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<u>Flipped Teaching</u>: What is it? What are the advantages? What problems does it present? How can I implement it in my classroom? What technologies are necessary?



What is it?

Flipped <u>Teaching</u> and Flipped <u>Learning</u>

Definition of Flipped Learning

Flipped Learning is 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.

www.flippedlearning.org





Traditional Classroom



- Instructor prepares material to be delivered in class.
- Students listen to lectures and other guided instruction in class and take notes.
- Homework is asisgned to demonstrate understanding.

Flipped Classroom -Instructor records and shares lectures outside



- of class.
- Students watch / listen to lectures before coming to class.
- Class time is devoted to applied learning activities and more higher-order thinking tasks.
- Students recieve support from instructor and peers as needed







Students practice applying key concepts with feedback

IN CLASS

······GOAL

Students prepare to participate in class activities



· · · GOAL

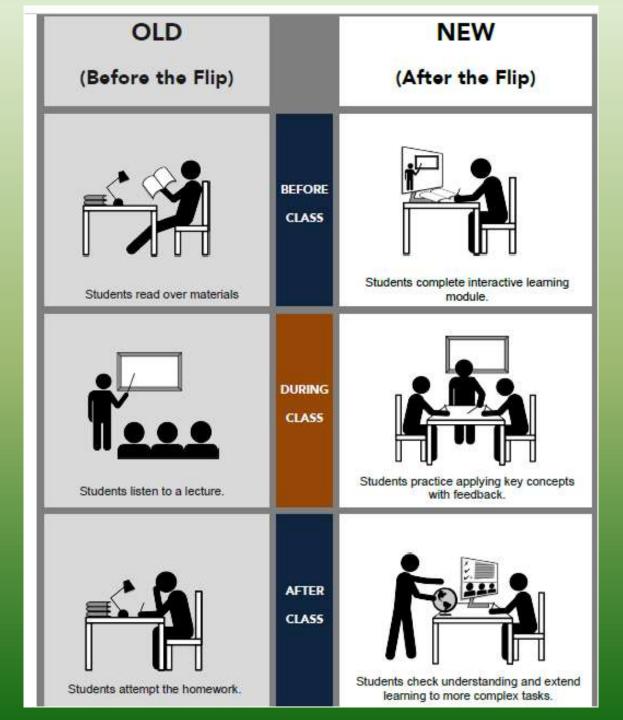
AFTER

Students check their understanding and extend their learning

· GOAL

OUT OF CLASS





Outside Class Teacher prepares content

- Videos
- Podcasts
- E-learning
- · Documents/books



In Class

- Teacher as a coach/enabler
- Assignments
- Project based activities
- Hands on processes
- Interactive Questioning
- Learner content creation.
- · Independent problem solving
- · Content and idea exploration



Outside Class Student learns

- View/read content
- Review
- Concept exploration
- Prepare questions



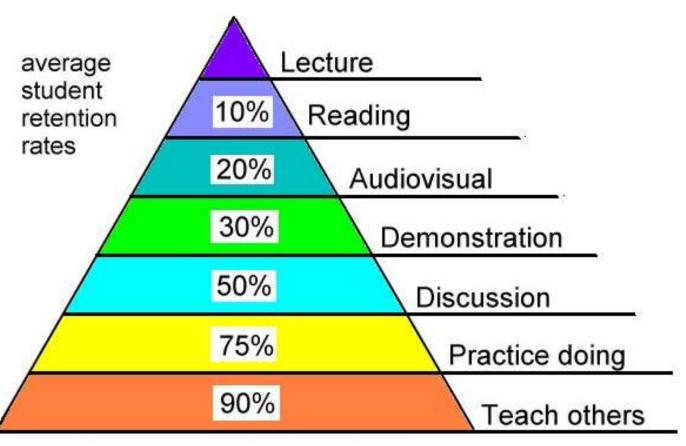


In Class

- Personal projects
- · Evaluation and feedback
- Resolutions
- Confirming learning objectives

