FLIPPING THE CLASSROOM

BY KRISTEN HESS & REBECCA NARRON

TRADITIONAL VS. FLIPPED
PEDAGOGICAL APPROACH
WEIGHING THE BENEFITS
BEST PRACTICES

TRADITIONAL VS. FLIPPED

Flipped institute.org:
http://www.youtube.com/watch?v=iQWvc6qhTds

http://www.flippingphysics.com:
http://www.youtube.com/watch?v=yzMFdDT6FSA

MADDrawproductions:
http://www.youtube.com/watch?v=ojiebVw8O0g

Simply speaking videos:
http://www.youtube.com/watch?v=26pxh_qMppE

Flipped Classroom Made Easy

Traditional Classroom

School
- Happens FIRST:
  - Lecture
  - Assign Homework

Home
- Happens SECOND:
  - Complete Homework

Flipped Classroom

Home
- Happens FIRST:
  - View Instructional videos at home OR
  - Listen to teacher podcasts
  - Complete quick assessments so teachers can gauge understanding before tomorrow's class

School
- Happens SECOND:
  - Do schoolwork (what used to be assigned for homework) together with teacher and peers
  - Teachers can offer one-on-one help

THE FLIPPED CLASSROOM

Turning Traditional Education on Its Head

Many educators are experimenting with the idea of a flipped classroom model. So what is it and why is everyone talking about it?

WHAT IS THE FLIPPED CLASSROOM?

The flipped classroom inverts traditional teaching methods, delivering instruction online outside of class and moving "homework" into the classroom.

THE INVERSION

The Traditional Classroom
Teacher's Role: Sage on the Stage

The Flipped Classroom
Teacher's Role: Guide on the Side

Pioneers Aaron Sams and Jonathan Bergmann started employing Flipped Learning in 2007.

(LEFT) Aaron Sams:
http://www.youtube.com/watch?v=2H4RkudFzlc&feature=channel&list=UL

(RIGHT) Jonathan Bergmann:
http://www.youtube.com/watch?v=nEfojG9ckYA&list=UL2H4RkudFzlc&index=208

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.

flipped learning network

PEDAGOGICAL APPROACH INVOLVED WITH FLIPPING THE CLASSROOM

http://flippedlearning.org

4 Pillars Of Flipped Learning

F 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 timelines for learning and in their assessments of student learning.

I 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.

L 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.

