

Cap sur l'école inclusive en Europe



Pedagogical sheet

Flipped classroom

Section of the module /E

Contact : Department of Projects

Etablissement : Agrupamento de Escolas João de Deus - faro

Site internet www.aejdfarp.pt

Global definition/short description of the content:

The inverted classroom (flipped classroom) is considered as a great innovation in the learning-teaching process. As the name suggests, it is a methodology through which the teaching model is, actually, inverted. In the traditional model, lessons are centred in the teacher, who works as the connecting element between students and knowledge. The teacher presents the contents and the students listen and take notes to study. With the inverted classroom, the students have direct access to knowledge and the teacher works as a monitor and mediator.

In this model, the students study the curricular contents in advance, out of the classroom, through materials suggested by the teacher. Basic knowledge is acquired outside the classroom, where the students do tasks proposed by the teacher about specific domains. In the classroom, later, the students can expose the knowledge they have acquired and the teacher has the chance of deepening certain aspects, stimulating interactivity in the class. All this has the aim of guaranteeing the understanding and synthesis of the contents.

Use/area of application: Nowadays, being a teacher is not only conveying, in a hurry, a series of concepts that appear in the syllabus orientations, appealing to memorization and abandoning debate and reflection. It is not only teaching to the average student, as the teacher doesn't believe in "one size". Today, being a successful teacher means teaching with enthusiasm and passion, with creativity. It's important to attract

students to learning, so that they feel motivated and therefore, mitigate the deficit of attention, combat indiscipline, and graduate creative and intervenient students in society

Thus, the teaching-learning process should be accessible and agreeable, creating favourable expectations. Motivating situations of learning should be created so that students can find a meaning in learning.

Teachers say that there's no room to explore important dynamics in learning. There's a clear perception that there are problems in time management, there are too many contents for the available time and as a consequence there are a series of practices that are teacher centred because theirs is no time left to promote research, project work and pedagogical differentiation. Actually, the curricular goals do not allow going beyond theory, do not give space for students to apply theory, what ends up in a short-lived learning. Thus the importance of promoting activities, which develop understanding, enabling the strict relationship between theory and practice. It is important to watch, question the students, make them think, propose challenges, propose solutions.

The teacher should make students develop the ability to apply the knowledge to different realties. So, specifically, they should have opportunity to learn how to "think#, through the correct handling of instruments of work, in order to acquire, present and analyse information. Therefore, it is necessary to adopt practices of pedagogical differentiation and promote challenges in the classroom and outside. It is fundamental to look for strategies that help all the students to succeed, regardless of being students with or without special educational needs. Our attention should be more focused on students. However, today with an average of 30 students per class it is not always easy to do experimental work in the classroom.

The flipped classroom allows students to have an active role, with a role in the teaching-learning process. It is possible for the students to work problems, together and actively, and get involved in learning in a collaborative, cooperative, dynamic and innovative way, leaving behind the model of the passive student.

This teaching methodology proposes lessons that are less expository, more participative and productive, where the students get more involved, awakening interest and motivation, enabling work in small groups, if possible heterogeneous, in small "islands", where all cooperate to reach group goals and where all worry, especially, about the success of the group as a whole. It allows the student to build his own studying material, using different tools and share it with the class, putting into practice the collaborative production – fundamental aspect of the flipped classroom.

This way, the student can interact with his mates and discuss in a live way the main concepts and ideas learned during all that process and put them into practice from different activities, promoting the teamwork. It creates situations that allow sharing what each one has and what each one knows. A kind of competition is established, making them look for and absorb most of the information to show, in the classroom, that they know the topic, which is being discussed. The student develops skills like self-management, it promotes

creativity, motivation and building knowledge, it increases self-esteem, and the student gets the necessary autonomy to look for information, plan his work and develop responsibility. With the flipped classroom, the time of the lesson is optimized, once the teacher offers to students multiple options to look for information. The students get previous knowledge of the lesson through material given by the teacher beforehand: texts, books, video-lessons, and YouTube videos, among other resources. With this the lesson can be dedicated to deepen the topic, create richer opportunities of learning, clarify doubts and maximize interaction with exercises, activities of problem solving, study cases, group work, exchanges between peers and teacher, projects and other collaborative and collective activities of group dynamic, which encourage the interaction in the class, with the promotion of a time for discussion among all the intervenient.

The teacher stops being the great holder of knowledge. In this case, he starts acting more like a mediator that monitors and guides the student in the learning process. The teacher defines the content, the instructions and the interaction strategies. It enables the teacher to create new learning opportunities that get all the students involved.