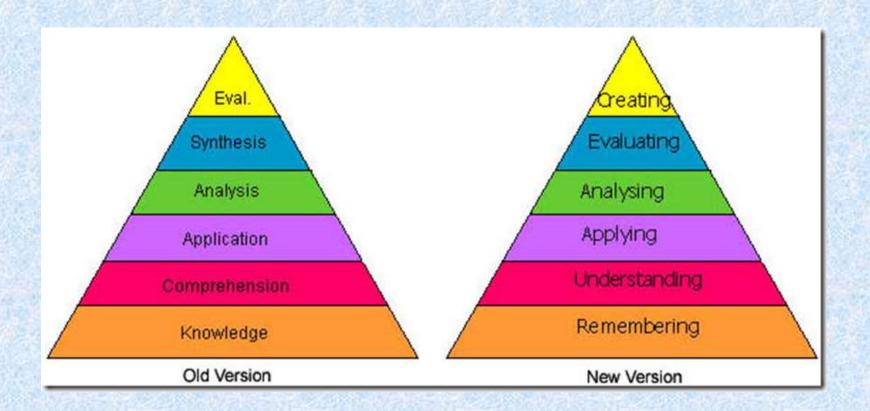






Source: National Training Laboratories, Bethel, Maine

Revised version of Bloom's Taxonomy of Learning Objectives



BLOOM'S TAXONOMY: THE 21ST CENTURY VERSION, Copyright © 2012. All rights reserved for Educational Technology and Mobile Learning. This blog is owned and operated by Mohamed Kharbach.

HIGH LEVEL THINKING SKILLS -

Knowledge

Recall /regurgitate facts without understanding. Exhibits previously learned material by recalling facts. terms, basic concepts and answers.

Comprehension

To show understanding finding information from the text. Demonstrating basic understanding of facts and ideas.

Application

To use in a new situation. Solving problems by applying acquired knowledge, facts, techniques and rules in a different way.

Analysis

To examine in detail, Examinina and breaking information into parts by identifying motives or causes; making inferences and finding evidence to support generalisations.

To change or create into something new. Compiling information together in a different way by combining elements in a new pattern or proposina alternative solutions

Evaluation

To justify, Presenting and defending opinions by making judgements about information, validity of ideas or quality of work based on a set of criteria.

Choose Observe Show Omit Copy Spell Define. Ducke State Duoticate Read Find Recell Trace What How Recite Identify Recognise When Label Record Where List Relate Which Listen Remember Who Locate. Repeat Why Match Reproduce Write Memorise Retell Name Select

Key words:

Ask Extend Outline Cite Generalise Predict Give exam-Classify Purpose Compare ples Relate Contrest li istrate Rephrase Demonillustrate Report strate Indicate Restate Discuss Infer Review Estimate Interpret Show Match Explain Summarise Express Observe Translate

Key words:

Act Employ Practice Administer Experiment Relate Apply with Represent Associate Group Select Build Identify Show Calculate Illustrate Simulate Categorise Interpret Solve Choose Interview Summarise Classify. Link Teach Connect Make use of Trensfer Construct Manipulate Translate Correlation Model Lite Demonstrate Organise Develop Perform

Plan

Key words

Analyse Examine Prioritize Find Appraise Question Arrenge Focus RANK Assumption Function Reason Breakdown Group Relation Categorise Highlight ships Cause and in-depth Reorganise effect discussion Research Choose Inference See Classify Inspect Select Differences Investigate Separate Discover solate Similar to Discriminate List Simplify Dissect Motive Survey Distinction Omit Take part in Distinguish Test for Order Divide Organise Theme Establish Point out Comparing

Adapt Estimate Plan Add to Experiment Predict Build Extend Produce Change Formulate Propose Choose Happen Reframe Hypothesise Combine Revise Compile Imagine Rewrite Compose Improve Simplify Construct Innovate Splive Convert Integrate Speculate Create: invent Substitute Delete Make up Suppose Design Maximise Tabulate Develop Minimise Test Devise Model Theorise Discover Modify Think Original Discuss Transform Elaborate Originate Visualise.

(ey words:

Agree Disprove Measure Appreise Opinion Dispute Effective Argue Perceive Assess Estimate Persuade Swant Fusioner Princitise Red Explain Prove Choose Give reasons Rate Compare Good Recommend Conclude Grade Bule on Consider How do we Select Convince know/* Support Criteria **Importance** Test Criticise Infer Useful Debate Influence Validate Decide Interpret Value Deduct Judge Withy Defend Justiny Determine Mark

Describing Finding Identifying Listing Locating Naming Recognising Retrieving

Definition Fact Label List Quiz Reproduction Test Workbook Worksheet

Actions:

Classifying Comparing Exemplifying Explaining inferring Interpreting Paraphrasing Summarising.

Outcomes:

Collection Examples Explanation Label List Outline Quiz Show and tell Summery

Actions:

Dramatise

Carrying out Executing implementing Using

Outcomes:

Demonstration Disco Illustrations Interview ice most Performance Presentation Sculpture Simulation

Actions:

Attributing Deconstructing Integrating Organising Outlining Structuring

Outcomes:

Abstract Chart Checklist Database Graph Mobile Report Spread sheet

Survey

Constructing Designing Devising Inventing Making Planning Producing

Advertisement Media product New game Painting Plan Project Song

What changes would you make to solve...?

Story

Actions:

Attributing Checking Deconstructing Integrating Organising Outlining Structuring

Dutcomes:

Abstract Chart Checklist Database Graph Mobile Report Spread sheet Survey

Why did ...?

