Flipped Learning Tools and Techniques

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FLIPPED LEARNING SHIFTS THE CLASSROOM

From Passive learning to Active learning

focusing on higher order thinking skills such as evaluating, analyzing, and creating to engage students in learning.

THE DEFINITION OF THE FLIPPED CLASSROOM

A flipped classroom is a type of blended learning where students are introduced to content at home and practice working through it at school.

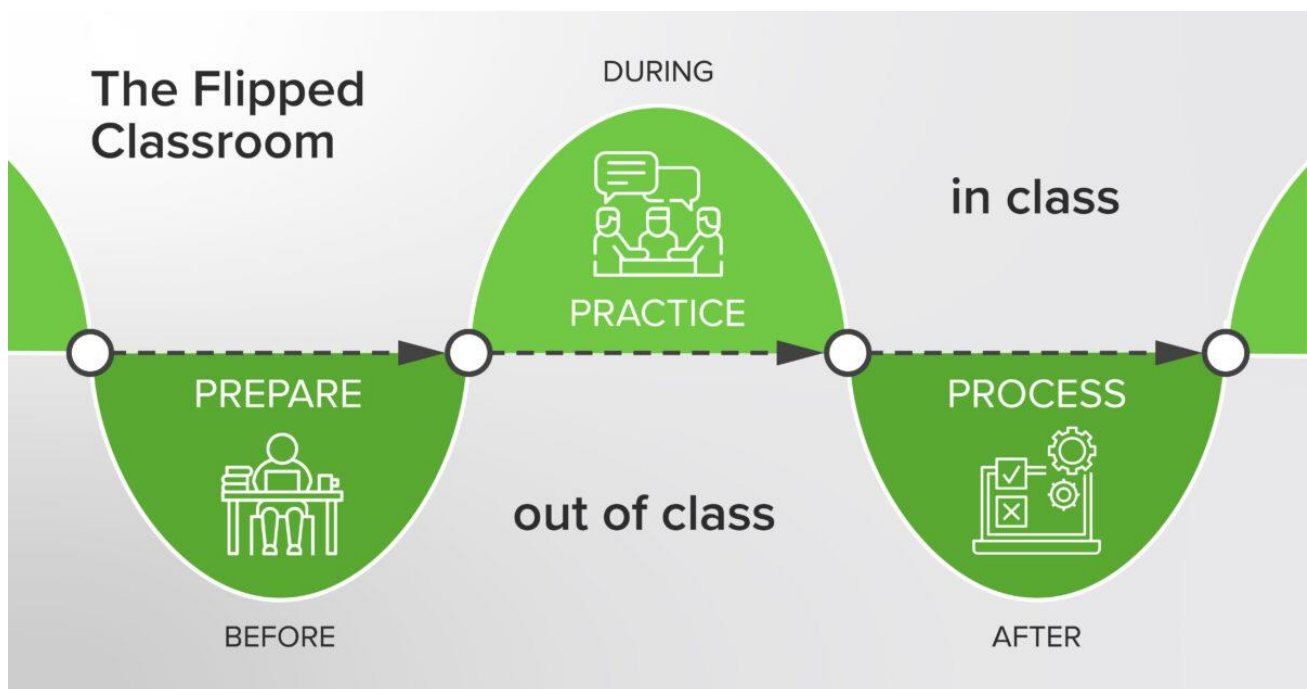then assigning homework and projects to be completed by the students independently at home.

Figure 1: https://kb-ecampus.media.uconn.edu/wp-content/uploads/sites/440/2021/06/Flipped-Classroom-Header-Green-1200x630-1.jpg

In a Flipped Classroom

Who developed the flipped classroom?

The flipped classroom is known by various names including the inverted classroom, and more simply, the flip.

Origination stories differ, but most credit Jonathan Bergmann and Aaron Sams, high school chemistry teachers from Colorado, who began using recorded lectures in 2006

PILLARS OF FLIPPED LEARNING

Four pillars of flipped learning: F- L- I- P

1.Flexible Environments

• Not only refers to the physical learning spaces, also refers to the flexibility the instructor in the classroom.

• Having a positive, stress-free environment foster learning in a better way

2.Learning Culture:

• Shifting from a teacher-based model to a student-based one

• Need our students to be active learners. students are actively involved in their learning process and have the chance to participate in each step in the learning process

• students to take an active role in the learning task that needs to be practical

• Lastly, the content must be approachable and meaningful for the learners.

