

The **Traditional** Model

Knowledge Acquisition



Knowledge Construction

The **Flipped** Model

Knowledge Acquisition



Knowledge Construction

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the Classroom
Flipping
the Classroom

Flipped Classrooms CIL 2019

Background...



Jonathan Bergmann & Aaron Sams

Year 2006

Teaching at a rural high school in Colorado

Problem: Learners missing many classes & struggling to keep up

Solution: Sams found a software where they could record lectures & add sounds

Note: They did this out of selfishness

Birth.. of the Flipped Classroom

Recording all lectures

Learners view videos as homework

Class period is used to help learners with concepts they don't understand

Learners watched one video as homework every other night

Learners took notes on what they learned

Teachers had more time for problem solving & lab work

Learners were completing all work with 20 minutes left of class time (95 mns. period/block scheduling)

More... details



Classes were not exclusively lecturing before flipping: there were a lot of inquiry based & projects

Not the first educators to use screencast videos in classes as instructional tools

They did not come up with the term “flipped classrooms”

One definition..

The flipped classroom describes a **reversal of traditional teaching** where students gain first exposure to new material outside of class, usually via reading or lecture videos, & then class time is used to do the harder work of assimilating that knowledge through strategies such as problem-solving, discussion or debates (Vanderbilt University, Centre for Teaching/TEDI).

What does it mean to “Flip?”

What is typically presented in class (i.e. lectures, content, background knowledge, or real life experiences) by a live teacher, learners receive at home via a podcast, YouTube video, and/or other online resources.

How Does It Work?

There is no single model

The term is widely used to describe almost any class structure that provides pre recorded lectures followed by in-class exercises

When using the flipped classroom, instructors allow learners to investigate the concepts introduced during the video lecture in the way that makes them comfortable- e.g., group work or independent reading, while focusing on gaining content knowledge (Lage, Platt & Treglia, 2000).

Who is Doing It?

A growing number of higher education individual faculty have begun using the flipped model in their courses

Why is It Significant?

Devoting class time to application of concepts might give instructors the opportunity to detect errors in thinking

What are the Downsides?

An effective flip
requires careful
preparation

Where is It Going?

New tools may
emerge to support the
out-of-class portion of
the curriculum

Better Days Ahead for Homework

Traditional Classroom	Flipped Classroom
Learners get frustrated & give up	Teacher able to assist learners when they get stuck
Teacher reviews homework in class	Learners able to review their work in class with peers & teacher
Struggling learners afraid to ask for help – often they don't complete assignment	Teacher able to identify learners as they struggle with content & immediately provide feedback & help
Learners do not read the comments placed on graded assignments	Teacher able to immediately provide feedback & help

