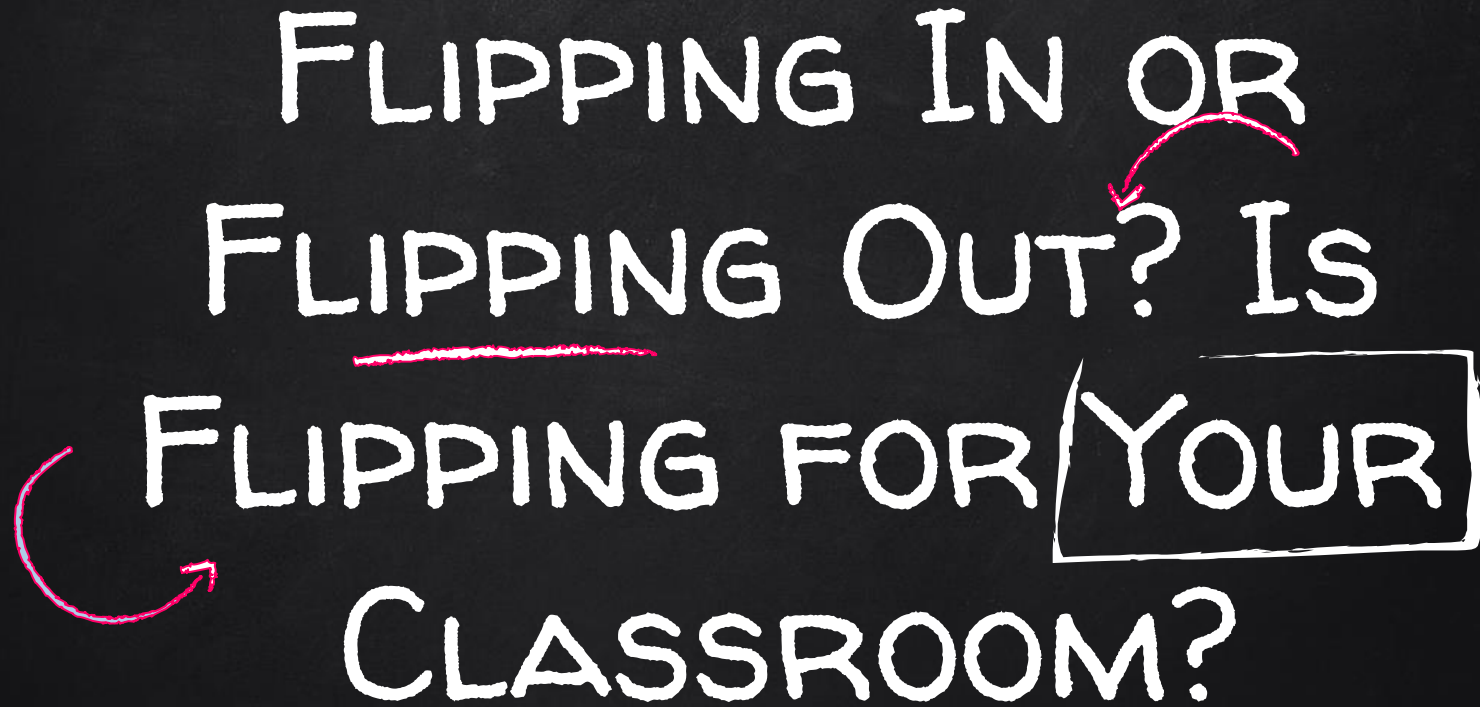


FLIPPING IN OR  
FLIPPING OUT? IS  
FLIPPING FOR YOUR  
CLASSROOM?



[tlewis-irsc.weebly.com](http://tlewis-irsc.weebly.com)



# Your poll will show here

1

Install the app from  
[pollev.com/app](https://pollev.com/app)

2

Make sure you are in  
Slide Show mode

Still not working? Get help at [pollev.com/app/help](https://pollev.com/app/help)  
*or*

[Open poll in your web browser](#)



INDIAN RIVER STATE COLLEGE

ADMINISTRATION BUILDING

1.



