

Flipping the Way you Teach Mathematics

Laura Brogdon

Geometry Teacher

Shawnee Mission West

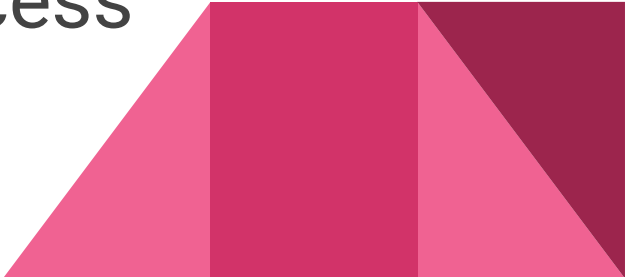
laurabrogdon@smsd.org



Agenda

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

In this class you will...

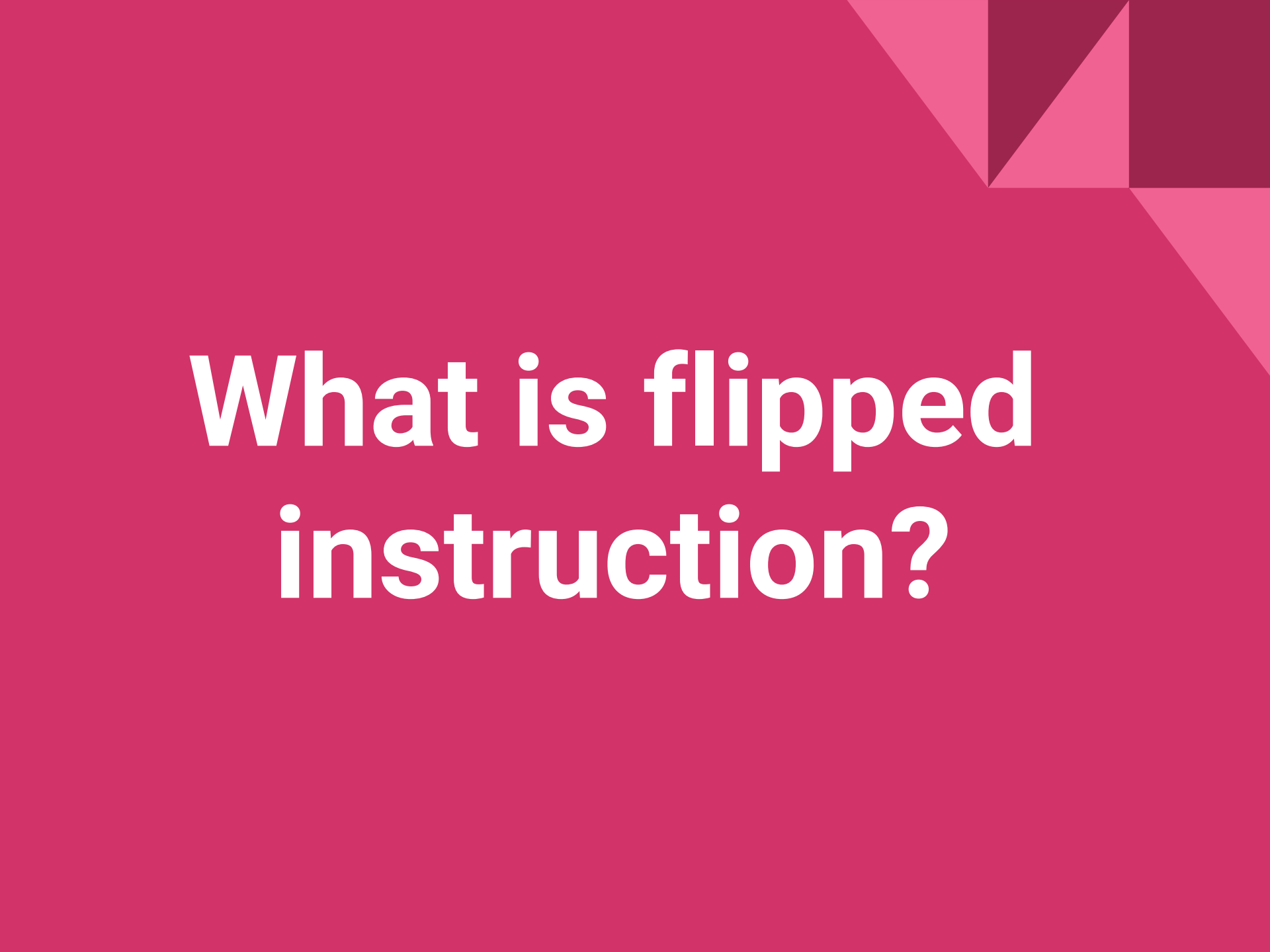
- Identify an entry point in flipped instruction
 - Brainstorm resources needed & available
 - Create procedures for digital access
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WHO AM I?