Flipped Classrooms

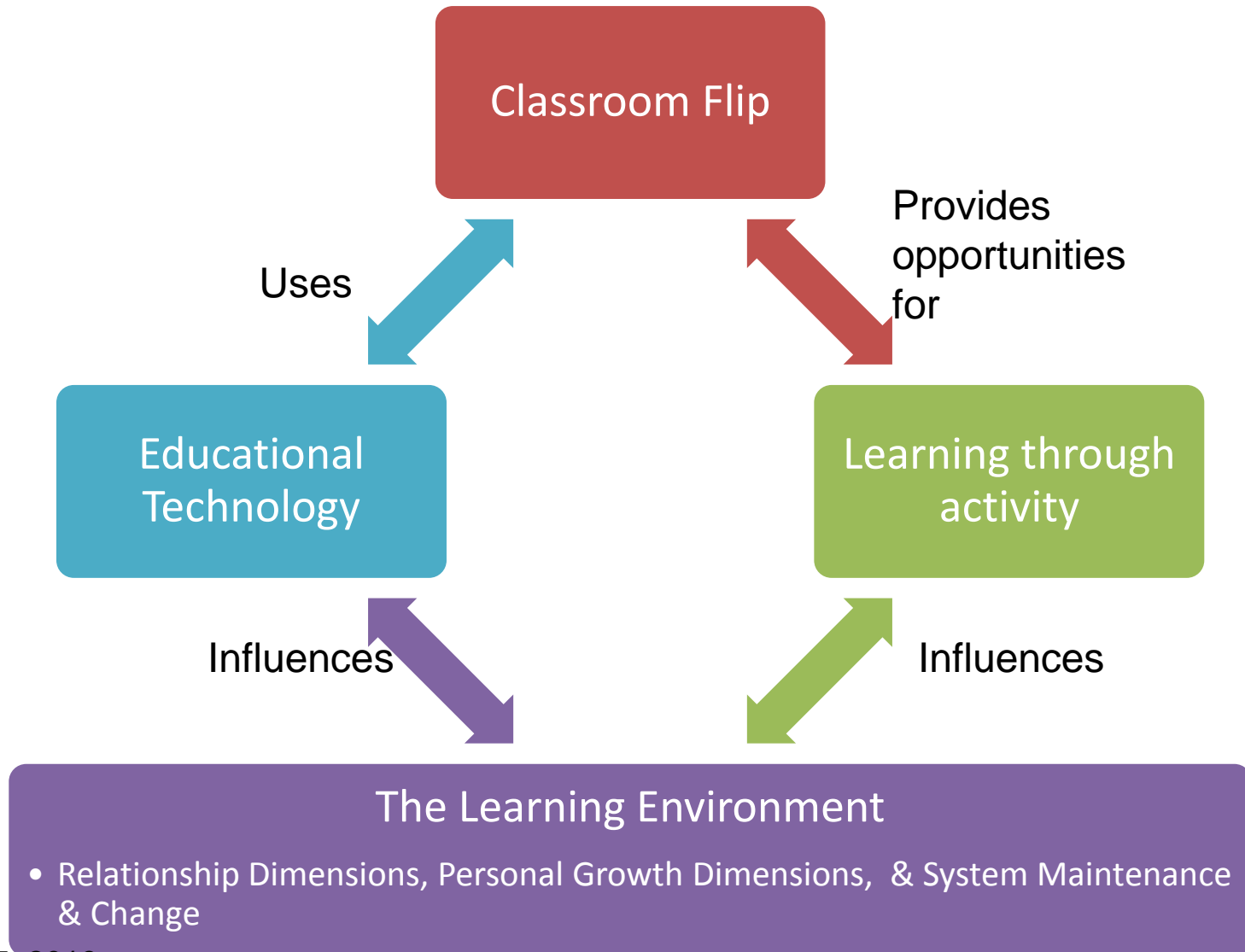
Drawback

Learners cannot ask immediate questions that come to mind as they could if topic was taught in class

Solution

Learners were trained at the beginning of year to view videos effectively. (no iPods, phones, & other distractions while watching the video)
They can pause & rewind the teacher
Use the pause button to write down key points