# INDIAN RIVER STATE COLLEGE

LOCATION: FORT PIERCE, FL

ESTABLISHED: 1959

TYPE: STATE COLLEGE

MASCOT: PIONEERS

[WWW.IRSC.EDU](http://WWW.IRSC.EDU)





2013

The image shows four rectangular tags hanging from a metal ring. The first three tags are white and feature the numbers '2', '0', and '1' in a bold, black, sans-serif font. The fourth tag is red and features the number '3' in a bold, white, sans-serif font. The tags are arranged horizontally against a solid blue background.

## Senate Bill 1720,

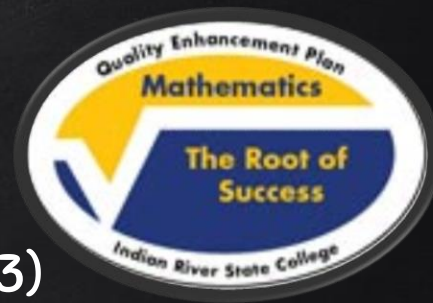
FOUNDED 1831

- **requires restructuring of remedial college preparatory instruction (developmental education) and requires Florida College System institutions to "provide developmental education that is more tailored to the specific communication and computation skills a student needs to develop to be successful in performing college-level work" (The Florida Senate, 2014).**
- **requires that colleges will no longer be able to require recent high school graduates to take the state's standard placement test or to enroll in noncredit remedial courses.**
- **requires colleges to offer developmental education options a student may pursue while also enrolled in college-credit courses.**
- **developmental education can be defined as modularized, compressed, contextualized, or co-requisite coursework.**

# SACSCOC

## SOUTHERN ASSOCIATION OF COLLEGES AND SCHOOLS COMMISSION ON COLLEGES

- \* Accreditation is reviewed every 10 Year
- \* Quality Enhancement Plan (QEP)
- \* Course redesign of Intermediate Algebra (MAT 1033)



### Identify the Problem:

Students' failure to progress through math gateway courses

### The Research Project:

Improve student learning and success in math gateway courses



# DELIVERY OPTIONS

- \* SE – Supplemental Emporium
- \* VM – Virtual Mastery
- \* FE – Flipped Emporium
- \* TR – Traditional Classroom
- \* CL – Collaborative Learning



WHAT NOT TO DO?

2.

## WHAT NOT TO DO?

- \* Rush
- \* Create long video lectures
- \* Come into a flipped class without a plan/schedule/activities
- \* Leave students without expectations
- \* Expect that ALL students have access to a computer
- \* Under estimate the amount of in class activities needed
- \* Use old/outdated technology
- \* Use handouts only



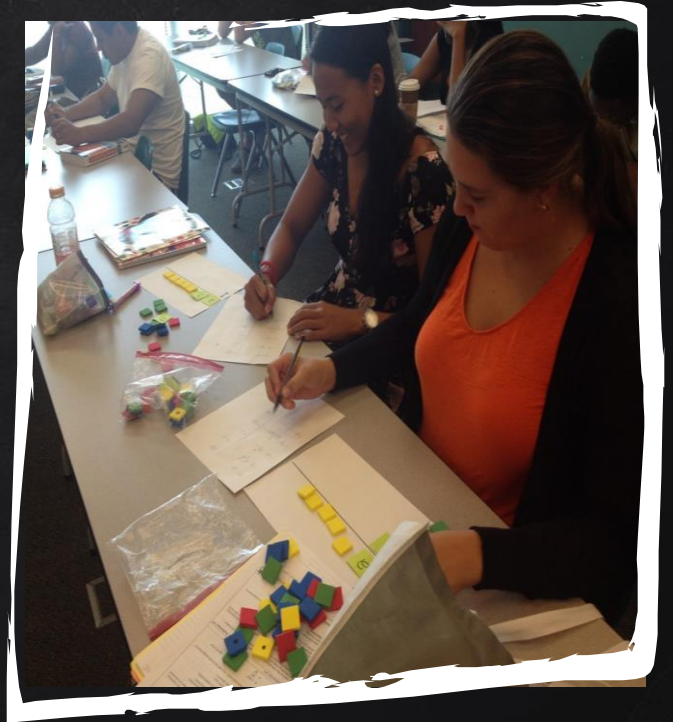


WHAT TO DO?

3.

