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# FLIPPED CLASSROOM: AN OVERVIEW OF (DIS)ADVANTAGES – COMPARING MODERN TEACHING METHODS TO TRADITIONAL ONES[1]

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In this paper we will present the basic principles behind the flipped classroom method, focusing on the advantages and disadvantages that this method brings in an era where the use of computer is prominent. The theoretic framework will be laid out, where we explain the approach of the method, the pedagogic principles behind it, the roles of teachers and students, the importance of modern technology and how all this affects the classroom dynamics when compared to the more traditional ways of teaching that are still used. Various factors (both inside and outside of the classroom) that can influence the implementation of the flipped classroom method will be discussed.

***Key words:*** flipped classroom, teaching methodology, computer assisted learning, implementation of new teaching methods

As humanity evolved and gained knowledge of itself and its surroundings, it was inevitable that people shifted the ways and methods through which they transferred that knowledge onto future generations. The changes affected all spheres of human interest, and foreign languages are no exception. Starting with the Grammar-Translation method, over the Direct method and notably to the Communicative Method/Communicative Language Teaching (Gass, Behney et al. 2013), a tendency to adjust the modern classroom towards the students' needs has always been present, with the goal to enable easier learning and application of knowledge and skills.

Given the fact that the influence of modern technology is on the rise, new approaches and methods which use these technologies in and out of the classroom have appeared. One such approach is ***blended learning*** (Driscoll

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2007), which promotes the use of modern technologies (computers, tablets, social networks, the ever-growing application of the internet) which makes it possible for a lesson to be taught and learned before the actual class itself and gives teachers the time to help their students apply their knowledge practically. In contrast to this way of teaching, there is the traditional classroom with its frontal or teacher-centered approach, an approach where the accent is on passive acquisition of knowledge and theory takes precedence over praxis (Durbaba 2011: 94 – 106). Generally speaking, blended learning is a process whereby the teaching process is partially done within the classroom and the second part is conducted outside of it via the internet and computer. One should bear in mind that this blend of approaches has been present in various researches over the past 30 years (see: Davies 1985, Nunan 1989, Pennington 1989, Baloche 1998, Warschauer 1999, etc.). However, what ignited the widespread appeal of blended learning in recent years is the omnipresence of the internet and the technologies that use its potential, as well as the accessibility of laptops and tablets. Namely, the affordable prices of these gadgets gave a way for students to communicate and interact with their teachers and peers in a new fashion.

Graham (2013) gives us a detailed categorization of different types of blended learning, which are based on a myriad of pedagogic methods:

- Supplemental: consists of materials, activities and quizzes on the internet.
- Replacement: reduces the face-to-face contact with the teacher in the classroom and replaces it with internet activities.
- Emporium: eliminates the use of classrooms and instead employs research centers where students gather learning materials from the internet and all other sources of their choosing. In some cases, assistance and counseling with regards to choosing the learning materials is provided.
- Buffet: the students themselves choose among the given options – lessons, internet, laboratory, individual projects and group activities.
- Fully online: the whole teaching and learning process is conducted through the internet with optional face-to-face classes.

Dziuban and Hartman (2004) highlight the subtle differences between the supplemental and replacement categories of the blended learning approach, by stating that:

> "[…] blended learning should be approached not merely as a temporal construct, but rather as a fundamental redesign of the instructional model with the following characteristics: a shift from lecture- to student-centered instruction in which students become active and interactive learners (this shift should apply to the entire course, including the face-to-face contact sessions); increases in interaction between student-instructor, student-student, student-content, and student-outside resources; and integrated formative and summative assessment mechanisms for students and instructor." (Dziuban, Hartman, et al. 2004: 3)

Thus, the focus of the supplement category is on materials and activities that can be arranged online, but does not necessarily encompass learning outside of the classroom, while replacement does, with a balance of different teaching formats.

One particularly interesting method within the frameworks of blended learning is the ***flipped classroom*** method. It is a method where the typical elements of class and homework are reversed or flipped (Educause 2012). The basic idea is quite simple: the things that were traditionally done in the classroom are meant to be acquired at home, while the things that were given as homework are meant to be done during the class period. Preparation for the class involves video lessons or other types of materials that the teacher prepares (they can make them independently or take them from online repositories) which the students will watch and read through before the class itself (Fallows 2013). They are often viewed as the key elements of this method, for if the preparation material is properly conceptualized, it can make the acquisition process easier for the students. The time in class is devoted to doing exercises, projects or having discussions which the teacher prepared to ensure that the students will be active during class, because the purpose of the class is to make the students use the foreign language as much as possible to express their opinions or thoughts on the matters at hand.

The two pioneers of the flipped classroom method are Jonathon Bergman and Aaron Sams, high-school chemistry teachers in Colorado, USA (Bergman, Sams 2012). Explaining their motivation to create this method, Sams emphasizes that his students often needed his help with activities that are typically done for homework or when the teacher is not able to assist them (Bergman, Sams 2012: 1 – 2). Bergman and Sams are optimistic when it comes to the results that this method could yield and highlight its advantages. They believe that this method is in concordance with the "digital age" in which the students live. They were born and raised in an environment where technology and the internet are omnipresent in their lives and are connected with them in a way that older generations

cannot be (Bergman, Sams 2012: 20). Thus, when the required materials are accessible through different kinds of technologies (PC, tablet, smartphones), the teachers are presenting them with the possibility to learn any time and any place, which plays a major role when organizing the students' time, both in and out of the classroom.

