complete the tasks. Offering students something they can focus on, other than just the teacher talking at the same time, like the videos and the presentations, it tends to give them a bit more of a choice on what they can concentrate and study particularly if they have got a low attention span. To sum it up, storage, access, multimedia, and personalization are just a few properties of digital mixed that can be used together with our conventional methods and so get a formidable mix of learning opportunities.

There are many new technologies that can be used by teachers in order to upgrade their courses and in the following section, we are going to present several options and suggest some of their contributions to designing active learning activities.

Being born in a digital era, today's students have different expectations as far as technology is concerned. It is our role, as teachers, however, to guide them and teach them how to use it for educational purposes. A complex tool towards accomplishing such an endeavor is a Virtual Learning Environment (VLE) which creates multiple facilities for both trainers and trainees (see as examples Blackboard, FutureLearn, BritTeen)Here, teachers can upload videos and their own online materials, or they create different types of quizzes (one-word answer, multiple-choice, yes or no, etc.). in addition, they can provide special places for online homework submission or for discussions, such as forums. On the other hand, students find accessing a VLE very engaging and their learning activities offer them the sensation of independence. As they can learn things at their own pace, according to a flexible schedule, class time can be used more productively because students are better prepared. As learning also represents a social activity, class time can be supplemented by remote communication tools such as the VLE forums, Facebook messenger, Skype or WhatsApp.

Blended learning is therefore aided by the use of virtual platforms where modern methodology can be used in order to turn students' role from mere passive receptors of information to actively involved participants. At this point of our discussion, it is worth mentioning the importance of free software such as Moodle, where 'semipresencial' teaching is encouraged (Bentabol *et all*, 2019, p.2) and where a wide range of tools is offered. With regard to this e-learning experience while using Moodle, Bansode S. and Kumbhar R. note that:

"Moodle is a free source e-learning software platform, also known as learning management system it was originally developed by Martin Dougiamad to help educators to create online courses with a focus on interaction and collaborative construction of content and in continual evolution and is available under GNU License. It is a software package for producing internet-based courses and websites. It is a global development project designed to support a social constructionist framework of education." (2012, p. 4)

As course managers, teachers are fully responsible for the uploaded content which can be customized by using different layouts or 'themes' and also a series of formats are available. Teachers can operate on their course sections by either editing/reediting or moving/removing them. Students' are granted access on the site after enrollment and authentication. As with a traditional classroom, Moodle classes have a virtual gradebook where every teacher can track students' progress by recording the scores they get after completing an assessment or quiz, or after being

assessed by their peers, etc. (see https://docs.moodle.org/38/en/Teacher_quick_guide).

Moodle Quiz is one of the versatile tools which is valued for its interactive features which will briefly be referred to. First, there is a 'question engine' enabling assessors to create a series of question types, including multiple choice, True/ False, short answer, numerical or composition. Images, videos and sound files can be inserted within the questions, too. After the questions being written, these are kept for storage in a 'question bank' for further uses in other quizzes. Therefore, the initial time and effort investment necessary to draft the first quiz can spare teachers' efforts when recycling these items for future quizzes. Once the questions are put down, the quiz can be arranged. There are many adjustments that can be made within the quiz settings to change the way the questions are displayed (for example, randomizing the questions). Besides, feedback (and grades) can be given to learners after a question has been attempted or at the end of the quiz. What is more, students can be given the opportunity to retake the quiz following the feedback, providing personalized formative feedback which helps learners consolidate their knowledge

You can use a Moodle Quiz to help learners practice what they know and gain formative feedback to help them consolidate their. When used at the end of a unit, module or course, a quiz can be used for summative assessment. Simple Quizzes can help learners remember what they have learnt or it can help motivate them to fill in the gaps. Quizzes can be used as a pre-test in order to give the learner confidence and motivation by showing them how much they already know. On the other hand, a pre-test will allow teachers to assess learners' existing knowledge and enable them to personalize their program of study. Quiz pages within the Moodle Lesson activity can support interactive self-guided study. Some other uses are: end-term quizzes may consolidate learning; summative quizzes may assess learning of key concepts; self-evaluation quizzes on performance may be used prior to tutor meeting; diagnostic quizzes may determine readiness for an examination entry; assessment quizzes for literacy may be used to demonstrate proficiency for study, and so on. More precisely, the steps suggested are as follows: first, for a course in Business Communication, a teacher or trainer selects a YouTube video case study about employment interviews for a group of online learners to watch; next, the teacher or trainer embeds the video within the Moodle course; then the teacher or trainer creates a short quiz beneath the video focusing on key points of learning during the video. After that, learners watch this video and take a short quiz to test their understanding and provide formative feedback before moving onto the next activity. Last, in the event that the answers given are incorrect, the teacher or trainer has created feedback that direct learners back to key points in the video so that they can watch again before the next attempt.