## RESEARCH

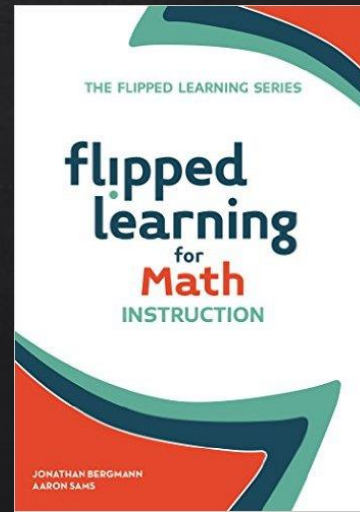
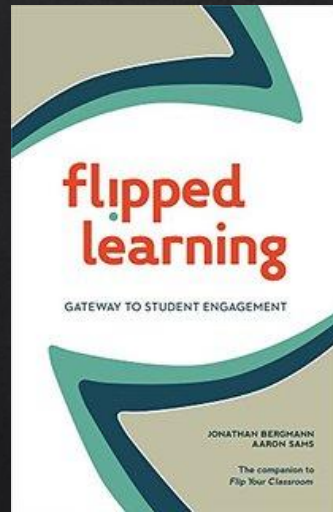
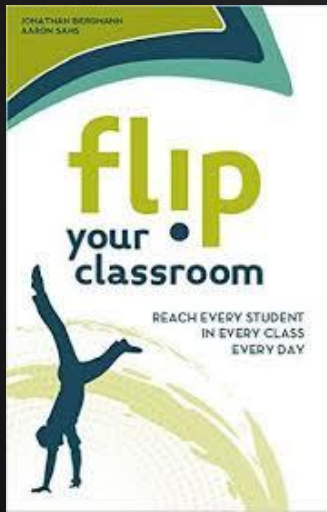
- \* Books, Articles, Published Dissertations
- \* Websites
- \* Conferences/Workshops/Webinars
- \* Social Media Outlets



# TRAINING/PROFESSIONAL DEVELOPMENT

BOOKS ON FLIPPED LEARNING:

by Jonathan Bergmann and Aaron Sams



The Flipped Learning Series:

for English Instruction  
for Science Instruction  
for Social Studies Instruction





# TRAINING/PROFESSIONAL DEVELOPMENT



## Websites:

- \* Flipped Learning Network  
[flippedlearning.org](http://flippedlearning.org)
- \* Flipped Learning: Turning Learning on Its Head  
[flipped-learning.com](http://flipped-learning.com)
- \* Flipping with Kirch  
[flippingwithkirch.blogspot.com](http://flippingwithkirch.blogspot.com)
- \* Flipped Learning Journal  
[www.flippedlearningjournal.org](http://www.flippedlearningjournal.org)
- \* Turn to your Neighbor: The Official Peer Instruction Blog. By Julie Schell  
<http://blog.peerinstruction.net/>
- \* Education Dreamer  
<http://www.educationdreamer.com/>
- \* Educational Technology and Mobile Learning  
<http://www.educatorstechnology.com/>



# TRAINING/PROFESSIONAL DEVELOPMENT



## CONFERENCES/WORKSHOPS:

- \* FlipCon 2016 ([flippedlearning.org](http://flippedlearning.org)): July 19 – 21
- \* The Flipped Classroom 4 Week Online Workshop by Kelly Walsh, Author/Founder of EmergingEdTech  
<http://www.emergingedtech.com/>
- \* ISTE 2016 Conference, June 26 – 29, Denver, CO

## SOCIAL MEDIA OUTLETS:

- \* Twitter: <https://twitter.com/flippedlearning>
- \* Facebook:  
**The Flipped Class Network**
- \* Blog: #Flipclass Chat
- \* Podcasts
- \* Radio Show: The Flipped Side hosted by Jon Bergmann



# TYPES OF FLIPPED CLASSROOMS

Traditional  
Flipped

Flipped Mastery

Peer Instruction  
Flipped  
Classroom

Inquiry Flipped  
Classroom

Problem Based  
Learning  
Flipped  
Classroom

- ✦ Start Slow
- ✦ Start with one lesson
- ✦ Take at least one semester to plan and create
- ✦ Guided notes to 1 page (2 page max)
- ✦ 3 to 5 minute lecture videos
- ✦ Save videos in all available formats
- ✦ Policies and guidelines
- ✦ Secondary website to store videos i.e. Weebly, Wix, YouTube

Unit 1  
Lesson 1

Symbols and Sets of Numbers

**Vocabulary**

**Natural Numbers** are numbers we use for counting. They are 1, 2, 3, 4, and so on.

**Whole Numbers** are natural numbers and zero.

**Integers** are positive numbers, negative numbers, and zero.

**Rational Numbers** are numbers that can be expressed as the quotient of two integers in the form  $a/b$  where  $b \neq 0$ .