This methodology allows the teacher to dedicate more time to check the learning of the topics and the acquired knowledge and to understand the difficulties of the students. It allows a direct and more effective observation, a continuous way of evaluating the work done by the students, marking the progress of the students, if he has researched the indicated materials or is able to apply concepts and if he has developed the expected skills and see the results.

It is worth mentioning that this methodology allows the creation of groups of need. The teacher can help the students according to their needs. Each student, no doubt, has a different process of learning and each one of them has a different learning pace. This method allows each student to find his own pace. This pedagogical differentiation can be seen as an aid for all the students, especially those with more difficulties. These students can participate in collaborative groups, which may meet their needs. In the flipped classroom, the students that have more difficulties to learn don't feel ashamed of asking new explanations to the teacher, once the content can be individually reviewed before the contact with the teacher and the class. So, these students participate more in the lessons and in the study groups. Moreover, this methodology allows varying the complexity and the depth of the contents for different levels of capacity and understanding. The teacher may offer more challenges for the students with fewer difficulties and help the ones who have more difficulties.

Principles and theoretical fundaments:

The flipped classroom gained shape in 2007, in the USA, when several teachers were looking for a solution to help the students who skipped lessons for health reasons.

The methodology has reached positive results, with impact in the learning and success rates, as well as in

the interest and participation of the students. To prove it the grades of the participating students were twice higher than the ones of students in classes that were using a traditional methodology. Disseminated in the last few years by North American teachers, it was tested and approved by universities ranked among the best in the world, like Harvard and Oxford. Thus, this method has been adopted by schools in Finland and it is being tested in countries with a great performance in education like Canada, Holland and Singapore.

Instruments/ Presentation of the Methodology:

This methodology requires an explanatory guide that I have attached to this document.



"Inverting" a classroom is more than the simple distribution of contents to the students so that they can work autonomously. It requires time, commitment, mastery and effort from the teacher.

I usually apply the flipped classroom once every term and in each of the classes that I teach, regardless the level of education. In this case what I will take as an example is based on this methodology to apply in the four classes of the eighth grade and it focuses "Natural Resources".

Having into account that Geography – the subject that I teach – is a global science, interdisciplinary and easy to articulate with other subjects, I adopt this strategy together with the teacher of Natural Sciences, where this topic is also taught.

Groups of two or three elements are formed, as heterogeneous as possible, and they are given a sub-topic two months in advance, an explanatory guide (attached) where the objectives are defined in a clear way with all the necessary orientations to accomplish the activity.

The students should do a digital work (PowerPoint, Prezi, vídeo edition) or build a model and later, in a date to be scheduled, present the final result to the class. This way they are taking the role of *"teachers for one day"* because only the students in the classroom will present that topic. For this, they have to do a research about the selected topic, common to both school subjects, with the guidance of both intervenient teachers, based on the sources indicated by them. All along the process of research and elaboration of the work, the students can clarify doubts and ask for suggestions to both teachers, who supervise and monitor all the process.

It should be mentioned that the timetable of both teachers is compatible because when one of the four

classes of the eighth form is, in one day of the week, in the Geography lesson, the other one is in the Natural Sciences lesson and in the next hour they invert the position, and the same happens in another day of the week with the other classes. This will allow the oral presentation to have a larger audience instead of presenting it only to their class and having to present it twice, in both subjects, in different moments. It is possible to have all the classes in the amphitheatre and in 90 minutes (the time of the lessons of Geography and Natural Science) these students may watch the oral presentations of their mates. Taking into consideration that 90 minutes are not enough for all the students to present their work, the rest of the presentations may take place the following week. This procedure will make the students have only one oral presentation of both subjects and at the same time it will promote a bigger equity in the evaluation process, once the evaluation of both subjects is made based on only one oral presentation, so there are no discrepancies. I would like to stand out that one of the students where I am the tutor has a Specific Individual Curriculum. This student attends the Natural Sciences lessons but not the Geography lessons. So, I am only teacher of Citizenship Education. I should also mention that the student is very excited because she has the chance of presenting a work to her Tutor and which is related to Geography.

Evaluation: This sharing of experiences that goes beyond the teacher the class and the subject can only be an asset for the students and for me as a teacher, it gives me the possibility of acquiring and reviewing capacities, skills and attitudes which are transversal to the subject I teach, through an exchange of knowledge and experiences, which are very appropriate to my activity in class, giving me the opportunity of being a more participating teacher.

The student develops skills like self-management, it promotes creativity, motivation and building knowledge, it increases self-esteem, and the student gets the necessary autonomy to look for information, plan his work and develop responsibility.