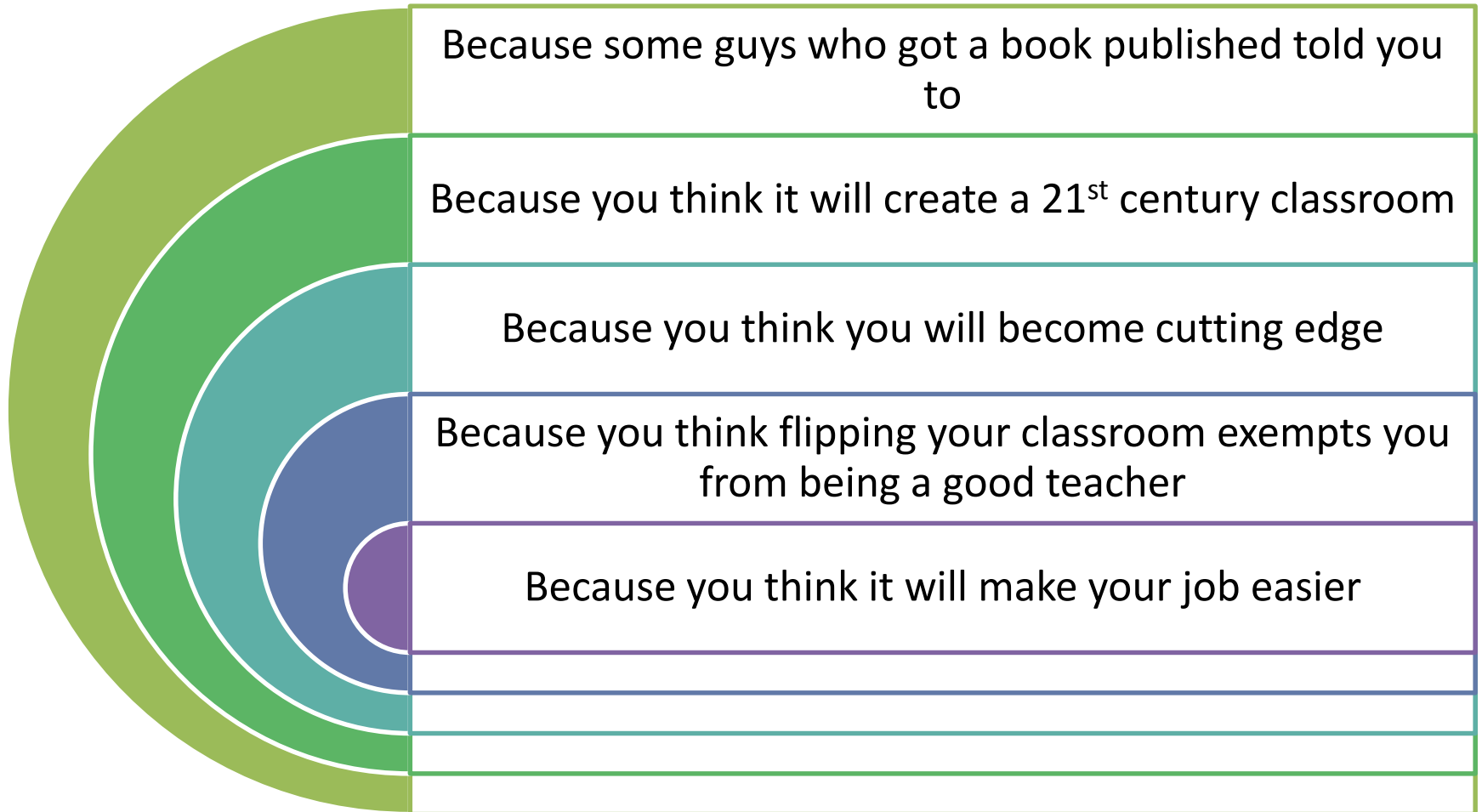
Theoretical Framework



Class Time Traditional Vs. Flipped

Traditional Classroom		Flipped Classroom	
<i>Activity</i>	<i>Time</i>	<i>Activity</i>	<i>Time</i>
Warm-up Activity	5 minutes	Warm-up Activity	5 minutes
Go over previous night homework	20 minutes	Q&A time on Video	10 minutes
Lecture new content	30 – 45 minutes	Guided & independent practice /or lab activity	75 minutes
Guided & independent practice /or lab activity	20 – 35 minutes		

Bad Reasons for Flipping your Classroom



Arguments Against Flipping

Too much homework

Lectures on video are monotonous

Not all learners have access to technology outside of school

Not all learners will complete their activity before class

We don't know what to do with the extra time if we do not lecture in the class

How we teach changes considerably

Time is needed to develop the videos & discussions as well as activities that will be done in the classroom

To "do what you want with the time in classroom" is not enough to help teachers know what to do!

