

GOING DIGITAL: FLIPPING THE FOREIGN LANGUAGE CLASSROOM

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Abstract: The Flipped Classroom approach was suggested by the chemistry teachers, Jon Bergmann and Aaron Sams (Bergmann & Sams, 2012) and, as a component of blended learning, it has spread throughout educational disciplines. The Flipped Classroom is an approach to teaching and learning activities where students watch a video lesson outside the class and do practical activities in the class – basically, the approach has made homework and classroom activities reversed, with the idea to make learning more individual and to transform a classroom into a dynamic and interactive learning environment, with high level of learners' engagement. The aim of this paper is to offer an overview of the flipped classroom approach and to explore its benefits and challenges for both, foreign language learners and educators.

Keywords: flipped classroom, flipped learning, blended learning, digitalization, foreign language teaching/learning

1. Introduction: Learning in the 21st century

The rapid development of new technologies has shaped our lives in all their segments. Information and communication technologies (ICTs) find their application in educational disciplines and call for innovative methods and approaches in teaching and learning processes in the digital age. The three essential elements – student, teacher and environment (classroom) have not left the focus of the educational process. In fact, they are obtaining more importance as emerging educational technologies are taking more and more space in the educational context.

Students spend much of their time on using some sort of technology tools, which is the fact that the educational process should take the advantage off. Initially used only for everyday communication, technology tools nowadays are used for interactions among teachers and students, but also for accessing learning materials in the classroom and out of it. The debate on whether to use technology in education or not has already been concluded in favour of their use (Cardinali & Gordon, 2002; Kent & McNergney, 1999; Kim, Mims & Holmes, 2006; Trotter, 1999). The challenges that are still waiting to be replied to are concerned the ways how do it so that the best educational goals are achieved.

New technologies have also assisted with language communication processes. Of course, they entered in the field of language education, too. They affected all the elements of language teaching and learning processes, especially the form of language courses delivery and language teaching and learning materials.

This paper aims to present the concept of the flipped classroom, its applications in the language classroom, so as to point out this benefits and challenges, paying special attention to the transformation of the teacher's and student's roles.

2. Flipped Classroom Concept: From Teacher-centered to Learner-oriented Process

The flipped or inverted classroom approach was suggested by chemistry teachers, Jon Bergmann and Aaron Sams (Bergmann & Sams, 2012) and, as a component of blended learning, it has spread throughout educational disciplines. The initial purpose of the approach was to make a video of some lectures in order to offer a solution to students who missed their classes so that they could make it up and continue successfully with topics planned to be covered in future lectures. Obviously, the outcome was greater than initially expected – it did not only assist in overcoming students' absence consequences, but it led to a revolution in teaching and learning processes.

The idea of the flipped or inverted classroom is to reverse classroom activities and homework. What previously used to be a theoretical lecture delivered by a teacher during a class, turns into an out of classroom activity – a video provided by a teacher and studied by students individually prior to a class. Time in the classroom is left for discussing the major issues, practical tasks, problem solving and a deeper discussion on the topic. The basic idea of the approach was to offer more personalized education that would meet learners' individual needs – they could study video materials when and where they wanted, play it as many times as they needed, following their own pace. The flipped classroom concept changed educational process from teacher centered to learner oriented.

The Flipped Learning Network (FLN) defines flipped learning as:

“a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter”

(<https://flippedlearning.org/definition-of-flipped-learning/>)

They also distinguish between a flipped classroom and flipped learning. Pointing out that these terms are not interchangeable, they remind that flipping a class does not necessarily lead to the flipped learning. To make sure that a flipped class results in flipped learning, they define four pillars, followed by a checklist of eleven indicators that are to be included in the educational practice.

The pillars of the flipped classroom are: Flexible Environment, Learning Culture, Intentional Content and Professional Educator.

1. *Flexible Environment*: Flipped learning approach requires flexibility in all its segments – physical space (rearranging learning space so it supports learning process), timelines and assessments (as students follow their individual pace, these cannot be rigid)
2. *Learning Culture*: Transforming learning culture is a very important characteristic of flipped learning. The central figure of a teacher delivering a lecture is replaced by a figure of a student involved in class activities, analyzing deeper topics and resolving problems. More involved in classroom activities, learners become more motivated and they have a greater responsibility in the learning process.
3. *Intentional Content*: Instructors in a flipped classroom have to create and provide materials that meet best educational goals. They define which

materials are to be taught directly and which are to be explored by students in order to help them develop conceptual understanding.

