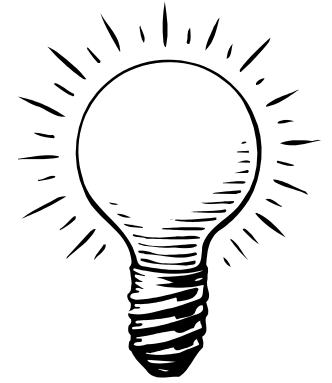


The Flipped Classroom



**Increasing Instructional
Effectiveness with Blended
Learning Technology and
Active Learning Methods**

Presented by: Ernest Reynolds, MS, RN, RRT; December-2012

THE FLIPPED CLASSROOM

Turning the traditional
classroom model on its head

Flipping the classroom is not a “magic bullet,” it is a great first step in reframing the role of the teacher in the classroom. It helps to move classroom culture towards student construction of knowledge (*constructivist learning theory*) rather than the teacher having to tell the knowledge to students.



Now that I have your attention.....

Many changes have occurred in education over the past 25 years. Entering the world of education in the 21st Century is vastly different than education was even as recently as the 1980s or 1990s!

"Traditional transmission of knowledge from teacher to student is no longer sufficient for an educated citizenry"

"Assessing knowledge gains will no longer be sufficient. Outcomes in critical thinking, cultural understanding, empathy, citizenship, and social responsibility will also be important." (Austin, 1996)

Flipped Classroom Best Practices

1) Need to Know

The flipped classroom must be innovative. It must be paired with transparent and/or embedded reason to know the content. Adult learners will be engaged when the content is made relevant.

2) Engaging Models

Examples include project-based learning (PBL), game-based learning (GBL), Understanding by Design (UbD), or authentic literacy, find an effective model to institute in your classroom.

3) Technology

Computer-based simulations, mind maps, e-folios, lecture-capture (pre-recorded or capture of live presentations).

4) Reflection

Build in reflective activities to have students think about what they learned, how it will help them and reinforce its relevance.

Video Examples

- **Flipped Classroom Introduction**
 - <http://www.youtube.com/watch?v=7oJnlu9XLGI>
- **The Flipped Classroom as a Vehicle to the Future**
 - <http://www.youtube.com/watch?v=ZpHfTO8SW7U>
- **Teaching for Tomorrow: Flipped Learning**
 - http://www.youtube.com/watch?v=4a7NbUIr_iQ
- **5 Things I Wish I Knew When I Flipped My Class**
 - <http://www.youtube.com/watch?v=4JPdGlyt6gg>
- **The Flipped Classroom is not...**
 - <http://www.youtube.com/watch?v=hGs6ND7a9ac>

Why Consider Flipping The Classroom?

➔ Learning and Teaching Trends in the 21st Century

- The most obvious is the increase in information technology and computer use, but there are other significant changes as well. The student population is changing and the collegiate experience has become more diverse. This is summarized in the following sections.
 - Changing nature of students
 - Changing nature of the collegiate experience
 - Changing understanding of how students learn
 - Changing nature of teaching
 - Changing nature of outcomes assessment

(ACPA – Higher Education Trends for the Next Century)

- Changing nature of students
- Increased diversity in age, gender, station in life, race/ethnicity, sexual orientation, learning and physical ability, and career retooling
- "Such heterogeneity requires educational communities to be open to difference, as well as new and varied pedagogies and assumptions about levels of preparation, learning styles, and available time for study"

W-I-I-F-M

Why I Flipped My Classroom

<http://www.youtube.com/watch?v=9aGuLuipTwg>

The Flipped Classroom is Born

<http://www.youtube.com/watch?v=v-y9vR7YTak>

10 Reasons Blended Learning Isn't Going Away

<http://www.teachthought.com/trends/flipped-classroom-trends/10-reasons-blended-learning-isnt-going-away/>

Five Best Practices for the Flipped Classroom

<http://www.edutopia.org/blog/flipped-classroom-best-practices-andrew-miller>

Strategic Plan | 2012 - 2015

Creating Opportunities for Our Shared Future



3.