Can you list three ...? Can you recall ...? Can you select __? How did happen? How is . ? How would you describe ...? How would you explain ...? How would you show ...? What is ...? When did ...? When did happen? Where is? Which one ...? Who was 7 Who were the main ... ?

Questions:

Can you explain what is happening ... what How would you classify the type of ...? How would you compare ...?contrast ...? How would you rephrase the meaning ...? How would you summerise ...? What can you say about ...? What facts or ideas show ...? What is the main idea of .? Which is the best enswer ...? Which statements support ...? Will you state or interpret in your own words 7

Questions:

How would you use . ? What examples can you find to ...? How would you solve using what you have learned ...? How would you organise show 7 How would you show your understanding What approach would you use to ...? How would you apply what you learned to develop ...? What other way would you plan to ...? What would result if ...? Can you make use of the facts to ...? What elements would you choose to What facts would you select to show ...? What guestions would you ask in an interview with ...*

Questions:

What are the parts or features of ...? How is related to ...? Why do you think ...? What is the theme ...? What motive is there ...? Can you list the parts ...? What inference can you make ...? What conclusions can you draw ...? How would you classify ...? How would you categorise ...? Can you identify the difference parts ...? What evidence can you find ...? What is the relationship between ...? Can you make a distinction between ...? What is the function of ...? What ideas justify ...?

How would you improve ...?

What would happen if ...?

Can you elaborate on the reason...? Can you propose an alternative...? Can you invent...? How would you adapt to create a different ? How could you change [modify] the plot (plan)...? What could be done to minimise (maximise)...? What way would you design...? Suppose you could ... you do..." How would you test ...? Can you formulate a theory for ... ? Can you predict the outcome if ...? How would you estimate the results for ...? What facts can you compile...?

Can you construct a model that would

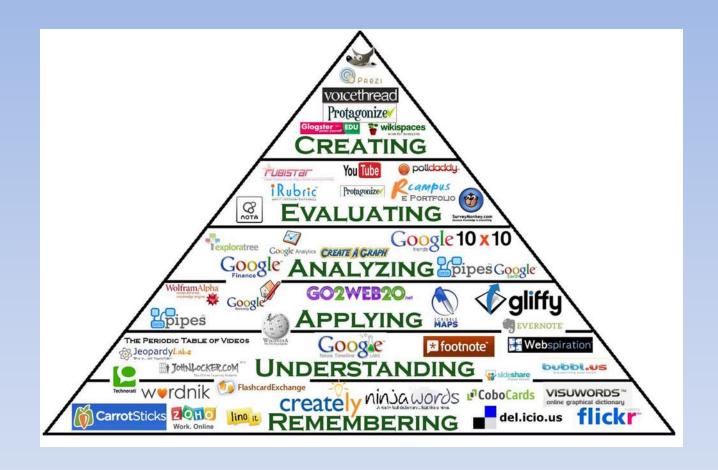
Duestions:

Do you seree with the actions/outcomes...? What is your opinion of ...? How would you prove/disprove...? Can you assess the value/importance of ...? Would it be better if .. ? Why did they (the character) choose...? What would you recommend...? How would you rate the ...? What would you gite to defend the actions...? How would you evaluate ...? How could you determine ...? What choice would you have made ...? What would you select...? How would you prioritise...? What judgement would you make about ...? Based on what you know, how would you explain_?

What information would you use to sup-

port the view...? How would you justify...?

Bloom's Taxonomy: Teacher Planning Kit



http://www.educatorstechnology.com/p/blog-page 7.html

A little history:

- The first experiments were carried out in the 1990s by Eric Mazur, professor of physics at Harvard University.
- The most famous applications are by the Khan Academy

http://www.ted.com/talks/salman khan let s use video to reinvent education

- Other important sites, offering entire courses, include: https://www.coursera.org
- and in Italian: http://www.tvscuola.it
- The founders of Flipped Learning are generally considered to be Jonathan Bergmann and Aaron Sams, authors of "Flip Your Classroom: Reach Every Student in Every Class Every Day", 2012.
- In 2014 FLIPNET was created in Italy by an association of teachers using flipped teaching: http://flipnet.it



The Four Pillars of F-L-I-P™



Flexible Environment

Flipped Learning allows for a variety of learning modes; educators often physically rearrange their learning spaces to accommodate a lesson or unit, to support either group work or independent study. They create flexible spaces in which students choose when and where they learn. Furthermore, educators who flip their classes are flexible in their expectations of student learning.

assessments of student learning.