3.Intentional Content

• choosing the best content to be delivered in the classroom, The teachers decide on what needs to be taught directly and what to be explored by the students.

4.Professional Educators-Professional Teacher or P.

• It represents the role of a professional teacher.

• Teachers must observe their students, give feedback, and assess their work.

• reflective in their practice, always improvise their instructions, accept criticism, and able to control chaos in their classrooms.

• Teacher has to Decide on the content, adapt the materials, choosing the strategies, maximizing classroom interaction time

• Even though teachers play less visible roles in flipped classrooms, they remain the most important ingredient flipped learning.

FLIPPED CLASSROOM APPROACH

Flipped Classroom Example:

Pre-Class Videos:

• Imagine students studying physics, and before each class, the teacher shares a short video explaining the fundamental principles and concepts.

• watch the video at your own pace, taking notes and grasping the basics.

• In the subsequent class, teacher and students engage in hands-on experiments, discussions, and application exercises, building upon the foundation laid in the video.

FLIPPED LEARNING TOOLS AND TECHNIQUES

1.Edpuzzle

2. **Book Widgets**

3. **Symbaloo**

4. **BrainPOP**

5. **Explain Everything**

6. **Duolingo**

7.**Ted-Ed**

8. **Clarisketch**

9. **TES Teach with Blendspace**

10. **Khan Academy**

11. **ClassFlow**

12. **Nearpod**

13. **Kiddom**

14. **PlayPosit**

15. **Hippo Video**

16. **Loom**

17. **WhatsApp**

18. **ShowMe**

19. **Doceri**

20. **Poll Everywhere**

1. Edpuzzle

• Flip the classroom with Edpuzzle, an easy and effective way to deliver videos in our classroom or outside our classroom.

• It's not just a video distributor: with Edpuzzle, you can make the video come to life by adding audio-notes and questions.

• Edpuzzle makes it easy to add comments to videos, and the questions make the video more interactive.

• When should use the Edpuzzle?

Traditional model   **Flipped model**

Students are responsible for homework in these levels of understanding

Creating
Evaluating
Analyzing
Applying
Understanding
Remembering

Students and teachers work together during the school day on these levels of learning.

Teachers introduce new material to students.

New material is introduced to students outside of class as their homework.

Blooms Taxonomy

Figure 2: https://media.springernature.com/m685/springer-static/image/art%3A10.1007%2Fs10639-023-11809-2/MediaObjects/10639_2023_11809_Fig1_HTML.png

• You can use it to empower critical thinking when students watch a video. Perfect to use in a flipped classroom

2. Book Widgets

• Book Widgets allows   to make interactive lessons. a widget is an element of a graphical user interface that displays information or provides a specific way for a user to interact with the operating system (OS) or an application.

- examples   icons, windows, cut-off menus, menu bars, switches,

  weather wedgets and forms

- BookWidgets provides strong digital templates of all kinds of interactive exercises.

- just have to add   own content

- There are 40 different widgets you can create that can be shared through a link, a QR code, an email, and Google Classroom.

- Simple assessments teacher can integrate include exit slips, quizzes, and worksheets. Kids can practice and review skills with flash cards, puzzles, or games

3. Symbaloo

- Symbaloo is a free educational tool that organize all our online resources and tools into one easy place!

- Symbaloo helps organize   web (or classroom) resources in one place.

- These resources are stored on a dashboard in the form of buttons.

- This dashboard can be set as   homepage, so   can find all the resources need immediately. It gives   the possibility to personalize the dashboard.

- The green tiles are student science resources,

- **The Orange Tiles Are Resources for Computer Science Technology,**

- The red tiles are engineering resources, and the blue tiles are resources in mathematics.

- **The** yellow **tiles are other study resources for students to use to enhance study and research in general.**

- **As for the pink tiles, they serve as links to teaching resources.**

- **The only "miscellaneous" tile would be the purple one in the top, left corner. This purple tile links to professional teaching wiki.**

4. BrainPOP

- Animated Educational Site for Kids - The content covers hundreds of topics within Science, Social Studies, English, Math, Arts & Music, Health, and Technology.

- creates animated resources that support teachers and engage students - in school, at home, and on mobile devices.