**Ensure Instructional Programs
Provide the Knowledge and Skills
Required for 21st Century Learners**

ACTION 3.3:

- **Provide an environment conducive to optimal learning that includes consideration of facilities, technology, equipment, materials, accessibility, and concern for students.**
 - Year One:** • **Develop standards that meet the needs of the 21st century learn**

- Implement a **learner-centered** instructional design in the creation of all courses
- Increase **hybrid course** offerings at all colleges
- Develop a plan for the use of **learner analytics** to diagnose and support students' individual learning needs

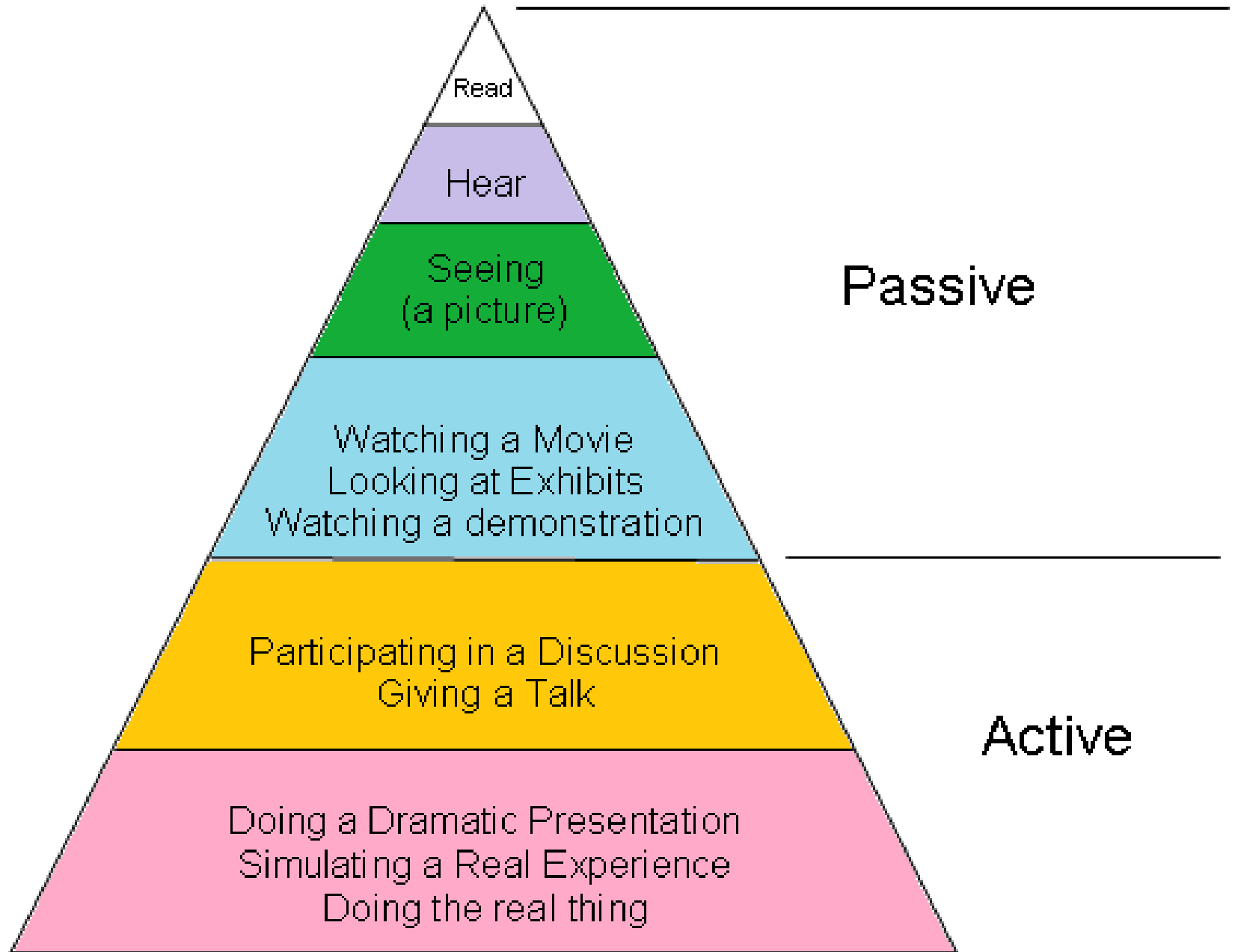
Learning Analytics

The use of intelligent learner-produced data, and analysis models to discover information and social connections, and to predict and advise on learning performance.