Learning Culture

In the traditional teacher-centered model, the teacher is the primary source of information. By contrast, the Flipped Learning model deliberately shifts instruction to a learner-centered approach, where in-class time is dedicated to exploring topics in greater depth and creating rich learning opportunities. As a result, students are actively involved in knowledge construction as they participate in and evaluate their learning in a manner that is personally meaningful.

L.1	I give students opportunities to engage in meaningful activities without the teacher being central.
L.2	I scaffold these activities and make them accessible to all students through differentiation and feedback.

Intentional Content

Flipped Learning Educators continually think about how they can use the Flipped Learning model to help students develop conceptual understanding, as well as procedural fluency. They determine what they need to teach and what materials students should explore on their own. Educators use Intentional Content to maximize classroom time in order to adopt methods of student-centered, active learning strategies, depending on grade level and subject matter.

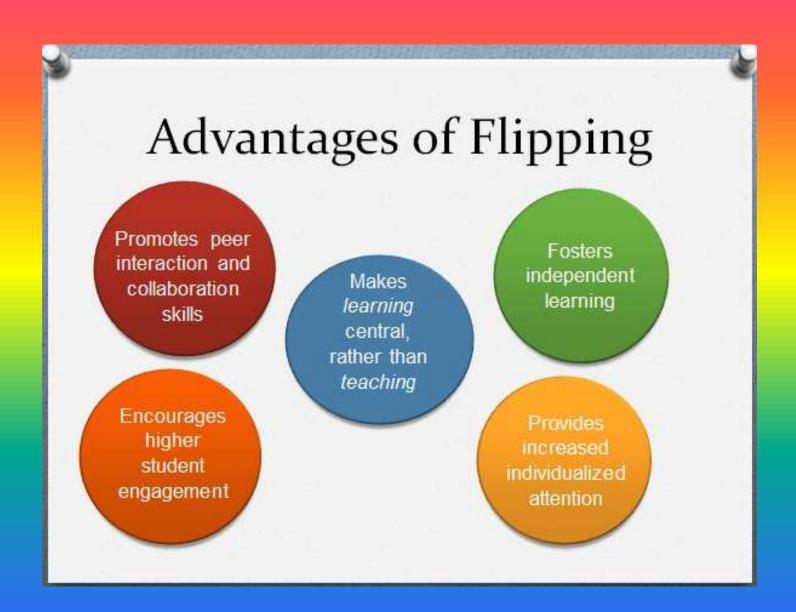
I.1	□ I prioritize concepts used in direct instruction for learners to access on their own.
I.2	☐ I create and/or curate relevant content (typically videos) for my students.
I.3	☐ I differentiate to make content accessible and relevant to all students.

Professional Educator

The role of a Professional Educator is even more important, and often more demanding, in a Flipped Classroom than in a traditional one. During class time, they continually observe their students, providing them with feedback relevant in the moment, and assessing their work. Professional Educators are reflective in their practice, connect with each other to improve their instruction, accept constructive criticism, and tolerate controlled chaos in their classrooms. While Professional Educators take on less visibly prominent roles in a flipped classroom, they remain the essential ingredient that enables Flipped Learning to occur.

P.1	I make myself available to all students for individual, small group, and class feedback in real time as needed.
P.2	□ I conduct ongoing formative assessments during class time through observation and by recording data to inform future instruction.
P.3	□ I collaborate and reflect with other educators and take responsibility for transforming my practice.

What are the advantages?



What problems does flipping present?

Transforming a course takes both time and commitment, so start with a single class session focusing on what and how students are learning at that time.

Flipping is an iterative process, so as you implement these practices, reflect on what works well and what needs to be modified.



Pros	Cons
Students no longer struggle with challenging concepts alone outside of class time.	Making sure every student has a computer and Internet access.
Students can skip parts of the lesson they already understand and re-watch new or challenging ideas.	Students cannot ask questions for clarification during a recorded lesson.
Applied learning in the classroom.	Technology issues.
Differentiated instruction.	Designing and grading frequent quizzes.
Students are given ownership and responsibility for their own learning.	Students have trouble "buying in" to instruction, especially when it is not created by the instructor.
Students come to class prepped and ready to learn. No down time.	Determining how to handle students who do not complete the homework video.
Videos include links for deeper thinking and further learning.	Creating or finding quality videos for each lesson.
Teacher can spend class-time working one-on-one or in small groups with students.	

In-Class Flip in primary/middle schools (= Easy Flip!)

Modifying the Flipped Classroom: The "In-Class" Version by Jennifer Gonzalez http://www.edutopia.org/blog/flipped-classroom-in-class-version-jennifer-gonzalez

Advantages

- The teacher can observe whether students are really watching. When attention starts to stray, the instructor can get students back on track right away. To boost accountability even more, try a platform like Educanon, which allows you to embed any video into an online multiple-choice assessment that you create yourself.
- The initial exposure to the video content has a better chance to sink in. The teacher can answer questions with more immediacy. And for students who struggle, the instructor can send them directly back to the video for a refresher.
- **Hardware is (presumably) safer.** There's less risk of a device getting broken or lost if it remains in the classroom.

