

BLENDED LEARNING, FLIPPED CLASSROOM AND VIRTUAL ENVIRONMENT: CHALLENGES AND OPPORTUNITIES FOR THE 21ST CENTURY STUDENTS

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Abstract

Although the terms Blended Learning [1] and Flipped Learning [2] are presented with different meanings, they actually have much in common. Blended learning is an educational strategy which combines the traditional classroom with on-line activities and finds its best application in the Flipped classroom where the responsibility for the teaching process is somehow transferred to that of the students who have direct access to the contents of the lesson before going to school. In this context, the teacher becomes a supporter and facilitator and helps students in the transition process from knowledge to the acquisition of skills and competences [3].

This paper explores these two E-learning approaches and the different theoretical and pedagogical implications they have. It also illustrates how some activities have been implemented and organized considering these methodologies both in English language on topics of everyday life and in literary teaching in high school classes through the digital environment. These classroom practices and approaches have been helpful for other school subjects such as Mathematics, Physics and Art that have experimented Blended and Flipped learning to teach CLIL more easily.

Furthermore, the most appropriate way to carry out Flipped teaching has been to create virtual classes on social media such as Facebook or Edmodo, which are also useful as a sort of on-line repository of lessons and as a discussion forum between the teacher and their students. From this new perspective, students have experienced new techniques and strategies through cooperative learning, that is a teaching/learning mode which allows them to work together in small groups to achieve the same goals [4]. Students have created digital products and posted them on the Net, thereby attaining great results.

All the activities have been planned to take into account critical thinking, different learning styles, multiple intelligences and with a view to obtaining examples of the digital literacy standards required for the 21st century students.

Keywords: Blended Learning, Flipped Classroom, Cooperative Learning, Social Media.

1 INTRODUCTION

Blended learning is becoming increasingly relevant in teaching. It is a new methodology which includes online and face to face modalities. The two approaches integrate and mix each other, 'blending' and enhancing a positive learning environment. This educational strategy combines the traditional class with computer-mediated activity through the use of tablets, smartphones and other technological devices which catch students' interests more effectively than simply face to face or on-line lessons.

Naturally, blended learning involves a series of methodologies and activities that can be considered to accomplish levels B1, B2 and C1 of the Common European Framework of Reference.

One of the best ways to organize blended learning is the flipped classroom [5] where students are asked to watch a video, view a site or on-line articles at home before coming to class. Once they have come to school they discuss the new material learned on the Net through cooperative activities, exploring topics for an inquiry- based learning. However, it is necessary to make a review of students' work frequently to pinpoint what should be repeated, revised or expanded.

A key to a successful flipped classroom, especially in project-based learning activities, is to encourage learners to have an active role in applying the new information to different contexts in a creative way.

For this reason, the teacher can supply material concerning different topics as everyday language, literary and artistic field, scientific subjects and CLIL modules.

Besides, the teacher can give absent students online videos or lectures they can easily watch at home pausing or rewinding them when necessary. Consequently, students are responsible for their own learning and teachers help them in a process of scaffolding and coaching, and become supporters, facilitators in developing the ability to compare, share, and differentiate opinions.

The aims of this approach will be therefore to use technology to interact with students, to enable a flexible and differentiated teaching-learning process in time and places, to conceive technology as the common channel of communication for the teaching-learning process.

For all these reasons, Blended and Flipped Learning should be considered in the context of the challenges and opportunities given to higher education to provide a truly personalized approach for every student, to exploit the potential of the network educational and training purposes and to supply deep and meaningful learning.

2 METHODOLOGY

There are several blended learning approaches which can take many forms, depending on the teachers and students involved. It is however through 'cooperative learning' that most of Blended Learning is surely organized. Cooperative Learning is a learning mode whereby students work together in small groups to achieve common goals, trying to improve their learning by helping each other, and making this method differ from individualistic and competitive learning. From the teacher's perspective, cooperative learning is a set of techniques for a new kind of class management, which entails that students work in small groups in joint learning activities and receive evaluations based on the results achieved.

Given that teamwork qualifies CL (cooperative learning), the following items should always be present:

- a) Positive interdependence. Group members rely on each other to achieve an established purpose and students must feel responsible for their own learning and learning of other group members.
- b) Individual responsibility. All students in a group must take responsibilities both for their work and what they have learned. Each student, in testing, will have to prove what they have learned.
- c) Face to face interaction. Although part of group work can be divided and held individually, it is necessary that the members of the group work interactively, checking the chain of reasoning, the conclusions, the difficulties providing feedback: students teach each other.
- d) Appropriate use of collaborative skills. Students in the group are encouraged and helped to develop confidence in their abilities, leadership, communication, make decisions and defend them, therefore, overcoming conflict management in interpersonal relationships.
- e) Assessment of the work. Periodically teacher should assess the effectiveness and the results of every group, and identify the changes needed to improve efficiency.

