FLIPPED CLASSROOM = FLIPPED LEARNING

What is Flipped Classroom?

Advances in technology have meant that the core purpose of flipped learning- introducing pupils/course participants to a topic at home before they apply what they've learned in the classroom- has been made easier.

In fact they learn at home through online learning materials and process their knowledge in the classroom.

The knowledge part of learning is taken out of the classroom and delivered beforehand, leaving more time for the teacher to focus on moving the learning on in the classroom and scaffolding higher order thinking.

Technology plays an important role in the delivery of the knowledge part and learners access content at home before a lesson or course.

It is not simply a matter of watching a video or looking at a website on a particular topic. The teacher/trainer expects students to engage with the knowledge that they see and read through a task set by the teacher. He can invite them to participate in preparatory work. They can then respond online or at the start of the class/course by the teacher/trainer. Such tasks test initial understanding and enable the teacher to look at the responses, act on what they find and adapt the lesson accordingly.

We are talking about assessment for Learning before you even get into the lesson. It means that teachers can more accurately target students, address misconceptions and extend those who need extending, which ensures that differentiation is more fluid and accurate. Wikipedia gives this description of flipping learning:

Flipped classroom is an instructional strategy and a type of blended learning that reverses the traditional educational arrangement by delivering instructional content, often online, outside of the classroom. It moves activities, including those that may have traditionally been considered homework, into the classroom. In a flipped classroom, students watch online lectures, collaborate in online discussions, or carry out research at home and engage in concepts in the classroom with the guidance of the instructor.^[1]



There are four big parts in the flipping methodology.

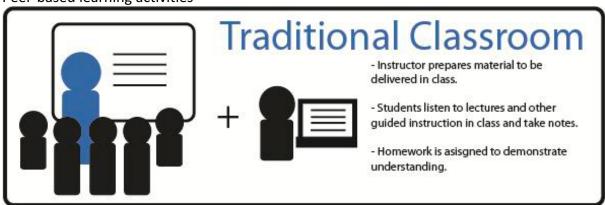
- The learning goal and of the course/lesson needs to be shared with the students for an ensured bigger/deeper understanding
- Online sources are shared to be viewed and understood as homework
- In-class: groupwork, focus on content, understanding, difficulties, project. Feedback by peer and teacher
- Evaluation of the learning process by all

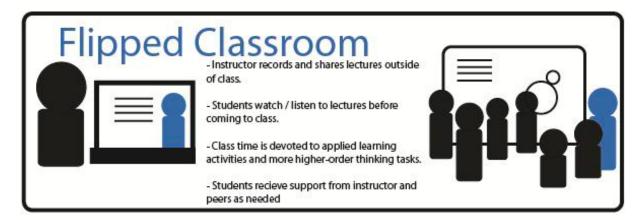
Why Flipping the classroom?

Flipping learning provides teachers faculty with more time in class to work with individual students and allows students to master content at their own pace.

In class time is used for deeper engagement with content, while the instructor provides guidance through:

- Collaborative projects
- Individual and group problem-solving
- Peer-based learning activities





The methodology inspires teachers to rethink and reflect on their teaching. Teachers perceive students as more motivated, taking greater ownership over their learning and feeling more comfortable asking questions.

Instructors feel they are able to engage in more student-teacher interaction and find themselves spending a significantly lower amount of time preparing their classes. (Lage, Plat and Treglia, 2000).

Students are learning for and by themselves which results in a higher student engagement. There is more interaction and face to face time and flipped learning improves the quality of the peer learning and interaction between students.

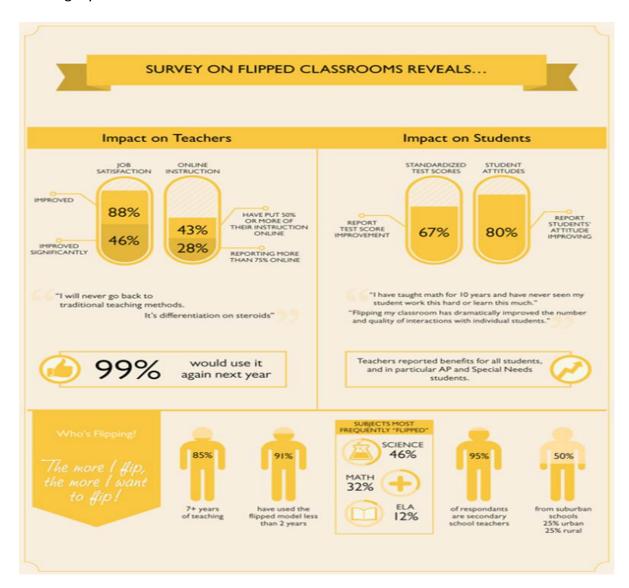
The students see the home work as more purposeful. They know they need to do the work in advance of the lesson, otherwise they experience a disadvantage.