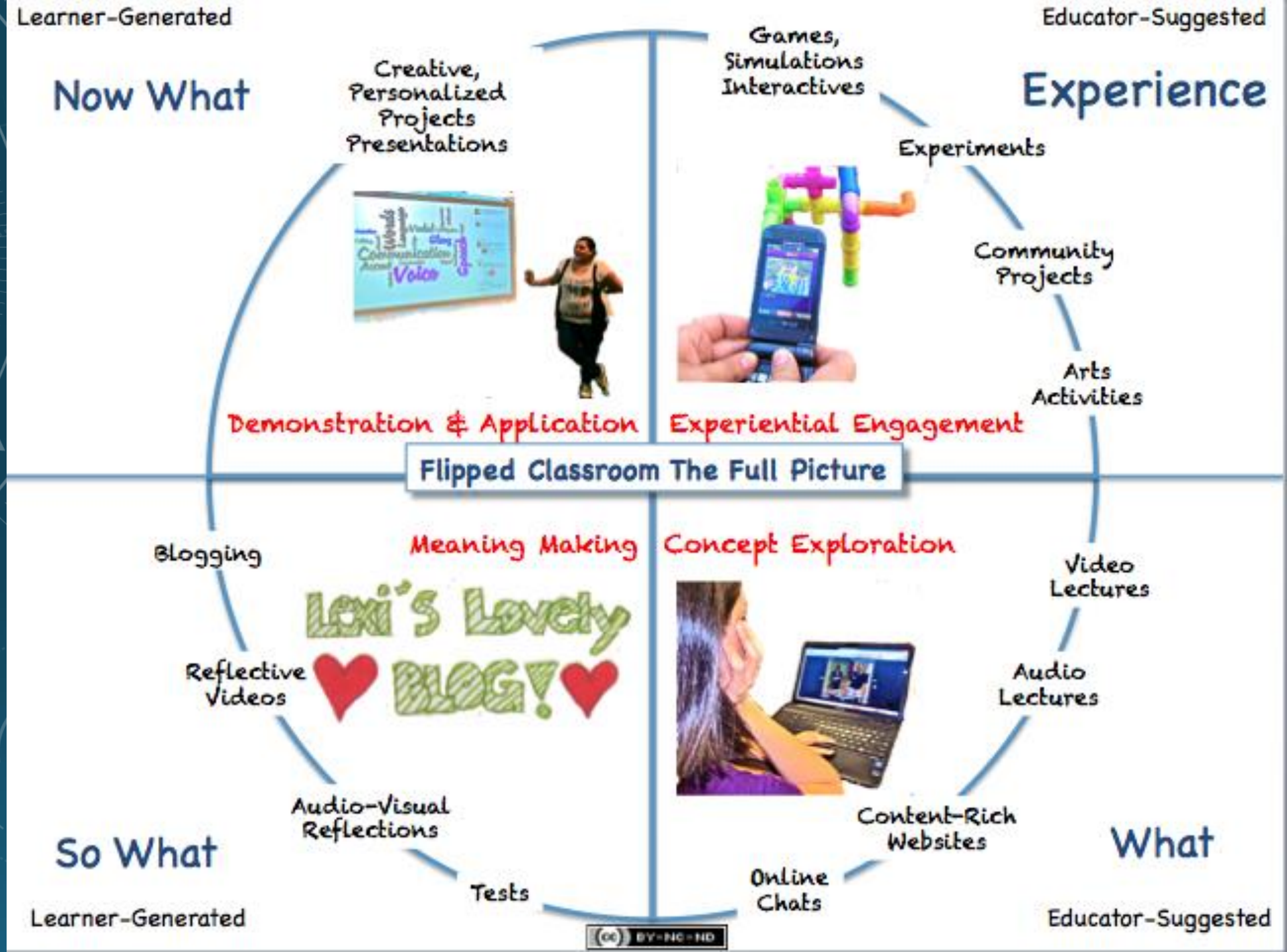
P Professional Educator

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.

TeachThought

JACKIE GERSTEIN, Ed.D.:
http://www.youtube.com/watch?v=cXcCBuU3ytU

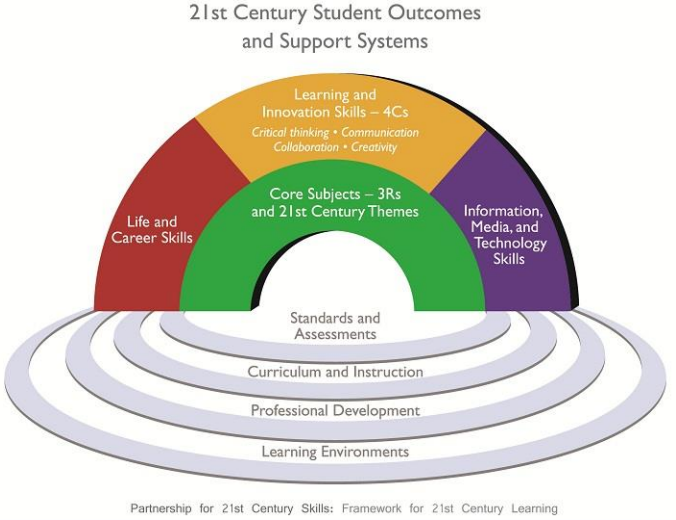
http://usergeneratededucation.wordpress.com/2011/06/13/the-flipped-classroom-model-a-full-picture



Aaron Sams speaks to how Flipping the classroom meets our current education goals:
http://www.youtube.com/watch?v=4a7NbUIr_iQ

- Creativity and Innovation
- Critical Thinking, Problem Solving, Decision Making
- Learning to Learn, Metacognition Ways of Working
- Communication
- Collaboration (Teamwork)
- Tools for Working
- Information Literacy
- ICT Literacy
- Living in the World
- Citizenship - Local and Global
- Life and Career
- Personal / Social Responsability

21st Century Skills



Traditional Model

Flipped Model

Students are responsible for homework in these levels of understanding

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

The 21st Century Classroom

21st Century Skills are a combination of cognitive processes and the technologies that enable individuals to leverage these processes for the greatest impact. The21st Century classroom is one that is student-centered, project based and focused on creating life-long learners.

Research & Information Fluency	Problem Solving & Critical Thinking	Collaboration & Communication	Creativity & Innovation
Teacher: ▪ provides opportunities for students to develop and demonstrate essential skills.	**Teacher:** ▪ provides opportunities for students to develop and demonstrate essential skills.	**Teacher:** ▪ creates structures, provides opportunities, and assesses student performances	**Teacher:** ▪ provides opportunities for students to develop and demonstrate essential skills.
Students: ▪ select appropriate digital tools to assemble, evaluate, and utilize information. ▪ apply varied research skills to find and evaluate resources. ▪ use information and resources to accomplish real-world tasks.	**Students:** ▪ use multiple resources to plan, design, and execute real-world problems. ▪ use technology to collaborate and solve authentic problems. ▪ develop and answer open-ended questions using higher order thinking skills	**Students:** ▪ Initiate communication in real and non-real time. ▪ communicate and collaborate with learners of diverse cultural backgrounds. ▪ form collaborative teams to solve real-world problems and create original works.	**Students:** ▪ apply critical thinking, research methods, and communication tools to create original work. ▪ collaborate effectively with an audience beyond the classroom to create original work.