Challenges

- It doesn't make for tidy one-period lesson plans. With short daily class periods, you won't be able to do a single-day flip. You need enough stations to provide work for students who haven't seen the video and some for those who have. That kind of rotation takes time. The discussion forums on the Flipped Learning Network offer great ideas and advice.
- More preparation is required at the beginning. Setting up and fine-tuning stations -- not to mention recording videos -- takes time, so <u>start slow</u>.
 Once you've been flipping for a few years, you'll have stations and videos that can be recycled.
- Technically, you don't "gain" more class time. Because the traditional flip
 moves the direct instruction outside of school hours, there is more time
 for classwork. The In-Class Flip can't do this. But think about those cases
 where traditional flipping results in unevenly prepared classes -- in these
 scenarios, the teacher has to catch up students who didn't do the home
 viewing, so the net gain may ultimately be pretty low.

How can I implement it in my classroom?

Example of a Flipped Class Lesson Plan

This lesson concentrates on

Target:

Previous knowledge:

Objectives:

Before class: View this video and do the following tasks described in

this video:

During class:

- warm-up: in groups SHAC session
- all together: results
- divide them into pairs and
- all together: check their answers and then brainstorm other possible responses to the conversation bits.
- in small groups: create
- in pairs (different combination from before) they
- they perform/present to the class... Constructive criticism from the others.

After Class: Follow up activity

SHAC stands for **Share-Help-Ask-Comment**. It is what you do in the first moments of your class in relation to the out- of-class activities. (Khalid Fethi, Morocco, EVO Flipped Learning, 2016)

- At the beginning of your class, divide students into groups of 4-5. They
 share their knowledge, impressions, difficulties encountered... in their outof-class activity.
- They ask each other for help in understanding.
- Whole class discussion (commenting) on their experience, what they learned, etc.

The teacher guides them to further comprehension before introducing the in-class activities.

Flipped classroom – is it for everyone?
Edutopia – Jon Bergmann and Aaron Sams – 2.51 min https://youtu.be/FAWidtL7pKE

5 things I wish I knew when I flipped – Sowash https://youtu.be/4JPdGlyt6gg

Resources for flipping for children with special needs: http://www.flippedclassroomworkshop.com/



What technologies are necessary?

It can be very easy!

https://youtu.be/PvwvShZ5MJk

My video on the Present Perfect with for and since

Made with Power Point and a simple voice recording, then uploaded to YouTube (private viewing – with link only).

Instructions on making a PPT video: https://youtu.be/aNkfZvjPHFE

Office Mix (Power Point add-in) instruction:

https://youtu.be/uPif4lYra6Y

Or complex: http://www.flippingphysics.com/flipping.html

This link also provides directions on how to make your own videos.

How to make a video using moviemaker (PC) or imovie (Apple):

https://youtu.be/ZRvmjjeZ9CA

Other free video making programmes: Screencast-o-matic, Jing, Quicktime Great list of all possible tools:

http://www.schrockguide.net/screencasting.html

http://www.pearltrees.com/smberdaxagar/screen-recorders/id15209110 Screen recording

Add quizzes to videos to make them more interactive. Three such sites are <u>edcannon</u>, <u>edpuzzle</u> and <u>zaption</u> (not totally free).

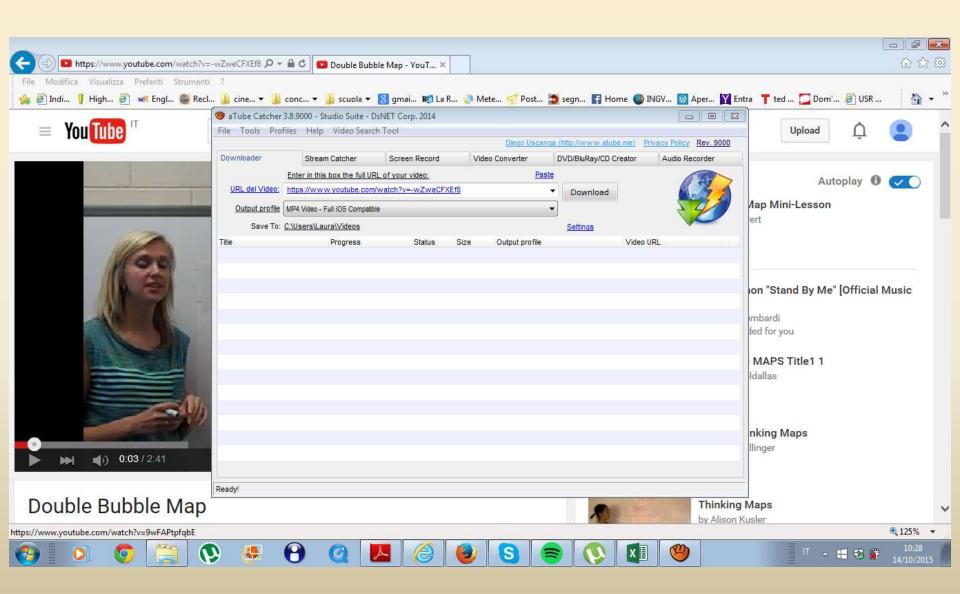
Use (free) Google forms to make questionnaires and surveys: https://docs.google.com/forms/u/0/