Purpose: to collect, review, validate, verify, analyze and to compare or leverage student learning and performance benchmarks in local, regional, state, national and international arenas.

Need more time to cover....

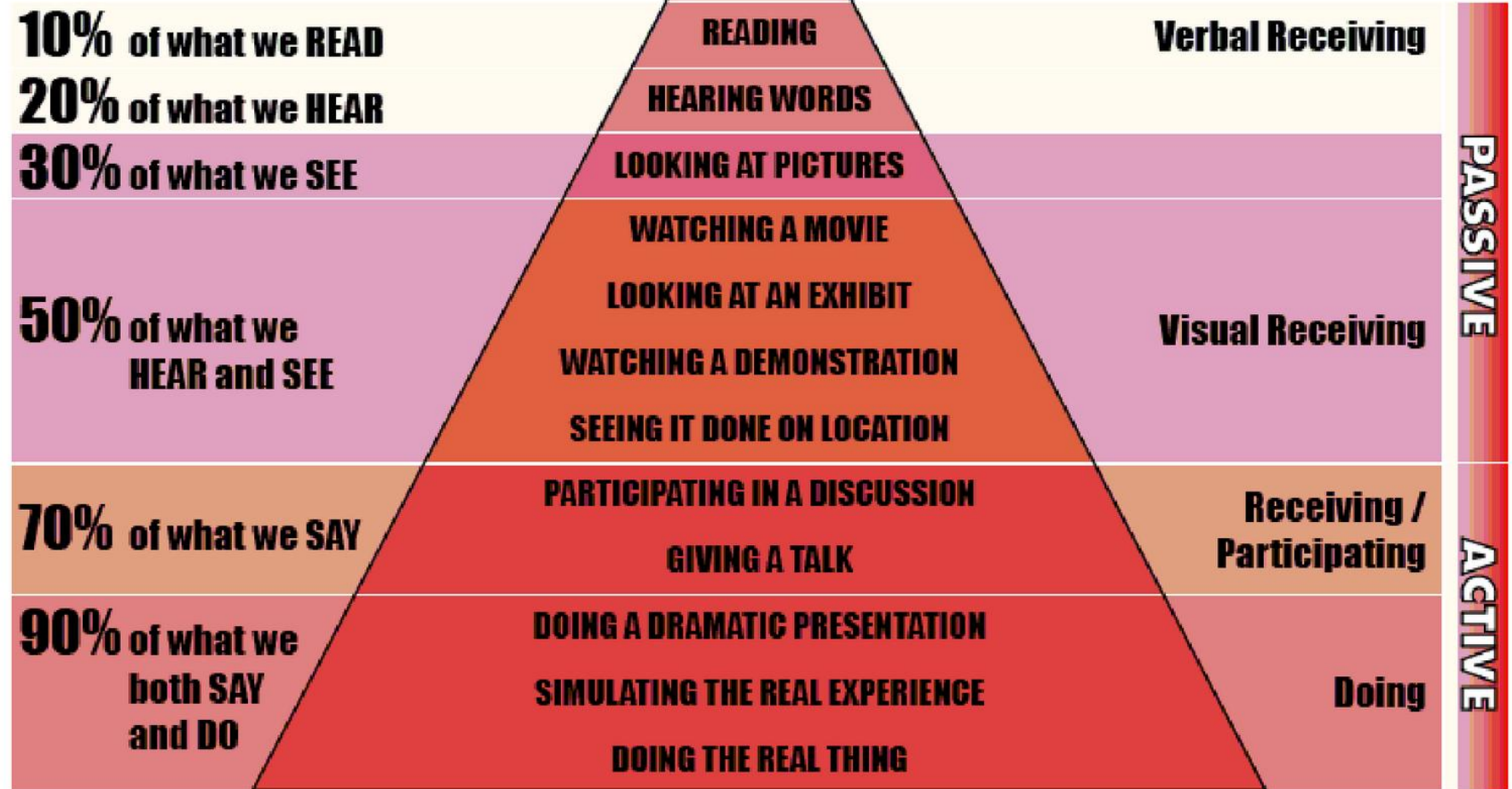
- Challenging concepts or content on a deeper level?
- Monitor students dissecting a case-study that involves critical thinking, clinical judgment and best practices decision making or interventions?