WEIGHING THE BENEFITS

http://www.teachthought.com/trends/10-pros-cons-flipped-classroom

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.	

Benefits of a Flipped Classroom

Students	*Teachers*
• Students learn at varying speeds.	• Teachers focus on being the "Guide on the Side" not the "Sage on the Stage"
• Students are provided opportunities for review.	• Teachers spend more time supporting students with practice.
• Lessons front-load students for classroom activities.	• Teachers are involved with student learning rather than lecture.
• Materials are ready and prepared for students who are absent or sick.	• Teachers spend less time on classroom management of student behaviors.
• Parents can view lessons and better assist students.	• Teachers are able to provide one on one and small group assistance.
• Students do not struggle with completing homework because they "forgot" how.	• Teachers are not spending extra hours tutoring and re-explaining to students who didn't understand the class lesson.
• Students take ownership of their learning.	• Teachers collaborate with peers in creating materials.
• Students are actively working with their peers.	• Teachers connect with students.

BEST PRACTICES

Five Best Practices: http://www.edutopia.org/blog/flipped-classroom-best-practices-andrew-miller

The Flipped Classroom is NOT:

- A synonym for online videos. When most people hear about the flipped class all they think about are the videos. It is the the interaction and the meaningful learning activities that occur during the face-to-face time that is most important.
- About replacing teachers with videos.
- An online course.
- Students working without structure.
- Students spending the entire class staring at a computer screen.
- Students working in isolation.

Remember the Four Pillars!

The Flipped Classroom IS:

- A means to INCREASE interaction and personalized **contact time** between students and teachers.
- An environment where students take **responsibility for their own learning**.
- A classroom where the teacher is not the "sage on the stage", but the "**guide** on the side".
- A **blending** of direct instruction with constructivist learning.
- A classroom where students who are **absent** due to illness or extra-curricular activities such as athletics or field-trips, don't get left behind.
- A class where content is permanently **archived** for review or remediation.
- A class where all students are **engaged** in their learning.
- A place where all students can get a **personalized** education.

http://www.thedailyriff.com/articles/the-flipped-class-conversation-689.php

Video Philosophy by Kristen Hess

- My biggest piece of advice is to not worry about making or finding the perfect video because, well, it doesn't exist.
- If you use outsourced videos, please make sure you have watched the entire video and personally endorse it's content as valuable and meaningful to your class.
- When you make your own videos, keep them under 10 minutes. Use humor at times. . If you make a mistake, just fix it, as you would in a live class.
- Most importantly as you create your own video remember to focus on the fact that this is you teaching! BE YOURSELF! Your recorded video is still your instruction….your delivery…your personality. Same value! Same importance!

Some personal samples

Laptop recording, using Windows 8 Movie Maker and posted to Vimeo: https://vimeo.com/84923244

Document camera recording, using Luna document camera (http://www.learningresources.com/product/luna--8482-+interactive+projection+camera.do) and posted to TeacherTube: http://www.teachertube.com/video/inverse-functions-hw1-327950

iPad recording using free Educreations App (iPad only, www.educreations.com) contributed by Jeni Kemp, LDHS: http://www.educreations.com/lesson/view/geometry-lesson-10-8-equations-of-circles-1314/19264674/?ref=link

Screencast using free Screencast-o-matic (http://screencast-o-matic.com) showing how I set up my Bb for Flipping: http://screencast-o-matic.com/watch/c2jqfJnMGN

My most commonly used for outsourced videos

http://www.virtualnerd.com
http://mathvids.com
http://www.statisticslectures.com

Additional Resources

- http://flippedlearning.org
- http://flippedinstitute.org
- http://thejournal.com/Articles/2012/06/20/Flipped-learning-founders-q-and-a.aspx?Page=1&p=1
- http://jonbergmann.com

- ***http://youwillflip.pbworks.com***
- ***https://docs.google.com/document/d/1sPk5RX4Weto13QNPtBuWy4TGpqkvqCSB9J3GQ59l7CY/edit?usp=sharing***

- http://www.screencast-o-matic.com
- http://educreations.com

Good Luck as you embark on this new journey!