4. *Professional Educator*: When discussing the concepts of flipped learning and flipped classroom it is often pointed out that it turns from teacher-centered to student-centered or student oriented approach. This is, of course a truth, but it does not mean at all that teacher's role loses its importance. Actually, it is quite opposite – it becomes more important and more demanding. Professional educators are responsible of material creation, selection and preparation; they observe students, provide feedback and evaluate their achievements. They constantly improve their teaching skills, they network and they are always open to changes that can improve the process. As said in the FLN explanation – “they remain the essential ingredient that enables Flipped Learning to occur”.

In order to help educators check if they are on a good way to ensure flipped learning happens, these four pillars are followed by a checklist of eleven indicators – the first, the third and the fourth have three and the second pillar goes with two indicators. This checklist comes as a hands-on tool for educators to make sure they are fulfilling essential flipped classroom requirements.

3. Flipped Classroom and Bloom's Revised Taxonomy

From theoretical perspective, many researchers identify that the flipped classroom model is based on Bloom's revised taxonomy of cognitive domain.

The original Bloom's taxonomy of educational objectives included six major categories: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation (Bloom, 1956).

Its revision was made by Krathwohl, Anderson and published in 2001. It provides the following six levels of learning:

1. *Remembering* (the lowest level): the stage in/at which students try to recognize and recall the information they receive.
2. *Understanding*: the students try to demonstrate their understanding, to determine the meaning of the instructional message.
3. *Applying*: the students practice what they have learned or apply obtained knowledge in a given situation.
4. *Analyzing*: the stage where students break the material into its constituent parts and finding out how they relate to one another, but also to overall structure.
5. *Evaluating*: assessment or established peer-review knowledge, students make judgements based on criteria; in this stage, students are evaluating the whole learning concepts and they could evaluate how far they successfully learned.
6. *Creating* (the highest level): the students are able put elements together to form a coherent and original product; they develop and design something new from what they have learned.

Bloom's revised taxonomy, as well as the original one, are usually presented by a pyramid diagram like offered in the Figure 1.

In the traditional classroom model activities related to the three lowest levels (Remembering, Understanding and Applying) of cognitive domain are practiced inside the classroom – a teacher introduces new materials, delivering a lecture. The three

highest levels are left for individual students' activities, usually in a form of homework. However, the flipped classroom model offers a reversed structure of learning activities – those from lower levels of cognitive domain are practiced at home, before classes, while classes are dedicated to higher level activities.

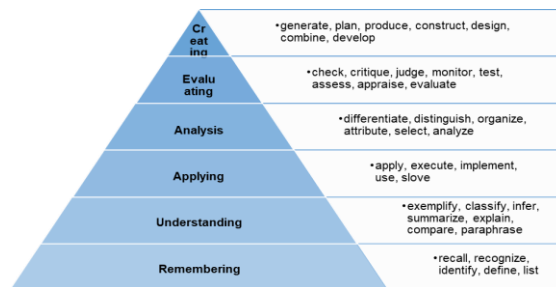


Figure 1. Bloom's Reversed Taxonomy of Cognitive Domain (Source: <http://cei.ust.hk/node/1156/guidelines-producing-effective-ilo-statements>)

The difference between the traditional and the flipped classroom models is offered in the Figure 2:

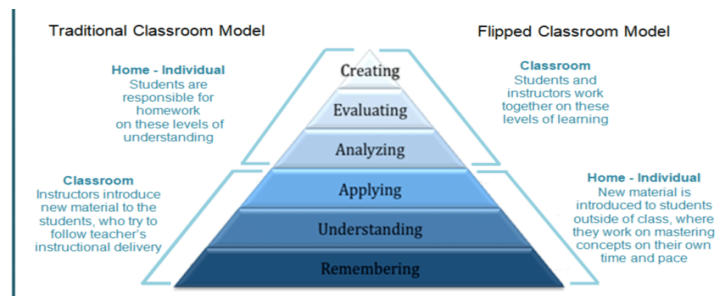


Figure 2. Bloom's Reversed Taxonomy: Traditional vs. Flipped Classroom Model

4. Flipped Foreign Language Classroom

Technological development has brought significant changes to all aspects of a human life, including foreign language teaching and learning practices. The main change that has occurred in this field is the delivery form or mode. Correa (2015: 116) reminds that based on the distribution of contact hours spent on face-to-face or virtual delivery, language courses can be divided into three types:

1. *Traditional courses* – contact hours are fully face-to-face (even technologically enhanced)
2. *Hybrid or blended courses* – 25-50% of the contact hours are delivered virtually (online) while the remaining hours are delivered face-to-face
3. *Online courses* – completely delivered virtually (online)

Even though in this paper we referred to the flipped classroom as a hybrid or blended category, most of the authors consider it a special form of traditional course

since it is completely delivered in the face-to-face mode. This topic could be further discussed in a future research.

Foreign language learning is a social phenomenon which requires opportunities for target language interaction and learners' exposure to target language, which means that classroom is a significant element in the L2 learning process. Since learning is an active, constructive process, learners gain new knowledge relating new inputs with prior understandings (Naylor & Keogh, 1999). To be able to construct new knowledge, learners need previous concepts as basis to develop and build on. In the flipped classroom model learners receive new inputs out of classroom via previously provided video material. They connect the newly received information with the already possessed information. Once they get to the classroom the new input is reinforced through interactive activities and a feedback from both, their teachers and peers.

When it is about a flipped foreign language classroom some basic and time consuming activities can be studied as pre-class assignments – i.e. many grammar units (morphology of tenses, word formation rules, etc.) and vocabulary can be delivered via a video lecture, while in the classroom the attention can be paid to necessary clarifications and its use in context. Many studies have proven that all language skills can be successfully taught using the flipped classroom model (even though some are more present than others).

5. Teacher and Student Roles Transformation

The concept of flipped learning has caused a significant paradigm shift in the learning process, reshaping the model from teacher-centered to student-oriented. As a logical consequence of this shift, we can identify transformations in both, the teacher and the learner roles.

One of the key components of the flipped learning concept is the role of the teacher or educator (already emphasized in the flipped learning pillars presentation). The traditional educational system relayed on the idea of top-down instruction, with a teacher as an active protagonist and a learner as a passive observer of the educational process. However, in a student-centered or student-oriented classroom the process is tailored to meet requirements and needs of the individual student. Teachers are leaving the focus of the classroom stage and they are taking the role of a process instructor, guide, facilitator, motivator and a feed-back provider. They are modifying and adjusting their teaching strategies in order to respond to the diversity they meet, such as the diversity of learning styles, academic level, emotional and social development of their students.

Even though teacher left the classroom focus, the role of teacher has not lost of its importance, but it became more demanding and challenging.

The new role of a flipped student also differs from the traditional one. As their individual differences are recognized (if not completely, then certainly more than they were previously), they can go through the learning process following their own pace and their autonomy increases. They can study the pre-classroom material when they want, where they want and they can repeat the action as many times as they need to. It is important to mention that all these flexibilities and changes do not mean anarchy and chaos, but only a greater personalization of the process, which increases students' responsibility and gives an impulse to their achievements. Classroom is now a place dedicated to higher levels of cognitive domain activities. By playing a more active role,

students are more motivated and engaged in the process and their interaction with teachers and peers is more intensive. They are stimulated to develop creativity and critical thinking, what leads them to greater achievements.

6. Benefits and Challenges

The flipped classroom model has proven beneficial in many different aspects, but there are also some challenges that researchers identify.

Correa (2015) recognizes eight advantages and eight concerns. The advantages are the following (Correa, 2015: 120-121):