Cone of Learning (Edgar Dale)

*After 2 weeks
we tend to remember...*

*Nature of
Involvement*





The **Flipped Classroom** is one of the most talked about movements in education, perhaps surpassed only by the mobile devices (iPad / tablets / smartphones) and online learning.



The notion of a
flipped classroom
draws on such concepts
as active learning,
student engagement,
learner-centeredness,
hybrid or model course design,
and lecture capture.

The value of a flipped class

is in the repurposing of class time

into workshops, activities,

real-life examples (W-I-I-F-M)

Videos or discussion sessions

where students can inquire about
lecture content, test their skills in
applying knowledge, and interact
with one another

in hands-on activities.

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



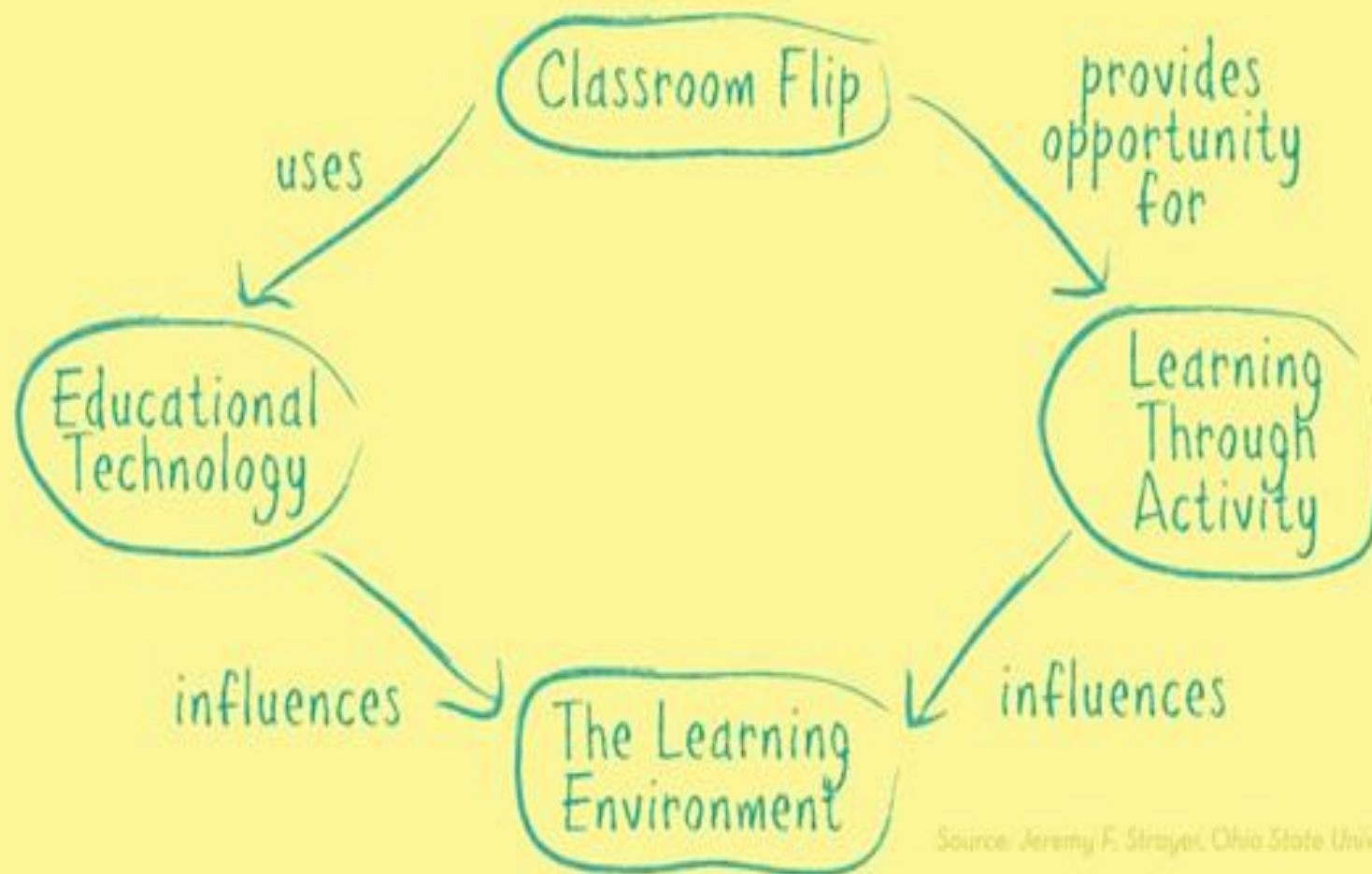
WHAT A FLIPPED CLASSROOM MODEL DOES



- 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.



Source: Jeremy F. Strayer, Ohio State University

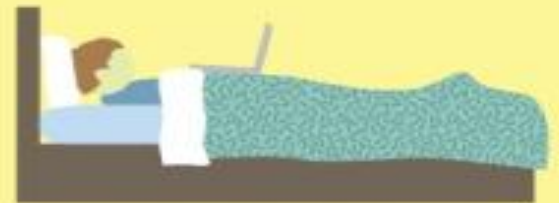
HOW IT CAME TO BE

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.



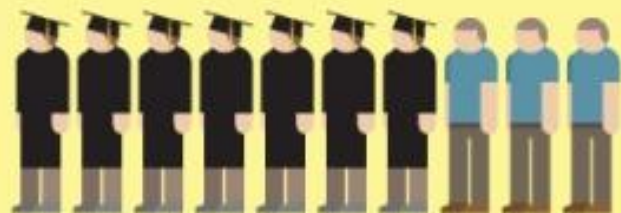
Teachers began using online videos and video podcasts to teach students outside class, reserving class time for collaborative work and concept mastery exercises.

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.



69% graduate