- Their content includes movies, quizzes, games, mobile apps, activity pages, and much more.

- BrainPOP is charged for after a two-week trial period.

5. Explain Everything

Explain Everything-can really explain everything.

It's an educational app that enables   to make   own interactive tutorials and presentations. whiteboarding platform where people meet to share ideas and make them visual and clear so they can better understand each other.

The principle is simple: Explain Everything is an interactive screen casting whiteboard.

This means that   can make a presentation, and record everything   is drawing and saying. Draw, add pictures, highlight and write text.   even have a nice red pointer

Explain Everything --free.

6. Duolingo

• If   are a language teacher, Duolingo is made for teaching foreign languages, and was awarded "the app of the year" in 2013.

• free mobile app or web and a few minutes a day.

• Google invested a lot in this language app. There are just so many languages to choose from.

• Students have to set a goal, from 5 up to 20 minutes a day, and pick if they are a beginner or not. If not, they have to take a placement test. Duolingo focusses on words and their translation and is very intuitive.

7.Ted-Ed

• TED-Ed   technology, entertainment and design

• education initiative- goal: supporting learning.

• They produce a growing library of original animated videos, and

• provide an international platform for teachers to create their own interactive lessons.

• All the videos made by TED-Ed and other teachers are mostly short videos that don't last longer than 5 minutes.

• Choose a lesson topic, and find a suitable video in the library. It's very helpful with finding resources and helping   to explain something.

• Bonus: get to save preparation time!

8. Clarisketch

It's clearer to the students than some weird icons and unreadable notes on paper.

When students have to work at home independently, it's always better to have some extra instructions. This way, they are sure that they have to do and whether they are doing it right. No more confused students in the next lesson.

9. TES Teach with Blendspace

• TES- Teacher Educators - TES Teach (formerly known as Blendspace) is a powerful website tool free online resource that is designed to help teachers create digital lessons in a few minutes that can be shared out with students to access lessons built around the blended teaching design.

• TES Teach with Blendspace makes it easy to plan, build, and deliver a lesson by integrating content from Tube, TES resources, own files, and other digital media somewhere on the internet. Just drag and drop the material on the TES teach dashboard.

• Students can also use TES Teach to create their own lessons and presentations as a way to showcase their understanding of a particular topic.

10. Khan Academy

 Nonprofit organization providing a free, world-class education for anyone, anywhere. Our interactive practice problems, articles, and videos.

Best tool for teachers and Khan Academy free in India

100% free content for Grade 1-12, aligned to India curriculum. Available in English, Hindi, Gujarati, Assamese, Marathi, Punjabi and Kannada.

Choose between subjects such as Maths, Science & Engineering, Computing, Arts & Humanities and Economics & Finance.

By signing up, can create a classroom, and invite students to take some video lessons and to take a quiz afterwards.

This is really handy for flipped learning. can even follow students' progress from a distance.

Afterwards, can see what parts of the lesson students didn't understand, and explain it again in the classroom with some exercises as well.

11. ClassFlow

• A cloud-based lesson delivery software free product created by Promethean that combines several products in one including interactive flipcharts and a student response system.

• Used by both teachers and students, ClassFlow can deliver engaging lessons and assessments, from an internet connected device. Registration for a ClassFlow teaching account is free and simple.

• Teachers can deliver interactive lessons that increase the depth of student and teacher engagement.

• ClassFlow provides the collaborative use of classroom devices, digital curriculum and assessments for learning. Students can access the lessons from home and start learning

12. Nearpod

- powerful teaching tool that works on a variety of devices, from smartphones to laptops.

- To use Nearpod, simply create an account and log in.

- From there, you can create a lesson plan or import one from the Nearpod library. Once you've created your lesson, you can launch it and share the code with your students.

- They can join your lesson from any device with an internet connection. During the lesson, you can use the Nearpod tools to engage your students and track their progress. Create interactive presentations.

- Add slide by slide or choose a special Sway template can adjust.

- All those slides make an amazing interactive presentation, especially if add activities like quizzes, open ended questions, BookWidgets exercises, draw questions and others.

- Nearpod is a subscription-based service that offers a variety of pricing plans to suit different needs

13. Kiddom

- Kiddom is a one stop shop for learning management system (LMS)

- and curriculum management that offers options to differentiate learning.

- free standards-based platform designed to help teachers create individual learning experiences.