Make videos with: atube or animoto

http://www.atube.me/video/

https://animoto.com/



http://flippedclassroom.org/

Education) that meets twice

a week. The biggest struggle

free professional sharing, help and resources (in English)

flipped Earning community for edur

A professional learning community for educators using flipped learning.

FLIPPED LEARNING NETWORK

MAIN MY PAGE **FORUMS** GROUPS VIDEOS MEMBERS LATEST ACTIVITY FLIPPED LEARNING COMMUNITY Welcome to Rob Pusch replied to Margaret Flipped Learning Community Welcome to the Flipped Learning Community, FalerSweany's discussion Can Sign Up the original online community of practice FOR and BY Flipped Educators! you flip a college class? or Sign In "I work with faculty in Higher Ed on flipping classes. One Want to Join? Send a request now. (Approval may take 24-48 hours; we check Or sign in with: in particular I worked on was each request to keep out spammers.) a Learning Strategies course ¥7 Already a Member? Once approved, update your profile on My Page, jump (I am in the School of into a discussion in the Forum section, and find a couple of Groups to join. You get

what you give! Occasional newsletters are sent to members.

If you would like to submit your Flipped Content Videos to share with teachers we encourage you to go HERE and share your videos. At this site you can also view flipped videos sorted by content and grade level.

VIDEOS



The Basics of Making Engaging Flipping Videos

Added by Jonathan Thomas-Palmer



8 "Don'ts" for Making Engaging Flipping Videos

Added by Jonathan Thomas-Palmer



9"Dos" for Making Engaging Flipping Videos

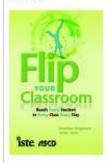
Added by Jonathan Thomas-Palmer

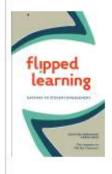
+ Add Videos View All July 13-15, 2015. East Lansing, Michigan

FlipCon14

You can still purchase the virtual archives for FlipCon14. Click HERE for more information.

Jon and Aaron's Books on the Flipped Class by clicking on the cover





This Ning site is provided by the Mathematics and Science Teaching (MAST) Institute at the University of Northern Colorado.

GROUPS



Elementary (Grades K-6) 322 members

Research

164 members



FlippedLearning MasteryLearning

Middle School 624 members 464 members

Middle

School



First Time Flippers

1497 members

View All

Flipped teaching in CLIL projects

www.flippedlearning.org
http://www.flippedclassroomrepository.it

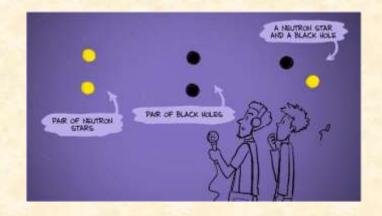
Easy <u>YouTube videos</u> that students watch at home before the lesson in LS.

e.g. Water Cycle

https://youtu.be/U80LVjVX75k



Gravitational Waves Explained https://youtu.be/4GbWfNHtHRg



www.zondle.com



create, play and share games to support teaching, learning and assessment

any subject, any level, any language, anywhere









consolidate learning



assessment



leaderboards



zollars











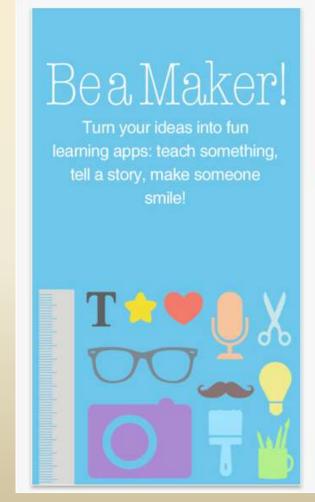


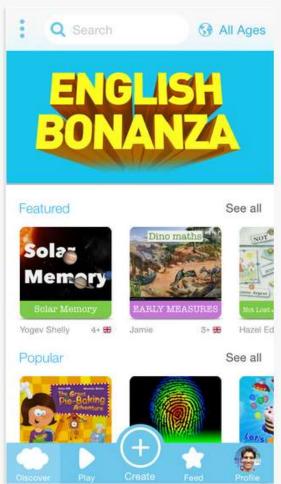
mobile

TinyTap, Create interactive lessons & games By TinyTap Ltd.