Prior knowledge motivates the students for the learning outcomes and teachers detect earlier misconceptions and provide more efficient and effective feedback.

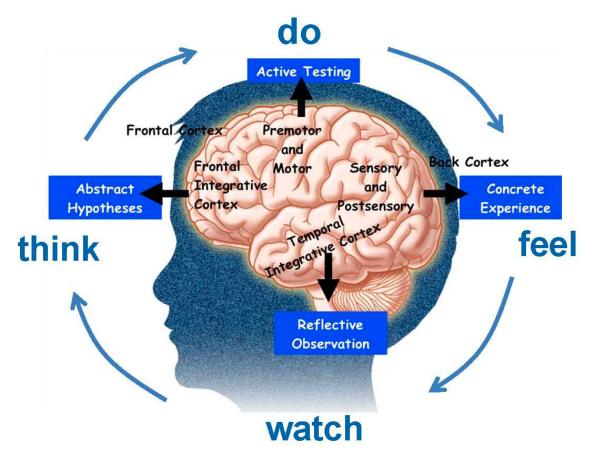
Research is confirming the numerous benefits to student's learning: Flipped classroom improves the student understanding of the curriculum because of

- an increase in available project time (Zappe et al.2009)
- the opportunity for instructors to engage learners in problem-solving activities (Toto & Nguyen, 2009)
- the ability to review lecture material (Foerttsch et al. 2002)

Research also reveals that the flipped classroom allows for student learning to become personalized as it allows students to choose methods that best match their preferred learning style.



Which Content fits the Flipping classroom approach?



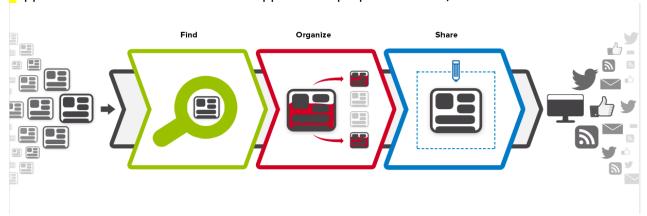
Content

- that needs more in-depth coverage, more iterations to be understood
- demanding more differentiation in the past
- demanding an authentic or project approach

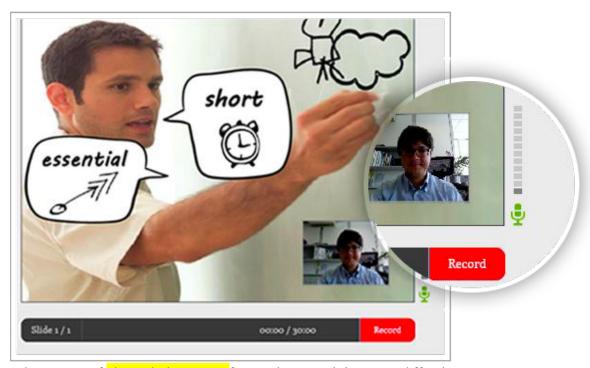
The instructor has to plan the process and to share his/her expectations with the students. He/she has to identify the aspects in the curriculum that are content-heavy and could benefit from being delivered beforehand.

The preparation time increases, but the resources are reusable, certainly when recording own videos. Sometimes teachers will need support to make videos of audio/ slides and podcasts.

Flipped Classroom demands an other approach to prepare a course/lesson:



- Use different sources such as video and sources from other colleagues or specialists
- Record your own video or audio/slides and podcasts
- Ask students to find sources
- Let students make online sources for other classes or groups
- Record your lessons so they're reusable but
- Use an other timing: max 6 minutes per learning objective



Advantages of Flipped Classroom for students with learning difficulties:

- •Option to review material as many times as necessary (online content)
 Retention and understanding increases. Repetition in a safe environment (not in group)
- •Transcripts can add to the diversity of content delivery (audio, video, text) supporting different types of students with their own **learning style**.

Everyone is a genius. But if you judge a fish on its ability to climb a tree, it will live its whole life believing that it is stupid.

-A Einstein



What is required for Flipped Classroom?

It is vital that access to the necessary **device** (computer, laptop, tablet) is available at home with a quick internet connection.

Teachers and students need an online space where they can interact: an **online platform.**

Staff need to be able to set tasks.