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

The background is a solid pink color. In the top right corner, there are several overlapping geometric shapes, including triangles and squares, in various shades of pink and magenta, creating a modern, abstract design.

**What is flipped
instruction?**

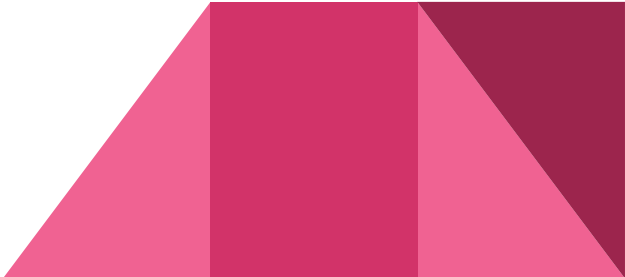
Why Flip Your Classroom?




Video Credit: Katie Gimbar, video borrowed from <https://www.youtube.com/watch?v=9aGuLuipTwg>

Preparing to Flip

Flipping questions to consider

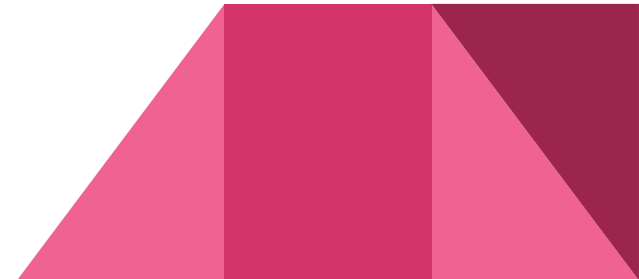
1. Why do I want to flip?
 2. What are the advantages/disadvantages?
 3. What about classroom management?
 4. What about homework?
 5. How do I communicate this with parents, and students?
 6. What do I do for those students that do not have the technology resources at home?
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What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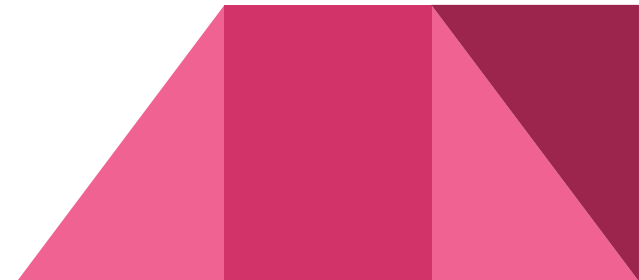
What makes a good video lesson?

- 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



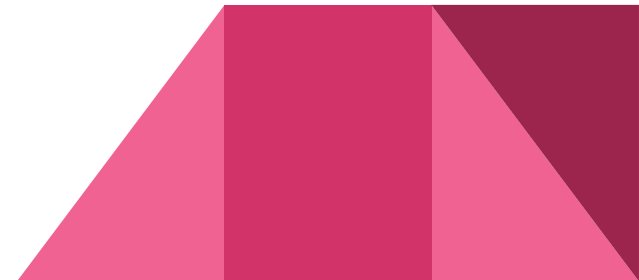
Tools for Flipping

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



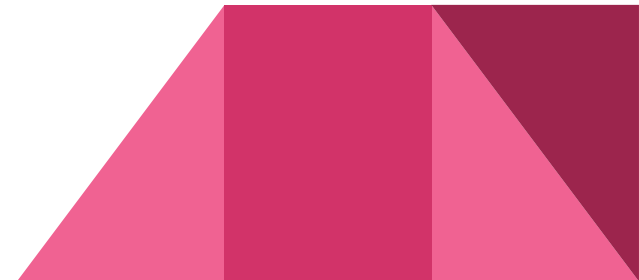
What about posting???

