

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



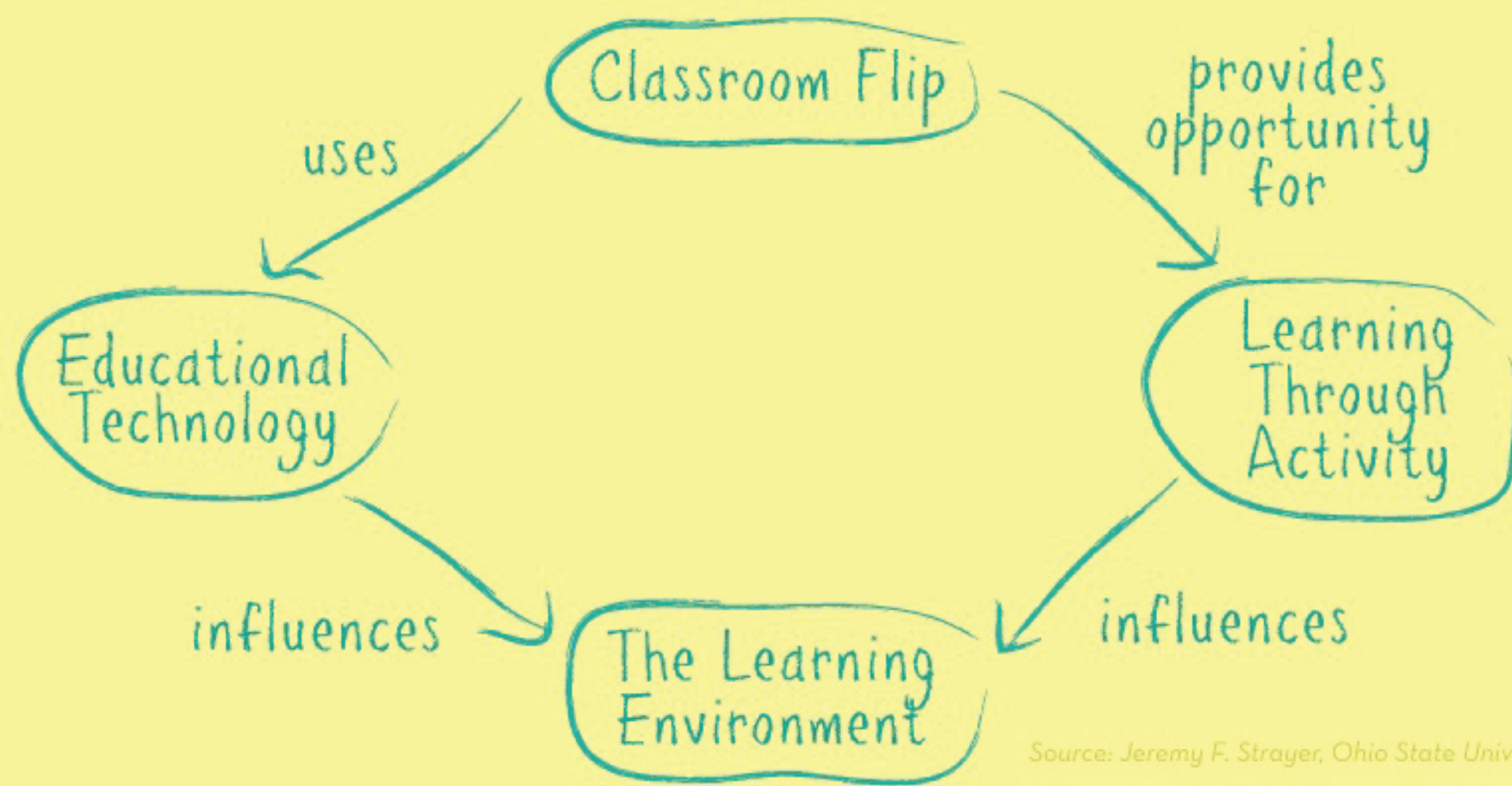
WHAT A FLIPPED CLASSROOM MODEL DOES



- Students watch lectures at home at their own pace, communicating with peers and teachers via online discussions.
- Concept engagement takes place in the classroom with the help of the instructor.

A THEORETICAL FRAMEWORK

Educational technology and activity learning are two key components of the flipped classroom model. They both influence student learning environments in fundamental ways.

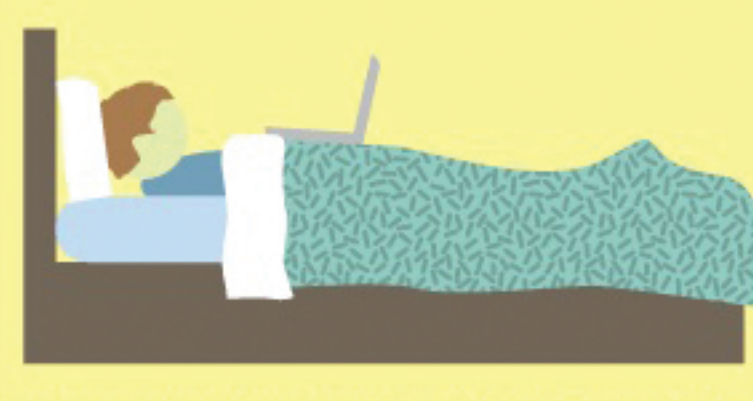


HOW IT CAME TO BE

Many factors influenced the creation and adoption of the flipped classroom model. However, two specific innovators played a key role.