Benefits of a Flipped Classroom

Learners

- Learners learn at varying speeds
- Learners are provided opportunities for review
- Materials are ready & prepared for learners who are absent or sick
- Learners do not struggle in completing homework because they forgot 'how'
- Learners take ownership of their learning
- Learners are actively learning with their peers

Faculty Members

- Focus on being the 'Guide on the Side' & not the 'Sage on the Stage'
- Spend more time supporting learners with practice
- Are involved with learners learning rather than lectures
- Spend less time on classroom management of learner behavior
- Are able to provide one on one & small group assistance
- Are not spending extra time tutoring & re-explaining to learners who did not understand class lesson
- Collaborate with peers in creating materials
- Connect with learners

Why Flip?

helps busy learners

helps struggling learners

helps learners of all abilities to excel

allows learners to pause & rewind their teacher

increases learner-teacher interaction

allows teachers to know their learners better

increases learner-learner interaction

allows for real differentiation

changes classroom management

makes your class transparent

is a great technique for absent teachers

can lead to the flipped-mastery program

Four Pillars of F-L-I-P

Flexible
Environment

Learning
Culture

Intentional
Content

Professional
Educator

Flexible Environment

- Educators can create flexible spaces in which learners choose when & where they learn.
- Educators who flip their classes are flexible in their expectations of learners timelines for learning & in their assessments of student learning.

Learning Culture

- The Flipped Learning model deliberately shifts instruction to a learning-centered approach where class time is dedicated to exploring topics in greater depth & creating rich learning opportunities.
- Learners are actively involved in knowledge construction as they participate in & evaluate their learning in a manner that is personally meaningful.

Intentional Content

- Educators continually think about how they can use the Flipped Learning model to help learners develop conceptual understanding & procedural fluency.
- Educators use intentional content to maximize class time to adopt methods of learning-centered, active learning strategies.

Professional Educator

- They continually observe their learners, providing them with feedback & assessing their work.
- They are reflective in their practice, connect with each other to improve their instruction, accept constructive criticism & tolerate controlled chaos in their classrooms.

What are the Implications for Teaching & Learning?

The flipped model puts more of the responsibility for learning on the shoulders of learners while giving them greater impetus to experiment

Implementing the Flipped Classroom

BE CAREFUL...

Don't jump into video production before considering carefully if it is the appropriate instructional tool for the desired learning outcome

Implementing the Flipped Classroom

Using other teachers' videos

Using your own videos

Components of a Flipped Mastery Classroom

Establish clear learning outcomes

Determine which of these outcomes are best achieved through inquiry & which are best learned through direct instruction

Assure learners access to videos

Incorporate engaging learning activities to do in class

Create multiple versions of each summative assessments for learners to demonstrate their mastery of each learning outcome in a particular unit of study

It teaches learners to take responsibility for their own learning

It creates a way to easily personalize & differentiate the classroom

It makes learning the center of the classroom

It gives learners instant feedback & reduces teacher paperwork

It provides opportunities for remediation

It allows for multiple means of learning content

It provides multiple chances for demonstrating understanding

It changes the role of the teacher

It teaches learners the value of learning instead of 'playing school'

It is easily reproducible, scalable & customizable

It increases face to face time with the teacher

It ensures that all learners are involved

It makes hands-on activities more personal

It makes teacher-led demonstrations more engaging

It helps teachers help learners

Key Elements of the Flipped Classroom

Provide an opportunity for learners to gain first exposure prior to class

Provide an incentive for learners to prepare for class. *Task associated with points*

Provide a mechanism to assess learner understanding

Provide in-class activities that focus on higher level cognitive activities

The flipped classroom is **NOT**

- Just online videos
- About replacing teachers with videos
- An online class
- Learners working without structure
- Learners working in isolation
- Learners spending the entire class online

The flipped classroom **IS**

- A means to increase teacher contact time
- An environment that increases student responsibility
- Blending of direct instruction & constructivist learning
- A class where all learners are engaged
- A class where absent learners won't fall behind
- A class where all learners are engaged in their learning

Remember..