**Irrational Numbers** are real numbers that cannot be written as the quotient of two integers in the form  $a/b$  where  $b \neq 0$ .

**Real Numbers** are real numbers consisting of the rational numbers and the irrational numbers.

**The Real Number System**

T. Lewis | BRCC | 1/6/17/028

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**The Real Number System**

**Rational Numbers**  
 Positive numbers  
 Negative numbers  
 Zero  
 Repeating:  $\frac{1}{3} = .333\bar{3}$   
 Terminating:  $\frac{5}{2} = 2.5$ ,  $-\frac{1}{4} = -.25$ ,  $7 = \frac{7}{1}$ ,  $\frac{3}{4} = .75$

**Irrational Numbers**  
 $\pi \approx 3.141592654\dots$   
 $\sqrt{2} = 1.41421356\dots$   
 $\sqrt{5}$   $\sqrt{21}$   
 $.1212312341235\dots$

**Integers**  
 Positive numbers  
 Negative numbers  $\{\dots -3, -2, -1, 0, 1, 2, 3, \dots\}$   
 Zero

**Whole Numbers**  
 Positive numbers  
 Zero  
 $\{0, 1, 2, 3, 4, 5, \dots\}$

**Natural Numbers**  
 Positive numbers  
 $\{1, 2, 3, 4, 5, \dots\}$

T. Lewis | BRCC | 1/6/17/028



## ASSESSMENTS

- \* Checking their notes for homework and class participation grade
- \* Questionnaires i.e. Google Forms, Camtasia, LMS
- \* Polling Tools

### Polling Tools

- \* Clickers
- \* Cel.ly
- \* Poll Everywhere
- \* Plickers
- \* Online Courseware i.e. MyMathLab



CELLY

# WHAT ARE THE TOOLS NEEDED TO FLIP A COURSE?



Videos

- YouTube or other video sharing sites
- MOOCs
- Kahn Academy
- Make your own

Screencasting/Recording Software

- Camtasia
- Jing (free)
- Active Presenter (free)
- Echo360

Pen Annotation

- Livescribe Smartpen
- USB pen tablet
- Tablet PC
- Wacom Bamboo Tablet

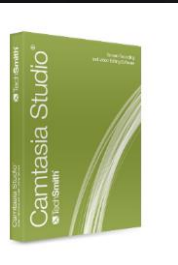


Interactive Whiteboard / Microphone

- SMART Board
- Mimio
- MS Office software

Video Camera

- Ipad/Iphone
- Camera
- IPEVO Doc Camera
- SWIVL



“In the beginning of the semester I was very unsure about the flipped class style, but I have to say that, if I am given a choice in my future math classes, I definitely will choose a flipped class. I like that we do our homework in class and that you are there to help us master the concept when you are needed. In high school, I was unable to grasp the concept of algebra and felt that if I could not understand the homework, the next day I was left behind as everyone else went forward. While many teachers follow the same style of teaching year after year, it is refreshing to see one that grows with the times. Thank you for caring about your students enough to try a bold new approach that I think is helpful in many ways.”

“I find the teaching style very different and interesting. The atmosphere in class makes it very fun and comfortable to learn.”

“...the videos were very important to watch before class. It gives your mind a head start and you can take your time going through the lessons.”

“I AM A VISUAL LEARNER SO SEEING YOU WORK OUT THE PROBLEM AND EXPLAIN WOULD REALLY HELP AND IF I GOT CONFUSED STILL THE NEXT DAY YOU WOULD GO INTO MORE DETAILS AND CLEAR IT UP.”



THANKS!

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Any questions?

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[tlewis@irsc.edu](mailto:tlewis@irsc.edu)