



RESEARCH ARTICLE

THE FLIPPED CLASSROOM: WHAT CAN IT BRING TO TEACHERS??

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ABSTRACT

The flipped class is the focus of immense interest in all spheres of education around the world. It has an undeniable appeal for teachers who wish to diversify their pedagogical approaches and try new experiences with their students. However, it seems necessary to understand how this approach offers real benefits, while little scientific research has demonstrated its effectiveness with evidence. The objective of this work is to know what a sustainable movement is, offering new pedagogical perspectives in a school system that is out of breath or a mode that is only appropriate for some teachers, for some students? What are the conditions to be respected to set up an effective flipped classroom?

INTRODUCTION

The flipped classroom (also called reverse, inverse, or backwards classroom) is a pedagogical method that is often perceived as the simple inversion of typical activities of a traditional teaching: instead of listening to the instructor without interruption and doing homework at home, the student learns autonomously at home using the learning technologies (captured video lectures, podcasts, web-based modules, and animated e-books) (Lage, 2000). As a result, valuable faculty "face" time is not spent merely communicating information, but rather is spent engaging directly with students when they are involved in in-depth learning activities (Gannod, 2008). The idea of flipping the classroom is not new, but the idea has recently gained prominence due to advances in technology and increased ubiquitous access to computers and other mobile devices (Davies, 2013). This approach allows the teacher to use class time in different ways, such as adapting time allocation based on reports of where students need help. Students can participate in inclass discussions or receive remedial assistance on things they were not able to learn on their own (Davies, 2013). According to Professors Kim, Kim, Khera and Getman from the Center for Scholarly Technology at the University of Southern California in Los Angeles, the inverted class is an open approach that focuses on (Kim, 2014).

- Integration of technology into pedagogy providing better learning outside the classroom

- Inversion conventional activities both inside and outside the classroom,
- Successful face-to-face interaction between students and the instructor.

In the inverted classroom students are able to prepare for in-class activities by watching and exploring on-line learning materials outside the classroom according to their levels of understanding (Davies, 2013; Kim, 2014 and Foertsch, 2009). The instructor moves from a position of knowledge transmitter to a position of coach, interaction producer, guide, counselor and facilitator. The instructor -student relationship is reinforced. This pedagogical approach is a highly translatable and flexible model characterized by a wide range of approaches to pre-class assignments, in-class activities, after-class practice, and assessments.

Impact of the flipped classroom: The flipped classroom project was initiated in pursuit of providing better learning environments in which students can be more engaged, and responsible for their learning. In face-to-face classroom sessions, students have the opportunity to become more active and interactive through group activities rather than passively listening to lectures. Teachers in turn are able to commit more in-class time to monitoring student performance and providing adaptive and instant feedback to an individual or group of students (Kim, 2014; Foertsch, 2002; Fulton, 2012 and Schiller, 2013). Advances in technology allow teachers to provide online instructional videos and to benefit from online assessment systems (Davies, 2013). Low-stakes quizzes and other forms of formative assessment appeared to be effective

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in both ensuring out-of-classroom activities and helping to prepare students for in-class activities (Kim, 2014). A meta-analysis of 24 reverse classroom studies by Jacob Bishop of Utah State University and Matthew Verleger of Embry-Riddle Aeronautical University in Florida shows that the inverted class combines the characteristics of several pedagogical approaches: active learning, pedagogical differentiation, self-learning, Peer-Assisted learning, Problem-Based Learning or cooperative learning. Many studies on the reverse classroom have attempted to measure the impact this approach could have on student success. Report of students perceptions of the flipped classroom are mixed but are generally positive overall (Davies, 2013 and Choi, 2013).

The conditions for setting up the flipped classroom (Kim, 2014; Nizet, 2015; Bishop, 2013; Brunsell, 2013).

- The development of the inverted class should be based on:
- A thorough mastery of learning principles;
- An understanding of the abilities of students to learn independently
- Instructor ability to use active pedagogy;
- The flexibility of teaching conditions (pedagogical and techno-pedagogical)
- What teachers need most in this context is:
- Learn to structure mediated teaching sequences;
- Learn to pilot meaningful and engaging learning activities in the classroom.

Recommendations: The literature offers some recommendations that may lead to more effective mobilization of the inverted class.

Limit technical difficulties: In order to address possible difficulties arising from the use of information and communication technologies for video distribution, the literature suggests the use of high-performance platforms such as YouTube (Enfield, 2013 and Smith, 2013) to avoid the complications associated with creating a distribution module.

It should be noted that several institutions already offer distribution platforms that are well adapted to the needs of the flipped classroom (Moodle, WebCT or other LMS). In order to reduce the possible obstacles associated with the use of the Internet to download teaching materials (videos, among others), Goldberg (2000) and Tune (2013), propose to send them to students in a physical way (USB key or DVD for example) (Goldberg, 2000 and Tune, 2013). Some universities provide computers and Internet access, ensuring that those with a low-speed connection or no Internet access can use them. Laptops can also be loaned to those who need them. While no article mentioned above offers direct solutions to the potential lack of technological knowledge and skills among students, the possibility of offering them, if necessary, short technological training sessions could, in our view, also be an avenue for action (Enfield, 2013; Smith, 2013; Goldberg, 2000; Tune, 2013).

Propose to learners good quality, coherent and limited number of online resources:

An individual's attention span can be limited when viewing videos and the aim is not to overwhelm them with knowledge. Create a short guide or series of short videos for people to

watch or read covering specific topics rather than one long resource. Three to four minutes for a video is a good length. in a inverted classroom context than in a traditional classroom. It is suggested to mention in class that this is only an impression and that the study time will ultimately be reduced. However, the enthusiasm of teachers can lead to an overload of work that is not essential to the success of a course. Sales (2013) is against excess material available online, especially if it is additional information. This creates an unnecessary surcharge for students who feel obliged to view or read all the information (Sales, 2013).

Support teachers in pedagogical development: It has been proven that, during the course running-in period, the work of teachers is more important with the reverse class than with a classroom teaching (Enfield, 2013; Smith, 2013; Tune, 2013; Sales, 2013; Mason, 2013 and McLaughlin, 2014). To reduce this charge, however, the literature offers some solutions, to reduce the time required to produce videos and correct documents.

Conclusion

The flipped classroom has garnered significant attention in recent years and represents a growing shift from teacher-centered to learning-centered instructional strategies. This pedagogical approach is a highly translatable and flexible model characterized by a wide range of approaches to pre-class assignments, in-class activities, after-class practice, and assessments. Moving foundational course content outside of class protects instructor-student contact time for higher level learning – learning that cannot simply happen by reading a book. The flipped classroom represents an important and exciting advancement in health professions education. However, whether flipped classrooms will become a dominant paradigm in medical education over the coming decades remains to be seen. Further development and evaluation of flipped models is crucial for optimizing outcomes and ensuring that the model remains flexible, transferable, and relevant. Research concerning cost-effectiveness, non-cognitive skill development (eg, teamwork, empathy, communication, adaptability), optimal strategies and modalities, learning space design, long-term impact, and faculty development could help further advance the impact and effectiveness of the flipped classroom.

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