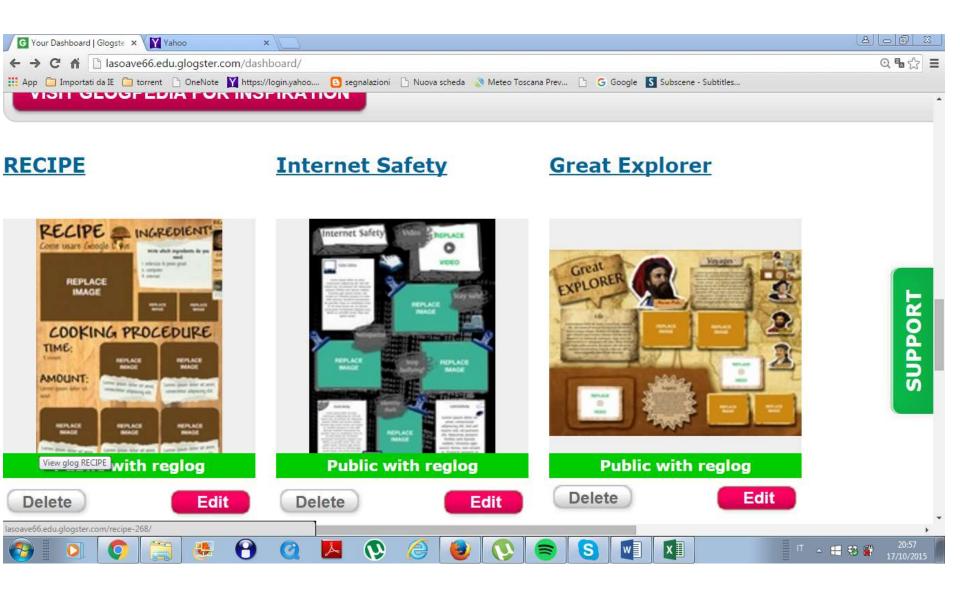
Open iTunes to buy and download apps.







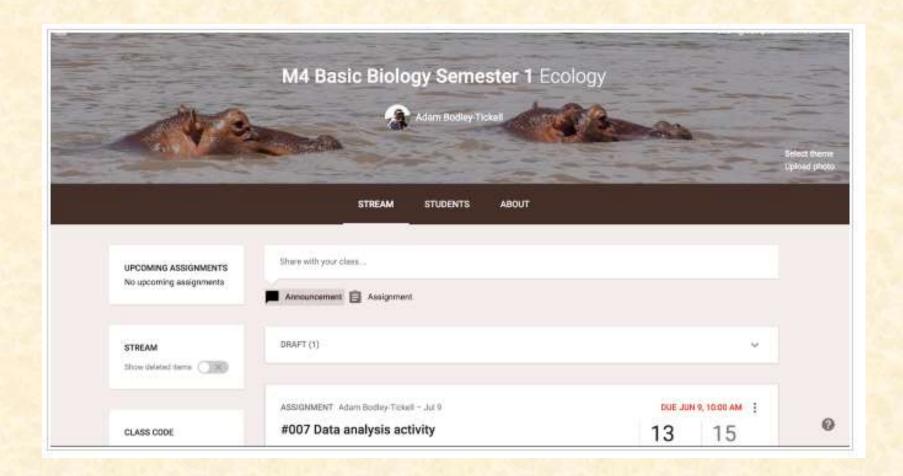
Glogster: create a digital poster <u>www.glogster.com</u>



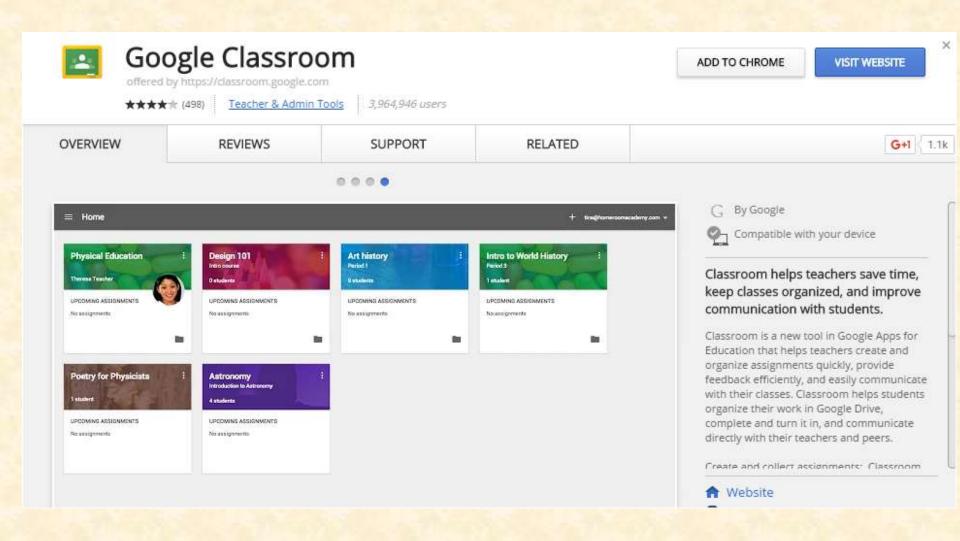
Making online questionnaires: Tricider https://www.tricider.com/