31% don't

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



7,200
each day



1.3 million a year

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.

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Adults Who Have Viewed an Online Educational Video

2007

15% of Internet Users

2010

30% of Internet Users



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

A problem that many new adopters have with the “flipped classroom” concept is

- What to do with a **void** during in-class time?
 - How this could be a potential problem of the reversed of flipped learning method.
 - Most teachers were students of traditional in-class lecture-based techniques and continue to teach using these old, rigid methods out of comfort, “tried & true” or a sense of control for student management.

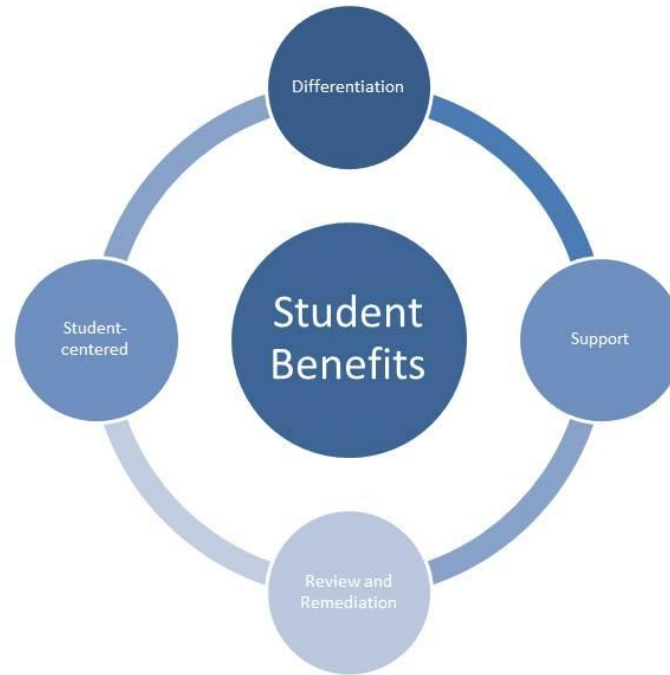
- **When a “flipped” newbie decides to switch over to a student-based, project learning style during class time, they sometimes become confused.**
 - This style pushes teachers to incorporate creative projects into their material. Some teachers are so used to providing most or all information to their students for the entire class, stumble during class time (it inadvertently contributes to student dependency & passiveness).
 - The newbie has trouble filling up this time getting students to work in groups or engaging activities during the transition.