- Its pages are visual and easy-to-understand, enabling teachers to quickly determine how students are doing and where remediation is needed–all without spending a lot of time analyzing data

14. PlayPosit

- PlayPosit is an interactive web-based online video platform learning environment in which teachers can create and share interactive video lessons.

- Teachers begin with any online video they made or found (screencasts, Khan Academy, TED, etc.) and transform the passive content into an active experience for students, with time-embedded activities.

- Data can then be analyzed on the individual or group level, providing powerful insight into educational trends in the classroom.

15. Hippo Video

- online tool for teachers that is uniquely designed to video record lectures, and to share videos directly from the recording tool. Send video recordings as a link via email or share the videos to Google Classroom, Google Drive, YouTube, or embed the video on your website.

• Record a digital whiteboard explainer, classroom, interview through webcam or just screen record an entire web browser screen and include audio to boost student engagement.

16. Loom

• Loom is a screen capturing software that allows to make instructional videos.

• Capture screen or front-facing camera and narrate it all at once, then instantly share it with students with a simple link.

• When show something and explain it, make sure understood by students.

17. WhatsApp

• WhatsApp can also help when it comes to flipping classroom.

• A social media platform offers students a way to communicate with each other and ask questions about their homework.

• Provide opportunities by online cooperation and collaboration

• Share educational videos, articles, and other relevant content

• Increase the level of communication between students also students and teachers

• Help students overcome their fear of using the language

18. ShowMe

Interactive whiteboard app for iPad that allows teachers and students to create presentations with live drawings, text, images, and audio recordings.

ShowMe lets create video lessons on whiteboards where literally show students. can use this tool to write, draw, talk and record voice. can use it with any age group because it is open ended.

"Groups" allows teachers to share their ShowMes and interact with students privately.

A teacher with ShowMe Premium subscription can create an unlimited number of groups and invite their students.

Students can join groups for free!

SHOWME PREMIUM

ShowMe Premium is an auto-renewing monthly or yearly subscription which unlocks all ShowMe features

19. Doceri

• Doceri is an interactive whiteboard app that allows users to create, record, and narrate slide presentations.

• It was originally designed for teachers, but is now used by creative individuals in many professions, including education and entertainment.

• Empowers students to create presentations and make meaning of concepts for a variety of subjects

• Doceri is very adaptive, meaning that can edit a lesson at any time.

• can also add an audio file at any point when creating flipped lesson.

• If necessary, can change parts of the lecture instantly, even when already shared it with students. can share the lessons via Facebook, YTube and email.

• fully functional trial, free for you to evaluate for 30 days.

20. Poll Everywhere

• Poll Everywhere is a web-based response system that allows users to create interactive presentations and obtain feedback from an audience.

• powerful educational tool which can be used in and outside the classroom.

• Poll Everywhere is a voting system, completely reinvented! As a teacher, have to set up a question on the web interface or smartphone app. Students can see it on their PC, tablet or mobile phone. Questions can be polls, but also open-ended questions such as "give me a tip to improve my teaching".

• Students can respond by using the web app, a text message via the Poll Everywhere smartphone app, or even Twitter. get instant audience feedback.

• Another fun feature is the ability to make nice charts of the answers. can easily get started analyzing the results.

• Poll Everywhere can help the flipped classroom teacher to keep track of the educational progress of the students

Conclusion

Exciting and engaging model of instruction. This method of instruction puts the learning in the hands of the learner and asks the educator to facilitate the learning process. The guiding philosophy behind the "flipped" model asks educators and students to change their attitudes towards a classroom experience.

These were my top picks of flipped classroom tools for teachers. I hope I gave the right tools to flip classroom, and to start with blended learning. Share this post with fellow teachers that are trying to get everything out of their flipped classroom as well.

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International conference presentation "A study to explore the awareness and attitude on the "mee too social media campaign" among college students in Puducherry" on 08.03.2023 organized by ICERT in collaboration with Debre Tabor University
Awards
Dr. Sarvepalli Radhakrishnan Global Educator Award-2023 by International Council for Education, Research and Training – ICERT, Delhi 13.09.2023
Resource person
Oxford College of Nursing, Bangalore, **Antenatal and Labor Management During Covid -19 -** 02/06/2021
Online Course Record of Achievement Certificates From WHO
    Blood stream infection
    Monkey pox introduction
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