Speaking of educational videos as learning tools, it needs to be stressed that they are useful ways of presenting and demonstrating new concepts and, as such, they can be seen as playing an important role in students' learning undertaking. Long or short as it may be needed, it is however recommended that videos should not exceed four-five minutes in length for optimum concentration.

There are also other important tools, also belonging to the 'open-source software' category that we have presented as a valid option since they can be downloaded from websites and used for free. A good example is Audacity, an audio editor that is easy to use for many operating platforms (Windows, Mac OS X, Linux), which is downloadable from http://web.audacityteam.org. After recording sound files in either. WAV or .MP3 format, these materials can be edited, mixed, exported and uploaded as educational podcasts, available for students' use or study. Those who are auditory learners will particularly benefit from this type of information sharing since they tend to better process it when extra-verbal elements are involved: voice tonality, pitch or rhythm. Unlike video materials, sound files are more readily available to be accessed "on the go" and used by using smartphones. For example, students at the University of Leeds have the lectures recorded for them and they can study these materials by accessing iTunesU.

Therefore, mobile devices are useful also for the purposes of studying. As we have already discussed, students can access their lecture notes via the VLE before, during or after the teaching sessions. Apart from the lecture notes, some other materials are made available, for instance, e-books, journal articles, blogs or vlogs. Also, they can get virtual library membership, organize notes, assignments and even deadlines. On a WhatsApp group, for example, its members can share worksheets instantly.

Remote collaborative work is another major advantage of some technologies, such as Google docs, Wikispaces, PBworks or Evernote. As suggested by its name, a wiki contains information that can be accessed very fast once created or edited online by several members of a team. In this way, reports, projects, survey results, translation work, or presentations can be assigned as homework to a group of students who are able to make individual contributions at the same time and whose autosaved work is available at any time and on any internet-connected device. In this way, the learners become actively involved in the educational process as they are directly responsible for when and what exactly they study, they also choose their learning pace and the extent to which they prefer to contribute and interact with their tutor and peers. A Using these online tools provides learners with independent space where online glossaries can be created. Thus, lists of specialized vocabulary can be drafted by students as relevant support to study and learn medical, business, legal terminology, for instance. Creating these virtual documents have highly valued benefits:

"Glossaries are widely used in educational context to provide just-in-time support for learners when they need it. Online glossaries enable co-construction by learners and therefore promote active, collaborative learning experiences helping learners to feel ownership over the vocabulary of their chosen field. The resulting glossary can then be accessed in class, at home and in the workplace by means of a mobile phone, tablet or computer, meaning that learners have support wherever and whenever they need it. Co-constructed glossaries can build confidence and community as learners can track their growing, collective understanding as more and more entries are added to the glossary." (https://ugc.futurelearn.com/uploads/files/69/82/69821e4b-4675-4629-9655-dc18c11f767e/Online_Glossaries.pdf)

According to the same source, the educational contexts that can benefit from the use of online glossaries are various:
- specialized vocabulary needed by ESOL learners
- technical and professional vocabulary
- written and spoken vocabulary for developing communication skills
- core skills backup
- written and spoken vocabulary in vocational fields
- communication skills
- specific language learning

(for details see https://ugc.futurelearn.com/uploads/files/69/82/69821e4b-4675-4629-9655-dc18c11f767e/Online_Glossaries.pdf)

Another possible assignment that has the potential to improve team working skills is writing a group essay or report where the module leader is able to check the exact extent of each member's contribution.