ITS INFANCY

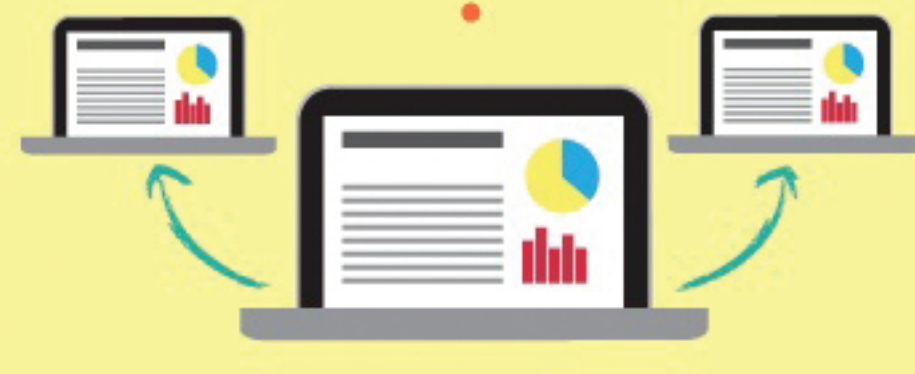
2007: Teachers Jonathan Bergman and Aaron Sams at Woodland Park High School in Woodland Park, CO, discovered software to record PowerPoint presentations



They recorded and posted their live lectures online for students who missed class.



Bergman and Sams were asked to speak to teachers around the country about their methods.



The online lectures started spreading.



Teachers began using online videos and video podcasts to teach students outside class, reserving class time for collaborative work and concept mastery exercises.

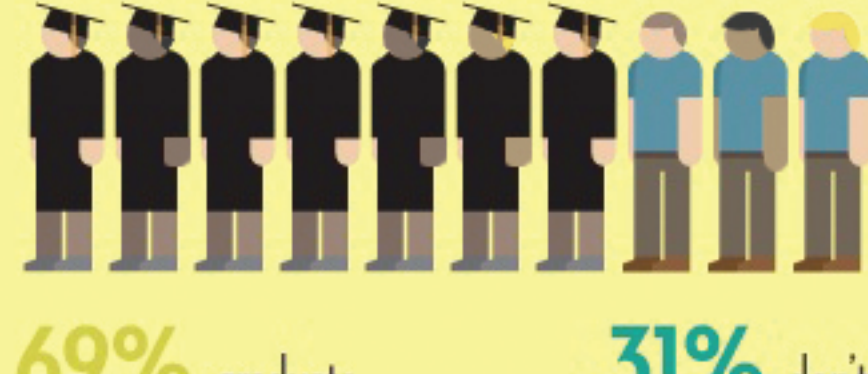
WHAT'S DRIVING IT?

Two key factors are driving increased adoption of the flipped classroom model.

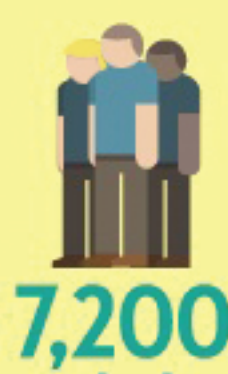
POOR LEARNING OUTCOMES

The traditional one-size-fits-all model of education often results in limited concept engagement and severe consequences.

Yearly High School Dropouts



Only **69%** of students who start high school finish four years later.



An average of **7,200** students DROP OUT of high school each day, totalling **1.3 million** a year.



PREVALENCE OF ONLINE VIDEO

The availability of online video and increasing student access to technology has paved the way for flipped classroom models.

Adults Who Have Viewed an Online Educational Video

2007 15% of Internet Users

2010 30% of Internet Users

+2,400
online video lessons
in Khan Academy

covering topics from arithmetic to physics, finance to history

WHAT IT LOOKS LIKE

Many schools and classrooms have adopted the flipped classroom model. Here, we look at Clintondale High School near Detroit, which has employed the flipped classroom model to great success.

HOW IT WORKED



- Teachers created three videos a week.
- Students watched the 5- to 7-minute videos at home, or in school if they didn't have Internet access at home.
- Class time was spent doing labs or interactive activities to illustrate concepts.



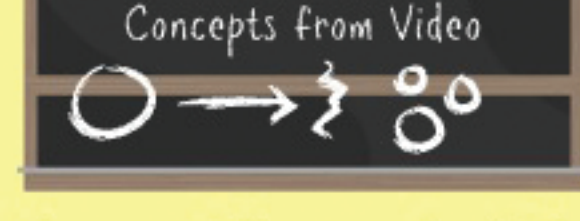
Students receive instant feedback.

Teachers have more time to help students and explain difficult concepts.



Students don't get as frustrated.

Before, many students wouldn't complete homework if they got frustrated with it. Working on problems in class minimizes this problem.



Teachers revisit concepts students don't understand. After students watch lessons, they write down any questions they have. Teachers review those questions with students individually.



Teachers support students in class.

Students who might not have technology or parents to help them outside of school now have teachers guiding them in class.

"It's about changing instructional models so the students can receive more instructional support in the classroom from the experts that Clintondale has on staff."

— Bruce Umpstead, Michigan Office of Education Technology & Data Coordination

THE RESULTS

BEFORE THE FLIP

+50%
of freshmen
failed English

44%
of freshmen
failed math

AFTER THE FLIP

19%
of freshmen
failed English

13%
of freshmen
failed math

736 discipline cases
in one semester

249 discipline cases
in one semester