The cooperative learning finds a good application in the flipped classroom. In a flipped classroom research projects are implemented in digital environments which promote students' elaboration of competences through cooperative learning, problem solving and development of critical thinking. Emphasis is also given to interactive communication and transmission of information through digital tools used with a spirit of collaboration and sharing ideas. Students first study different topics by themselves using video lessons and then apply the knowledge by doing practical work in class in a cooperative way.

The term 'flip' means that the way content and time proposed for learning is in a way inverted, turned upside down. In a flipped classroom responsibility for the teaching process, is in a sense 'transferred' to the students, who can control access to content directly, with all the time needed for learning and assessment. The teacher becomes a *support* to the understanding of the lessons learned beforehand by students who will have to use their time in class for the process of transition from knowledge to the acquisition of skills and competences.

Normally the main reason why you choose to make learning overturned is related to the fact that often the traditional education is not sufficiently effective today and consequently you need to 'unlock' the state of a liability through the encouragement and with an educational approach that engages

students. The teacher is called to prepare the different teaching materials and their role in the classroom is to animate the discussion and other learning activities. The elements which characterize and design a lesson should be:

- preparing an introduction on the subject to be treated;
- identifying the prerequisites that are required for the correct use of resources;
- making clear and attainable objectives that the lesson aims to achieve;
- explaining new subjects watching a video with questions to be answered;
- facilitating the acquisition of knowledge and competence through cooperative learning;
- providing assessment and self-evaluation;
- encouraging and facilitating pertinent questions;
- developing class discussion and critical thinking;
- creating products: mind maps, Power Points, videos.

Teachers who prepare "homework" are aware they will be mainly instructional videos, possibly planned in advance by them. Of course, you must first teach students to be proactive when viewing the videos assigned, so they can better understand the concepts presented. Therefore the teacher who prepared or chose the instructional video gives directions to students on how to pause or restart the video if they need to hear the information again. At the end of the vision, students can or should take notes or answer questions of a short questionnaire (created on the basis of the skills of critical thinking) to verify their level of understanding [6]

Therefore students at home, in an autonomous way, but with the teacher's guidelines, begin their research, viewing videos and browsing the Web looking for the sources suggested. For example, they can answer questions, understand different types of texts, recognize and classify information, use different reading techniques by skimming or scanning, choose, develop and synthesize contents. Then, in the classroom, learners develop the ability to compare, to share, to differentiate opinions with the collaboration of the teacher (action of coaching and scaffolding) [6]. They also try to realize products as Power Point presentations or interactive mind maps on what has been learned so that it can be shared and exploited by other students or even in different contexts. In a flipped classroom, different activities can be organized as those ones shown in the figures 1 and 2.

2.1 Examples of activities: frames and map in the middle

- 1 Students organized into groups of 4 arrange themselves around a table on which an A3 size sheet is divided according to the model presented

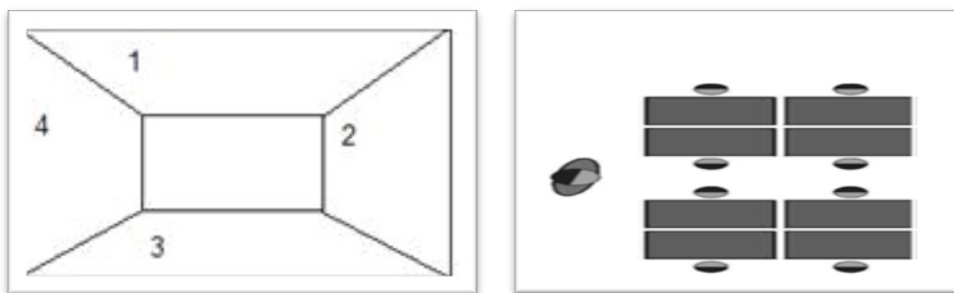


Figure1.Frames

- Each Member of the group, in turn, expresses his opinion about a proposed theme
 - The opinions of the individual will be given in numbered spaces depending on the level of sharing of the Group (*If only two people agree with the opinion expressed, this will be indicated in the space marked with the number 2; ...*)
 - The central space will contain a summary of the different opinions
- 2 Students organized into groups of 4 arrange themselves around a table on which an A3 size sheet is divided according to the model presented.