All these tools that have been presented enable students' individual/group study outside the classroom and thus promote learning beyond the traditional classroom setting, but, at the same time, complementing the latter. This pedagogical style in which instruction is directed bidirectionally from face-to face group-work to on-line mediated individual study is known as the 'flipped learning' approach. This name briefly indicates that concept acquisition can be accomplished individually, with the help of the modern technology available, while practice-time, including providing feedback, explanations, demonstrations, analyses, etc. is offered more attention during the face-to face activities, in the traditional environment. Teachers' role is rather that of a discrete observer and a coach who provides trainees with personalized guidance during the workshop. Following specialists' analysis of the flipped classroom structure (Ozdamli, F. and Aşıksoy, G., 2016, p. 102) arrive at an even more complex model called HFC (Holistic Flipped Classroom), where every study environment is assisted and closely monitored and which is schematically described in *Figure no 1*:

Figure no. 1
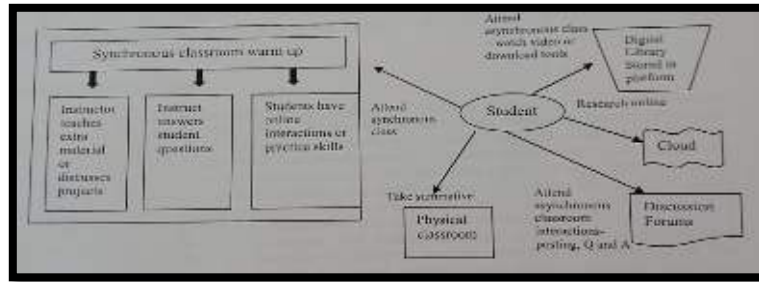
Source: Ozdamli, F. and Aşıksoy, G., 2016, p. 103

More practically, for such an approach to be feasible and successful, there are several requirements that have to be met: the first condition is time frame flexibility, meaning that students should be given the opportunity to study at times chosen by them (see Fulton 13-14). Then, as already suggested, the traditional view of the teacher as the main education source is to be replaced with a more democratic model, where the learner is placed in the center of attention. This is what specialists call a 'shift in the learning culture', where students become more actively involved in the educational process:

"In the traditional teacher-centered model, the teacher is the primary source of information. By contrast, the Flipped Learning model deliberately shifts instruction to a learner-centered approach, where in-class time is dedicated to exploring topics in greater depth and creating rich learning opportunities. As a result, students are actively involved in knowledge construction as they participate in and evaluate their learning in a manner that is personally meaningful."
https://flippedlearning.org/wp-content/uploads/2016/07/FLIP_handout_FNL_Web.pdf

The third requirement is made with reference to the types of materials selected in such a way these are relevant and accessible in terms of both terminology and availability. Moreover, the content used should promote strategies suitable for an active learning style, on the one hand, and it should be personalized according to the students' level and interests. Creators/ curators of such 'intentional content', teachers give up their central role assuming, nevertheless, a more demanding role. This role is called by the Flipped Learning Network (FLN) the 'Professional Educator' and is considered one of the 'four pillars' of this educational approach:

"The role of a Professional Educator is even more important, and often more demanding, in a Flipped Classroom than in a traditional one. During class time, they continually observe their students, providing them with feedback relevant in the moment, and assessing their work. Professional Educators are reflective in their practice, connect with each other to improve their instruction, accept constructive criticism, and tolerate controlled chaos in their classrooms. While Professional Educators take on less visibly prominent roles in a flipped classroom, they remain the essential ingredient that enables Flipped Learning to occur." (https://flippedlearning.org/wp-content/uploads/2016/07/FLIP_handout_FNL_Web.pdf)

3. Findings: Digital technologies— advantages and disadvantages

Following the arguments brought by Ozdamli, F. and Aşıksoy, G. (2016, p. 103), this approach presents both benefits and drawbacks. On the one hand, extending teacher-student interaction, focusing on the interactive learning style and encouraging individual input and output. Apart from these, some other advantages are worth mentioning:
- Accessibility
- Affordability
- Flexibility and ending
- Inclusivity
- Self-empowerment
- Resource management.

On the other hand, while listing the drawbacks, reference is made to students' lack of time management skills when extra-class activities are to be prepared or having to deal with technical issues concerning internet connection problems.

4. Conclusions

To conclude, the use of digital technology involved in blended learning has the potential to enhance the education process in terms of the degree of flexibility it provides, flexibility in terms of time and place, rhythm of learning, learning forms (audio/video, text/pictures/, online/offline, individual/team work), and, last but not least, adaptability to the learner's needs. As noted by B. Valenzuela Zambrano and M. V. Pérez Villalobos,

"A modern and friendly virtual platform is not a guarantee of effectiveness and quality in the teaching-learning process, because virtual environments have not been able to replace the teacher's work. However, it can be a good tool when the teacher decides to use it, because it can help to generate didactic activities that enhance face-to-face training. And in some cases, it encourages more autonomous student work." (quoted by Bentabol *et all*, 2019, p. 3)

After all, the ultimate goal of blended learning is enriching the learning activity and therefore, making it more effective.

5. References

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