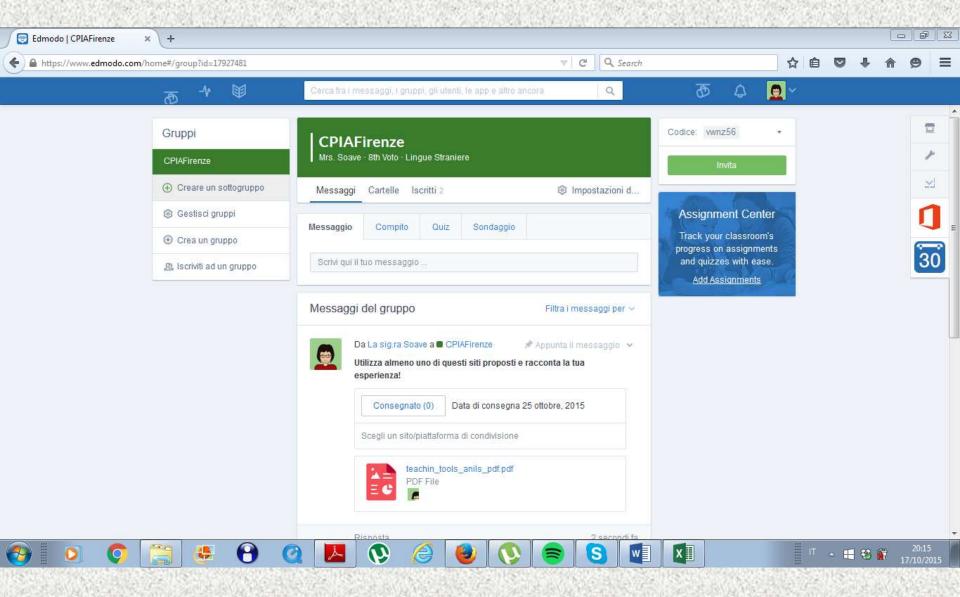
Google's latest educational tool, <u>Google Classroom</u>, a great addition to the <u>Google Apps for Education</u> family.



It is available to any school that has Google Apps for Education. Advantage of using all the free Google tools (doc, sheet, forms, slides, drive, etc.)



Edmodo: https://www.edmodo.com/



https://kaizena.com

The easiest way to provide constructive feedback to your students.



Speak instead of type

Voice comments are up to 75% faster than typing, and help you convey tone and emotion in your feedback.



Stop repeating yourself

Use one of our curated Lessons to explain concepts, or create your own.



Track and rate skills

Quickly communicate strengths and weaknesses



Google Drive integration

Seamlessly add files from Google Drive.

OTHER USEFUL RESOURCES

in italiano: http://www.flippedclassroomrepository.it/

LA DIDATTICA "CAPOVOLTA" di Fabio Serenelli (in italiano) http://is.pearson.it/magazine/la-didattica-capovolta/

Sitografia commentata di risorse: http://www.anils.it/doc/TeachingToolsAnils.pdf

in English:

http://www.educatorstechnology.com/p/blog-page 7.html

Great links and summary of flipped learning:

http://www.educatorstechnology.com/2016/02/everything-teachers-need-to-

Flip It!

know-about-flipped-classroom.html

Flip It! by Robyn Brinks Lockwood, 2014 http://www.press.umich.edu/7110704/flip it!

Resources at: https://www.teachertube.com/

Article: What's on the Internet for Flipping English Language Instruction? by Ilka Kostka and Robyn Brinks Lockwood

http://www.tesl-ej.org/wordpress/issues/volume19/ej74/ej74int/

https://quizlet.com/ - create interactive activities

Create wikis with your students:

https://www.wikispaces.com/



Thank you for your attention!



Nancy Bailey

https://sites.google.com/site/nbaileysite/

redigranbailey@yahoo.it