The factor of time is of the utmost importance, for the flipped classroom method is based on active learning, students' participation in the teaching process and hybrid course design[2] (Educause 2012). These principles enable the flipped classroom method to divide classroom time in a different manner. Thus, instead of using the classroom time for teacher explanation, teachers can focus on checking and utilizing the already acquired knowledge, as well as on the interaction between the students, their teacher and their peers while solving practical problems and tasks. During class the teacher relinquishes their traditional role of a lecturer and becomes an advisor, who gives support during individual and group work. By doing so, we are developing the students' communicative competence. Simultaneously, this method stimulates the teacher to give up on the frontal approach to teaching and encourages teachers to maximize the use of blended learning and cooperation. This type of role shift is prominent in modern teaching methodology and approaches such as Community Language Learning, Communicative Approach and Task-based Learning (Larsen-Freeman 2000). With the flipped classroom method a shift in priorities is made – teachers are moving away from simple lecturing and learning the materials towards acquiring and understanding the subject matters (Educause 2012). Furthermore, this method puts the process of acquisition into the hands of students themselves, which stimulates them to experiment and be independent. Many of the classroom activities can be executed by the students on their own, and communication among themselves can become a driving force in the process of learning and solving practical problems.

There is no single scheme or formula which one should use to conduct the flipped classroom. This term is used to signify any kind of classroom organization where practical exercises are preceded by

[2] "Hybrid" or "Blended" are names commonly used to describe courses in which some traditional face-to-face "seat time" has been replaced by online learning activities. The purpose of a hybrid course is to take advantage of the best features of both face-to-face and online learning. A hybrid course is designed to integrate face-to-face and online activities so that they reinforce, complement, and elaborate one another, instead of treating the online component as an add-on or duplicate of what is taught in the classroom. <http://www4.uwm.edu/ltc/hybrid/about_hybrid/index.cfm> (1.12.2018)

preparation materials or lectures. In the most well-known model of the flipped classroom, the students are instructed to watch videos and read about the topics of the class in advance from their text books, presentations or other types of materials that the teacher provides. One can also combine the video materials with quizzes or other activities (word plays, pop-culture or other facts related to the topic which show the application of what they are learning) that help the students get some feedback on how well they are comprehending the preparation materials. Such instant feedback and the possibility to go back to the parts that they have not understood, helps the students to understand the more difficult parts of the lesson (Bergman and Sams 2012: 13 – 19). Hence, the teacher can use the classroom time to open a discussion about the topic or create workshops where the students will create, cooperate and use in practice what they have learned at home (Educause 2012). This removes the passiveness in the students and thereby elevates the motivation to a whole new level. More precisely, the teachers should strive to promote intrinsic motivation in an effort to override the instant gratification that comes with extrinsic motivation. As Douglas Brown states: "[the traditional classroom] focuses students too exclusively on the material or monetary rewards of an education rather than instilling an appreciation for creativity and for satisfying some of the more basic drives for knowledge and exploration" (Brown 1994: 40). Dörnyei showcases how other researchers, such as K. A. Noels, agree with Brown's point of view. Noels believes that extrinsic motivation is so omnipresent because the students think that the teacher has too much control over them and their learning process or that the teacher does not give enough constructive feedback (Noels 2001a according to Dörnyei 2005: 76 – 77). By using the flipped classroom method, where the student is the central figure of the learning process, teachers can help promote independent learning and come a step closer to intrinsic motivation.

Furthermore, this method gives the students, who had trouble to fully grasp the subject during class, the opportunity to review the materials once again at home. The students can thus avoid the situation where they might feel ill-at-ease, because they did not understand the subject matter right after it has been explained to them (which is often the case in traditional classrooms). The possibility to go back and look over the materials again, even if they do not fully comprehend it, gives students ample time to formulate questions to ask later and with the help of their peers or teacher, clarify any doubts or misconceptions. In this way we enhance the

retention[3] of information into long-term memory. Namely, when a new piece information needs to be accepted, it goes through the process of consolidation[4]. In this process the information must go through three filters in the human brain, sensory memory, short-term memory and long-term memory. To ensure that a piece of information will pass into long-term memory via consolidation, it is necessary to go back to that information multiple times and acquire it in different ways or formats. The flipped classroom method facilitates this, for the students will be exposed to the subject matter multiple times in different ways during their preparation for the class, the class itself and afterwards with homework.

Alongside the retention of information, the flipped classroom method or more precisely the preparation materials help in minimizing the affective filter. This is one of the famous Krashen's hypotheses which implies the existence of an emotional "barrier" which can hamper the acquisition process in learners (Krashen 1982: 30 – 32). The barrier itself does not stop acquisition, but it can make it substantially more difficult, for their thoughts are not focused on the learning process, but on various other problems, such as: troubles at home, insufficient preparation for classes or tests, nervousness because they could be called out to talk in front of the whole class, lack of self-confidence and motivation. With this method, teachers can significantly reduce the affective filter, because the students will be prepared for classroom activities, making them feel more at ease while tackling with new subject matters.