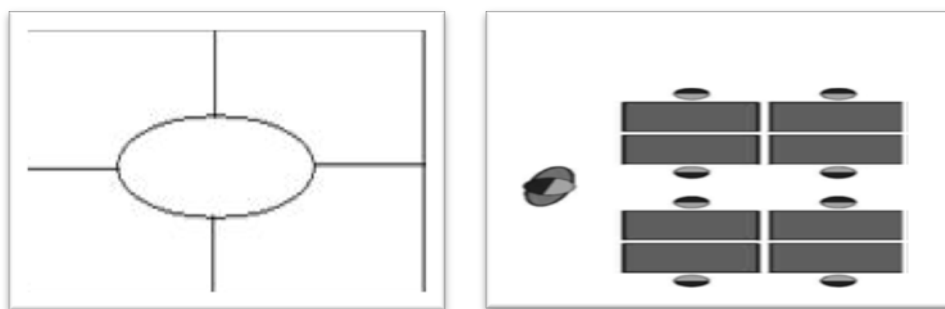


Figure2.Map in the middle

- Each member of the group writes, in a space, personal opinions about a proposed theme.
- The group members share what it is written and make a summary, which is shown in the Central oval.
- The synthesis can leave room for creativity: a slogan, a drawing, a diagram, a map.

Another activity that can be organized is: THINK PAIR SQUARE [7]

- Every student thinks about the answer to the question that has been posed.
- The class grouped in pairs, compare individual responses and discuss. You can get an answer that is shared by both members taking into account their contributions.
- Each pair is confronted with another pair or a larger group and tries to reach a shared response.
- A member of the group, called at random (personal responsibility), shares the elaborate answer with the entire class.

For the evaluation of students' learning, this will be verified at first in the classroom as a report of the various web searches made at home by every student on various topics of the program and proposed in advance every time by the teacher. Then traditional classroom tests may also be applied to confirm the level achieved by each individual student. Another effective instrument to organize both blended and flipped learning is the creation of virtual classes on social media such as Fidenia, Edmodo or in particular Facebook. Today Facebook plays an important role in the lives of millions of students and can improve learning not only inside the classroom but also outside [8]. The way to accomplish this may not be as obvious: there are various examples you can use Facebook effectively. This is a virtual environment for learning the English language and you can post for examples *video lectures* that introduce and explain the topics covered, *mini lessons*, articles and text followed by reading comprehension, *PowerPoint presentations* in order to understand literary or linguistic phenomena, *discussion topics* for English conversation, *mind maps* to review the topics you have already studied. According to the class in which virtual class has been created, you can also select interactive video tutorials on phonetics, lecture slides, on line reference grammar, study guides on foreign language in social context, preparation course, and exam practice tests. Furthermore, Facebook promotes good citizenship in the digital world, embracing social and mobile learning styles for 'always online' students. It helps teach in a flipped class and implement blended learning. In high school classes Blended and flipped methodologies have been used to teach topics of everyday life as vocabulary and related expressions of everyday life (food, clothes, physical description), literary phenomena but also to integrate different school subjects (English and Mathematics, Physics, Science, Art) in CLIL project works [9]

3 RESULTS

Flipped classroom was implemented in a high school English language courses. Students were informed about this new methodology and what they were expected to do. Their works were collected after class interviews, discussions and activities taking into account Multiple intelligences, critical thinking and cooperative learning. All the results indicate that this blended methodology had several potential benefits. Examples of some initiatives and results in different classes are provided below:

- a) In a first year, high school class, Flipped classroom helped the access to technologies and resources on the web which are useful for the different learning style and experience of each

student. Furthermore learners became active in the productions of videos, Power Point presentations and interactive maps.

- b) In a third year, high school class the focus was on the relation between poetry and music with specific reference to Shakespeare's sonnets. The main aim was to teach how to analyze a poetic text and how this can be exploited in the analysis of some songs students liked.
- c) In a fourth year, high school class Flipped teaching was helpful to arrange activities on a multidisciplinary and transdisciplinary level in a project work which integrated Art and English language. Students learned how to analyze a work of art, how to organize art galleries, how to create a QR code.
- d) In several high school classes CLIL modules overlapped various subjects such as Mathematics, Physics, Science in which English language was used for the learning and teaching of both content and language.

All students' works were displayed on interactive boards and walls or on free social media websites which allowed to create profiles on virtual pages and keep in touch with teachers and classmates.

4 CONCLUSION

All things considered, the main objectives to be reached in a blended learning could consist of teaching students to make the most out of the new communication networks and out of the increasing availability of educational resources. Besides, this methodology enhances students' interest and provides them with learning autonomy; it enables students to learn at their own pace and prepare them for the future.

Even though online and face-to face interactions are used alongside each other in Blended Learning and are more differentiated in a Flipped classroom, [10] they both aim at developing foundational literacy, competencies and character qualities which are required by the 21st century students.

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