It is not about watching a video as homework

It is not about educators making their own videos for learners to watch at home

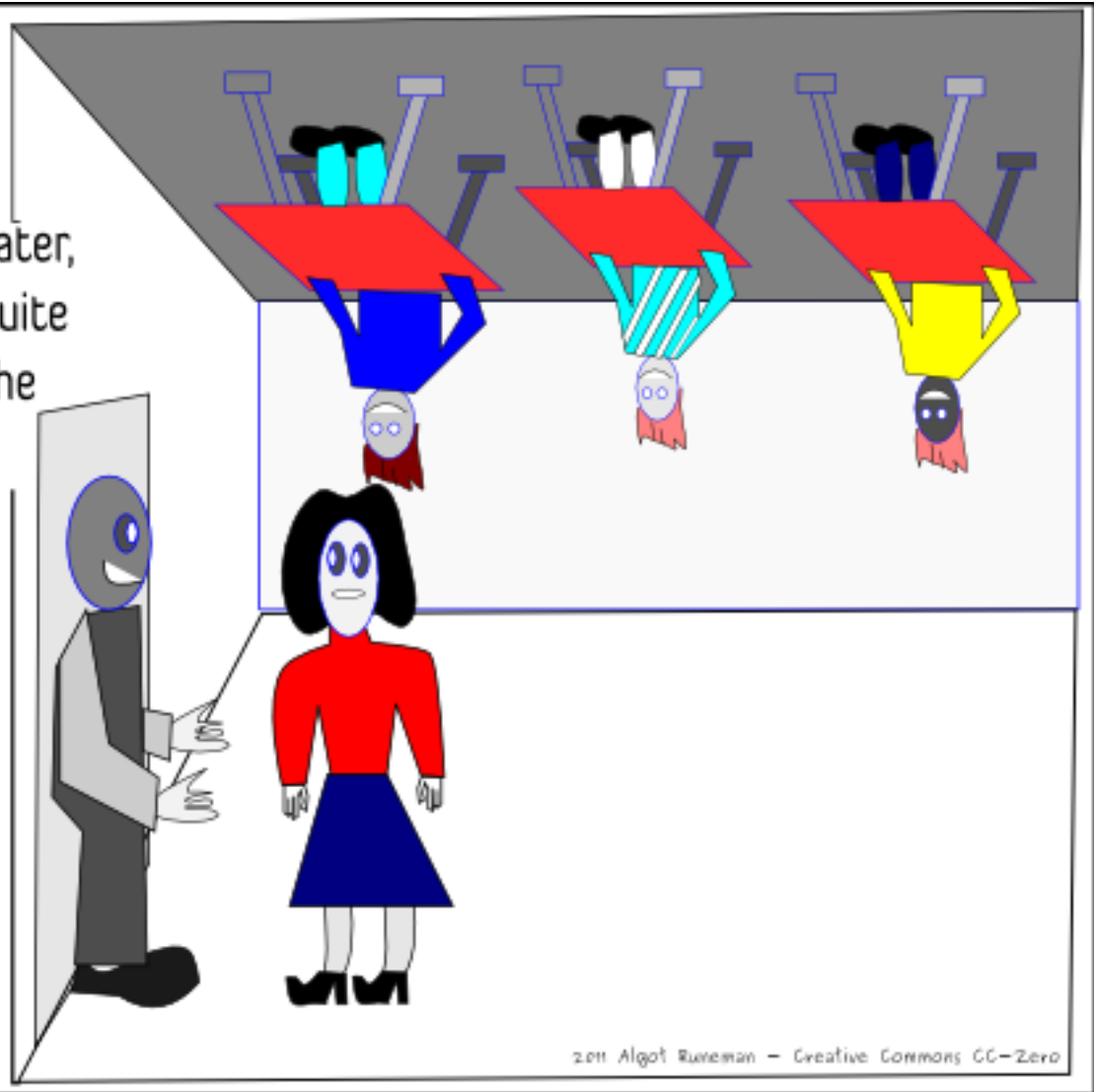
Lectures should support the learning not be central to it nor drive it

The expert content is only part of the learning experience

Remember..

Lectures still have a place & can be more effective if given in the right context such as after (not before) learners have explored something on their own & developed their own questions & a need to know

You know, Ms. Grigwater,
I don't think you've quite
grasped the idea of the
"Flipped Classroom."



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