Additionally, by using this method, there is one more way to assist the students who have problems with the materials. Namely, students who had trouble comprehending the preparation materials, can turn to their classmates using peer teaching or peer correction (Larsen-Freeman 2000: 68). The opportunity for correction is given to another student instead of the teacher, which advocates communication among students, gives a means for students to practice language use and express their knowledge, rather than passively accepting teacher explanations. Bergman and Sams (2012) maintain that the flipped classroom encourages student to teacher and students to students interactions, which provides more authentic communication, where the students practice to communicate with different kinds of people, just like they would in real life situations.

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[3] For more details about the retention process see: <http://www.human-memory.net/processes_storage.html> (01.12.2018).

[4] Consolidation is the processes of stabilizing a memory trace after the initial acquisition. <http://www.human-memory.net/processes_consolidation.html> (1.12.2018)

Naturally, one must bear in mind that blended learning and flipped classroom can't overcome all the shortcomings of traditional praxis at once, but: "if used wisely they can help the students in the acquisition process and provide a whole range of interesting courses for schools." (Friedman, Friedman 2011: 162) One of the basic challenges for blended learning researchers is to define what exactly the computers and teachers do so well individually that we could employ and combine those values efficiently, leading to the highest level of knowledge acquisition (Graham 2013: 354).

The implementation of innovation is usually not an easy task. Goertler and his associates (Goertler, Bollen et al. 2012) have identified the fields that institutions and teachers often find problematic when wanting to introduce a new kind of course from the blended learning framework:

- Logistics: the access, reliability and possibility of using technologies, especially internet applications.
- Time, space and money: while it can be argued that this method can pay itself out in the long run, the preparations demand a considerable investment of time and money.
- Preparation: not all institutions are equipped with the necessary staff that is sufficiently technologically literate or educated to lead these new courses, nor are they usually open towards adopting and using the new, modern teaching methods, especially if something was deemed ineffective by their standards.

Thus, even though the basic principle behind the flipped classroom is rather simple, effective realization demands careful preparations from both teachers and students:

- When teachers are concerned, one should bear in mind that the making of video and other materials is time-consuming and takes a lot of effort to do well, for the teaching elements in and out of the classroom have to be carefully integrated so that the students can understand this method and be motivated to prepare for classes in advance. As a consequence, this method may put additional strain on the teacher and require them to acquire a new set of skills.
- When it comes to the students, Kafi and Motallebzadeh (2014) state that they usually have the following complaints about the flipped classroom method:
  - ✓ They complain about the loss of traditional lectures, especially when they realize that a part of the video and audio materials

are available online, deeming that they are not learning anything new, since they could have gotten their hands on this kind of materials by browsing the web in their spare time.

- ✓ Students who have been taught in the traditional ways for an extended period of time will not immediately comprehend or appreciate the practical value of this method. Additionally, it may happen that the students, who primarily expect to learn everything they need in class, neglect the preparation material and focus on classroom activities, which diminishes the value of the flip.
- ✓ Finally, one must always consider that some students do not have the equipment or the accompanying technology to do the preparation of lectures at home.

These kinds of reactions ought to be expected, given the fact that many teachers in our region have been following the more traditional approaches to teaching and introducing such a new and in many ways radical method can at first come as a shock to them. Notwithstanding the initial restraints of this method or the rejection of the students that the teachers might come across, this method has many positive sides which can be summarized as follows:

- The subject matter in flipped classrooms is covered three times at least (in preparation materials, in class and as homework), which enforces better retention of information into long-term memory. In more traditional methods students mostly learn in class and then review via homework.
- The factor of time is given prominence, for it is divided more effectively. The preparation of materials with a lot of theoretical background is done at home, while in class teachers and students can focus on the application of the students' knowledge and give more opportunities for the students to participate in class and communicate with each other.
- The affective filter is reduced, given the fact that the students are well acquainted with the lesson that they will be doing in class and they had enough time to examine it in multitude of ways and form questions that need to be solved. This creates autonomous students who will become more open to communicating with their peers in an effort to tackle their difficulties.

Bringing forth innovations into an already established system is not an easy task. And the field of education is no exception. While the traditional classroom certainly has its benefits, modern day sensibilities and the desire to create autonomous learners who will be responsible for their own learning require different methods. One such method is the flipped classroom with its focus on the students, use of technology, effective time management, enhanced retention of information and reduction of the affective filter. Even though the flipped classroom method comes with its own shortcomings, including: access and use of technology may not be widespread in some areas, additional qualifications are required for the teachers, it is a considerable investment and there may be some resistance from both students and teachers to use this method. However, it should be noted that as the students evolve and their surroundings change, the process by which they learn must adapt to their needs, and schools as institutions and teachers as representatives of those schools should always strive to put the students and their interests first and not be afraid to try out something new, even at the price of slight discomfort and going into an uncharted territory.

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