Flipping the Way you Teach Mathematics

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Agenda

● What is flipped instruction?
● Preparing a classroom for flipping
● Implementation of flipped instruction

In this class you will...

● Identify an entry point in flipped instruction
● Brainstorm resources needed & available
● Create procedures for digital access
WHO AM I?

Laura Brogdon

- 7 years of teaching
- 2016 Shawnee Mission Teacher of the Year Nominee
- Middle School & High School Math
- Flipping Experience
  - Regular Geometry
  - Honors Geometry
  - Remedial Geometry
What is flipped instruction?
Why Flip Your Classroom?

Video Credit: Katie Gimbar, video borrowed from https://www.youtube.com/watch?v=9aGuLuipTwg
Preparing to Flip
Flipping questions to consider

1. Why do I want to flip?
2. What are the advantages/disadvantages?
3. What about classroom management?
4. What about homework?
5. How do I communicate this with parents, and students?
6. What do I do for those students that do not have the technology resources at home?
What are your ideas?

- Is there a unit you have in mind that would work with the Flipped Model?
  - lab
  - challenging concept
  - objective students struggle with
- What are other advantages of Flipping?
  - student are responsible for their own learning
  - substitutes
  - absent students
  - parents resources
What makes a good video lesson?

- Clearly defined objectives
- Examples
- Demonstrations/Modeling
- Logical order
- Structured
- Easy to understand
- Clear visuals

- Balance procedures and concepts
- Provide context
- Support vocabulary development
- Professional
- Audible
Tools for Flipping

● Any video camera that converts to digital format
  ○ flip camera
  ○ iPad camera
  ○ webcam
  ○ document camera
● QuickTime
● PowerPoint Tutorial
● Screen-Cast-O-Matic
● Others???
What about posting???

- You can post your videos on:
  - Google Classroom/Sites
  - Classrooms in Web Back Pack
  - Edmodo
  - Moodle
  - YouTube
  - SchoolTube
  - Google Drive
  - DropBox
  - DVDs/Flash Drives
  - Other???
Keep in mind:

- Size limits for different websites
  - District websites
  - Google Drive
    - Google Apps for education
    - Personal google accounts
  - Edmodo is 100 MB
  - Moodle is 5 GB
  - Dropbox
  - Personal websites-
    - Weebly
    - Schoology
Keep in mind:

- Copyright:
  - Is it your material?
  - Is it digital material you have permission to use but not post to the world? (only your students have permission to view)
  - Permission to have a digital copy?
  - Permission to post a digital copy?
Think Pair/Share

● Discuss with someone near you what strategies sound appealing to you for both creating and posting videos.

● What concerns do you still have about flipping?
Implementing a Flipped Classroom
Daily Agenda

● Bell Work
  ○ informal, formative assessment
  ○ review of concepts from video lesson
  ○ spiraled instruction

● Break Out Groups/Activity
  ○ Differentiated instruction
  ○ Small group reteaching

● Summary/Take Away/Exit Ticket
What Flipping is:
- Application
- Collaboration
- Challenge/Project Based Learning
- Mastery
- Dialogue/discussions
- Differentiation
- Reasoning
- Rigor & relevance
- What you make it!

What Flipping is NOT:
- Recall and memorization
- Drill and kill
- Study Hall
- Homework Help

What does this look like during class?
What do I do when students don't watch the lesson at home?

You could...

- Allow them to watch the lesson during class.
  - Play on the projector or mobile device
- Assign students to groups for collaboration
- Hold students accountable with an entrance quiz or activity that requires students to demonstrate what they learned from the video lesson.
Time for Questions