So.....

- During in-class sessions, faculty functions as coaches, facilitators or advisors, encouraging students in individual inquiry, engaging activities, support and collaborative effort.

Why Flip Classroom Instruction?

It allows for greater differentiation in meeting student needs.



Students have greater control over their learning.

Students are able to review and replay the instructional segment as many times as necessary.

A variety of strategies and materials can be provided to meet the various student needs.

This provides for those students who wish to move through the material quickly. While those who need to take their time and process are also able to.

IMPROVE

student learning and teacher satisfaction
in one Flip of the Classroom

*"The biggest and best
change in my teaching
practice in 25 years!"*

*"Game-changing! I can
meet more students'
needs more often."*

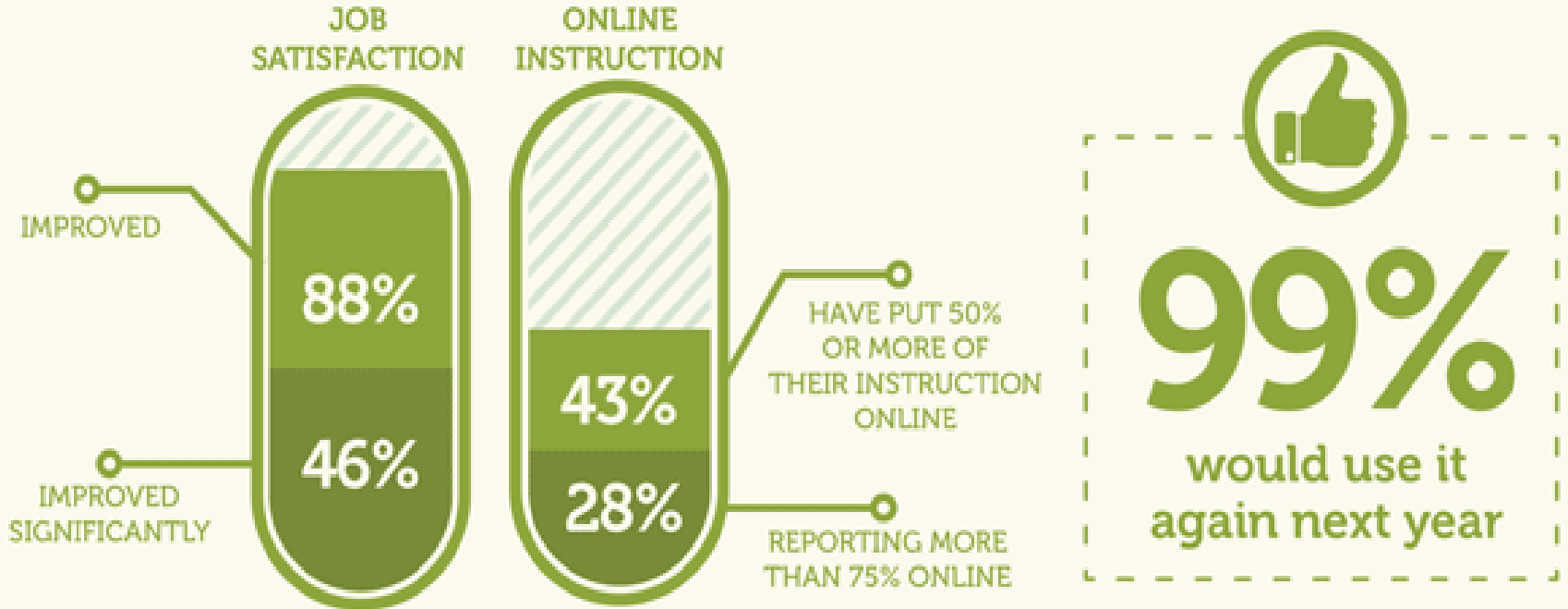


What do teachers who've flipped their classrooms have to report?

TeacherView™ Survey On Flipped Classrooms Reveals...

(preliminary data as of 6/21/12, with responses from 453 flipped educators)

Impact on Teachers



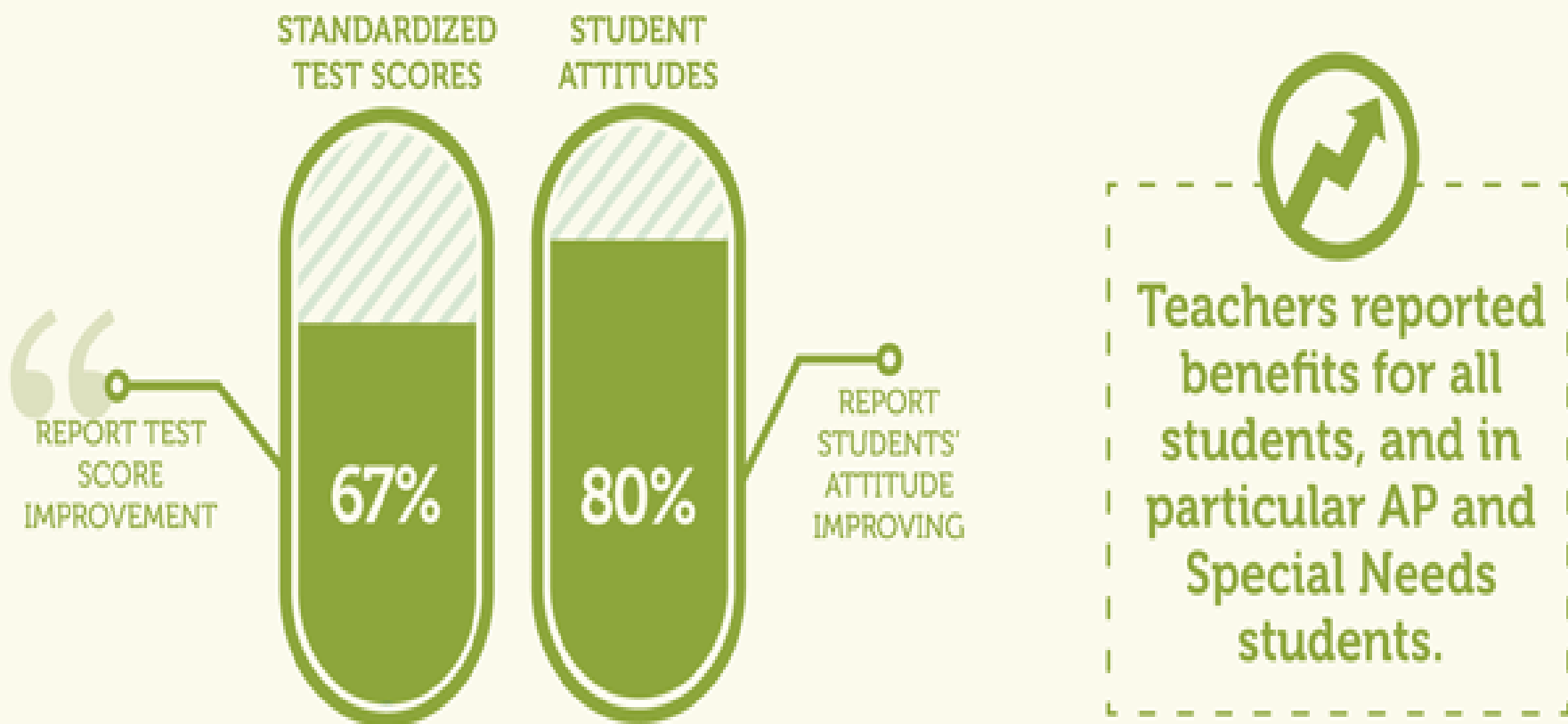
“

“I will never go back to traditional teaching methods.”