Students need to access those tasks, and upload work or respond in some way.

Teachers need to see those responses and to communicate online with the students.

There are several possibilities for instance e-learning platforms as Moodle and Blackboard, Google Docs, Office 365, maybe a blog.



Monitoring and evaluation

How do you know the students have actually accessed the resources?

Classical approach will do (with or without grades):

- •Provide a quiz or some questions they need to answer, and which demand reflection (intro to class discussion)
- •Make sure you get the results before the class moment

Additional help for individual learning: a guiding text which highlights the focus and concepts of the topic/reflection.

Class time used can better used for:

- •Creating a better understanding of the subject matter (more time to answer specific questions in group or individual)
- Active learning in class (skills: speaking, listening, writing)
- Options to plan/show projects in class
- •Situating those concepts that result in confusion
- •Or simply: exercizes in class => immediate feedback

When your first attempt doesn't seem to be having the expected impact, you have to try work out why. Is it the access at home? Did you give students enough time to respond before the lesson?

A mini flip can involve asking them to do something quick and easy for the next day, such as a poll.

However, setting something at the end of a week and allowing a number of days to complete the task before the lesson will generally work better.

Resources and Materials



• Open education resources provided by other educational institutes or schools

- Publically available resources from the Web
- Self-recorded resources : your own teaching style and expertise
- Any online content that passes your stamp or approval (quality)
- Wikimedia and wikipedia



- Google scholar (research papers & books)
- National geographic free views (documentaries)
- YouTube: movies of all kind of items (and all quality)

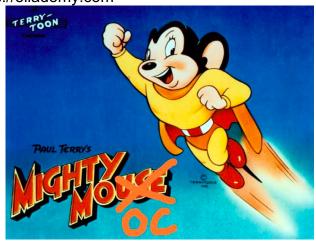


• Add material from **MOOC** s (Massive Open Online Courses)

Some MOOCs only offer audiovisual materials for a limited time, others keep it open for those who registered for that particular course.

-www.coursera.com, www.FutureLearn.com , Iversity.org , canvas.net , udacity.com, https://www.edx.org/

-https://eliademy.com



.Flipped World Classroom for language teaching:

Contact a teacher from another country where the learners either speak the language you are teaching or are learning the language you are speaking. Connect your students with both of this two possible opportunities for practising exchange of language by webinar sessions (Google Hangout) and/or Skype meetings.

Give adequate tasks at your students to collaborate with the students of the other country and collaborate with your colleague to do also for his students. The collaboration could easy go further by involving other lessons/courses as for instance history and geography.



Sources

English sources

- –OER commons (inlog for free, but email needed for activation) https://www.oercommons.org/browse/
- -The code academy (coding & web) http://www.codecademy.com/
- -Ted Ed http://ed.ted.com/ (inlog via facebook login or other)
- -Khan Academy https://www.khanacademy.org/ (inlog via FB or gmail)
- -TeacherTube http://www.teachertube.com/collections/
- -MOOCs (Massive Open Online Course) materiaal: www.coursera.com, www.FutureLearn.com , Iversity.org , canvas.net , udacity.com, https://www.edx.org/-https://eliademy.com

Dutch sources

- -Klascement.be (Flemish/Dutch site) http://www.klascement.be/
- -Teacherlinks (Dutch) http://www.lerarenlinks.be/index.php?pid=21
- –Kennisnet (Dutch) all sorts of material curriculum & non-curriculum => wikiwijsleren (http://www.wikiwijsleermiddelenplein.nl/)

Flipped classroom links

Information

- •https://www1.plymouth.ac.uk/ouruniversity/teachlearn/guidanceresources/Document s/7%20Steps%20to%20a%20Flipped%20Classroom.pdf
- •Eng rapport met voorbeelden:

http://fln.schoolwires.net/cms/lib07/VA01923112/Centricity/Domain/41/Extension%20 of%20FLipped%20Learning%20Llt%20Review%20June%202014.pdf

- http://flippedlearning.org/site/default.aspx?PageID=1
- •http://net.educause.edu/ir/library/pdf/ELI7081.pdf
- Research: http://fln.schoolwires.net/domain/41

Examples of lesson plans

https://tch4902012mb7393.wikispaces.com/Flipped+Classroom+Lesson+Plan

Subject matter: mobile learning

(introhttp://mobimooc.wikispaces.com/Introduction+to+mLearning)

Thanks to: Inge De Waard, Kirsty Tonks, Luc Vandeput, Ilse Stroobants