1. *Exposure to input/output.* Since the classroom has become a place for a deeper discussion and problem solving, the exposure to a meaningful input is maximized and opportunities for output are multiplied.
2. *Humanization of the classroom.* Communication among students and communication between teacher and students is more active, meaningful and with a greater engagement from the students' side. Contact time between teacher and students increases and they get to know each other better.
3. *Retention of material.* Based on the study done by Lang & McBeath (1992), Correa (2015: 120) reminds retention of material is much greater with group discussion, individual practice and opportunities to teach others than with lecture or demonstrations.
4. *Individual pacing.* As mentioned, various times before, in the flipped classroom students can watch video materials when they want, where they want and how many times they want.
5. *Meaningful interactions.* Mechanical tasks are done out of the classroom while class time is devoted to deeper and meaningful conversations and tasks.
6. *Differentiated teaching and personalization of instruction.* While in the traditional classroom model teachers pay most of their attention to the best and most active students, the flipped model allows teacher to identify issues and provide personalized help to those students who struggle the most.
7. *Development of higher-order skills.* Classroom time is dedicated to the higher levels of cognitive domain (Bloom's revised taxonomy), which contributes to an increase of students' creativity and critical thinking.
8. *Transparency of instruction.* As the video lectures are studied at home, parents and/or tutors can be included in the process.

Regarding the video material, we would add that one of its advantages is the fact that after going through a course once, teachers get their own material set that can be further improved and reused. Teachers can also exchange materials

The flipped classroom offers (at least partially) a solution to the problem of absence (either teacher's or students'), since video materials are watched at home and are prepared in advance.

However, as any innovation, the flipped classroom model also faces challenges that are to be overcome for its successful integration into the educational process.

The concerns that Correa identifies are the following (Correa, 2015: 120-121):

1. *Boring/not engaging lessons.* If video material is boring and watched at home with no supervisor, Correa considers it leads to more distractions than it would in class. Most researchers suggest that video should not take more than 15 minutes, that it should be intentional and engaging.

2. *Deeming teachers non-necessary.* Teachers are often afraid that the flipped model will make them not needed anymore. As we commented before in the text, the role of teacher in the flipped classroom is even more complex and demanding and teacher is not threatened.
 3. *Students not watching the videos.* This is something that can never be completely avoid. Correa compares this issue to students not doing homework in the traditional model and suggests periodical reminders on the importance of the pre-class preparation.
 4. *Not everything can be taught online.* Some units and concepts are too complex to be taught in a one-way video. In situations like this it is suggested to stick to the traditional model (not every class has to be flipped), but Correa (2015: 122) reminds that advantage of the flipped classroom still leaves enough time for special in-class sessions.
 5. *This approach is passive.* Correa (2015: 123) reject completely the idea that watching videos at home is passive, explaining that actually lectures are the most passive part of any give class and they should be moved from the classroom arena.
 6. *Insufficient (technological) resources.* Many educational institutions face the problem of a restricted technical equipment. Correa (2015: 123) points out that the flipped model is about a meaningful pedagogical change and not about technology. We would also remind that with technological developments we are witnessing, every day it becomes easier to produce video materials. Teachers can use adequate materials from the Internet, but also materials produced by other teachers (of course if authorized).
 7. *Insufficient time to produce the materials.* It is true that video production is time consuming. This is why Internet resources and materials produced and approved by other colleagues should be used, too. Once produced the flipped material can be upgraded, modified and reused.
 8. *Using other teachers' videos would be unethical.* Some teachers consider using someone else's video unethical. If authors of a certain material approve its further use, there is no any reason to avoid it. We all use different materials made by other professionals, which does hurts ethical principles if done in a proper way.
- It is also argued that the flipped model increases students' screen time, but most of the research shows that does not increase it, but just makes it more meaningful.

7. Conclusion

The flipped classroom approach is an innovative model that has spread throughout different educational disciplines. It is successfully used in teaching and learning processes of foreign languages, too. It shifts educational process from teacher-centered to learner-centered or learner-oriented. It unifies traditional model elements with new technology achievements in order to reach a model that will lead to best results of the educational process. It should be emphasized that its use is not intended to replace teachers by computers, but it is for sure reshaping the roles of both, teachers and students. Correa (2015: 116) reminds that Bergmann, Overmyer and Willie (2012) make clear what the flipped classroom is not: "(a) about replacing teachers with videos, (b) an online course, (c) students working without structure, (d)

students spending the entire class *staring at a computer screen* or (e) students working in isolation” (Correa, 2015: 116). Among many benefits of the flipped model, we would point out the activation of a student's role and a closer collaboration between teachers and students. Although the idea of the flipped classroom is very simple, its successful implementation in educational process requires careful preparation. As any other new approach, the flipped model should be well studied, its benefits should be implemented and its disadvantages should be fixed and overcome. Education as a live and dynamic process should always be open to reshaping but also careful and cautious when the reshaping is done.

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