“It's differentiation on steroids!”

”

Impact on Students



"I have taught math for 10 years, and have never seen my students work this hard or learn this much."

"Flipping my classroom has dramatically improved the number and quality of interactions with individual students"

Who's Flipping?



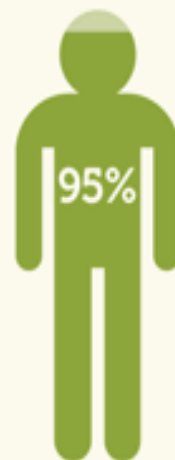
7+ years
of teaching



Have used the
flipped model less
than 2 years



SUBJECTS MOST
FREQUENTLY "FLIPPED"



of respondents are
secondary school
teachers



from suburban
schools
25% urban
25% rural

"The more I flip, the more I want to flip!"

Contribute your voice to this ongoing survey at <http://www.classroomwindow.com/review-a-product>

The coursecast, video lecture or lecture capture is often seen as the key ingredient in the flipped approach, such 24/7 available lectures being either created by faculty or publisher and posted online (Eagle Online, EduTube or Learning Web) or selected from an online repository.

Emergence of Devices (BYOD)

A growing number of institutions are moving away from the traditional instructor-focused teaching model f-2-f lecture to a new student-centric/learner-centered approach that favors a more personalized, collaborative, anytime-anywhere— access to content from any device, a new learning experience.



The flipped classroom is a
manifestation of
adaptive learning theories.

Adaptive learning, n.:

A teaching method premised on
the idea that the curriculum
should adapt to each user.

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 theories.
- A classroom where students who are **absent** due to illness, circumstances or extra-curricular activities such as athletics or field-trips, don't get left behind.
- A class where content is permanently **archived** for review, remediation or refinement.
- A class where all students are **engaged** in their learning.
- A place where all students can get a **personalized** education.

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 interaction and the meaningful learning activities that occur during the face-to-face time that is most important.
- About replacing teachers with videos.
- A completely online or DE course.
- Students working without structure.
- Students spending the entire class staring at a computer screen.
- Students working in isolation.

Resources

The Flipped Classroom Infographics

- <http://www.knewton.com/flipped-classroom/>

Teachers use technology to flip classrooms

- <http://www.techsmith.com/flipped-classroom.html>

Educause: 7 Things You Should Know About Flipped Classroom

- <http://net.educause.edu/ir/library/pdf/eli7081.pdf>

The Flipped-Classroom; Pro & Con

- <http://www.edutopia.org/blog/flipped-classroom-pro-and-con-mary-beth-hertz>

Top EdTech Trends for 2012: The Flipped Classroom

- <http://hackededucation.com/2012/11/28/top-ed-tech-trends-of-2012-flipped-classroom/>

Center for Digital Education

- <http://echo360.com/sites/default/files/Flipped%20Classroom%20Brief.pdf>

Flipped Classrooms: Turning Learning Upside down

- <http://www.deseretnews.com/article/765616415/Flipped-classrooms-Turning-learning-upside-down.html?pg=all>

The 21st Century Instructor's Affirmation

I believe my role is a **tour guide** of **learning possibilities** - providing students with a menu of possibilities to learn the content.

In Summary.....

Flipped VS Traditional

Flipped

Teacher instructs lesson at home
(video / podcast / book/ website)

Students work in class.

- Deeper understanding of concepts, applications, and connections to content are made.
- Students receive support as needed.

Traditional

Teacher instructs


Students take notes

Students follow guided instruction

Teacher gives assessment

Students have homework

Ready to



Flip
YOUR
Classroom