- 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???



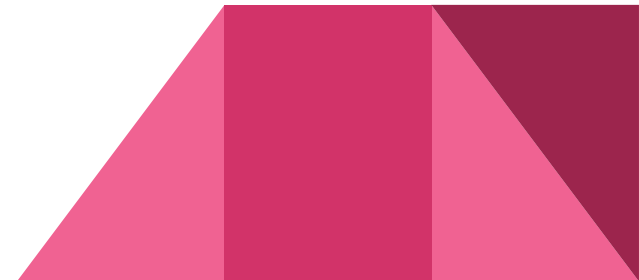
Keep in mind:

- 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



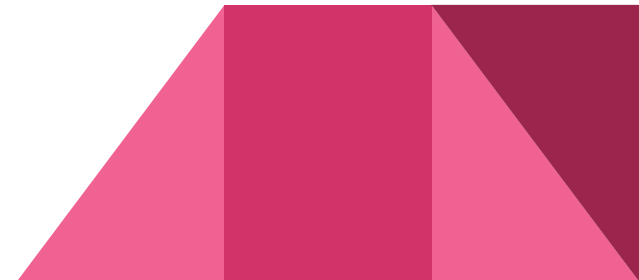
Keep in mind:

- 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?

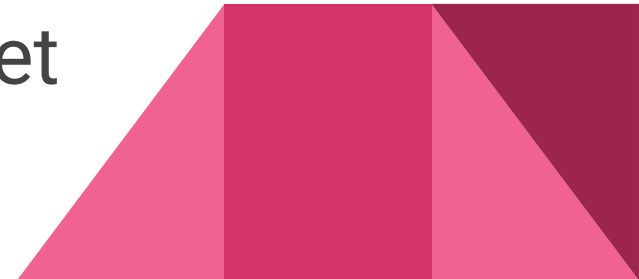


The top right corner of the slide features a decorative arrangement of overlapping geometric shapes. These include a dark pink square, a medium pink square, and a light pink square, all partially overlapping each other and the main background.

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



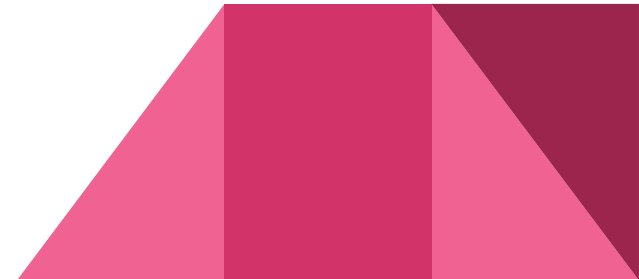
What does this look like during class?

What Flipping is:

- Application
- Collaboration
- Challenge/Project Based Learning
- Mastery
- Dialogue/discussions
- Differentiation
- Reasoning
- Rigor & relevance
- What you make it!

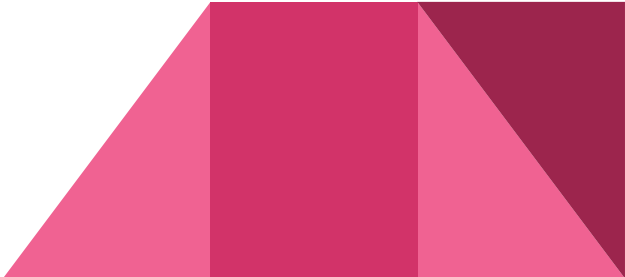
What Flipping is NOT:

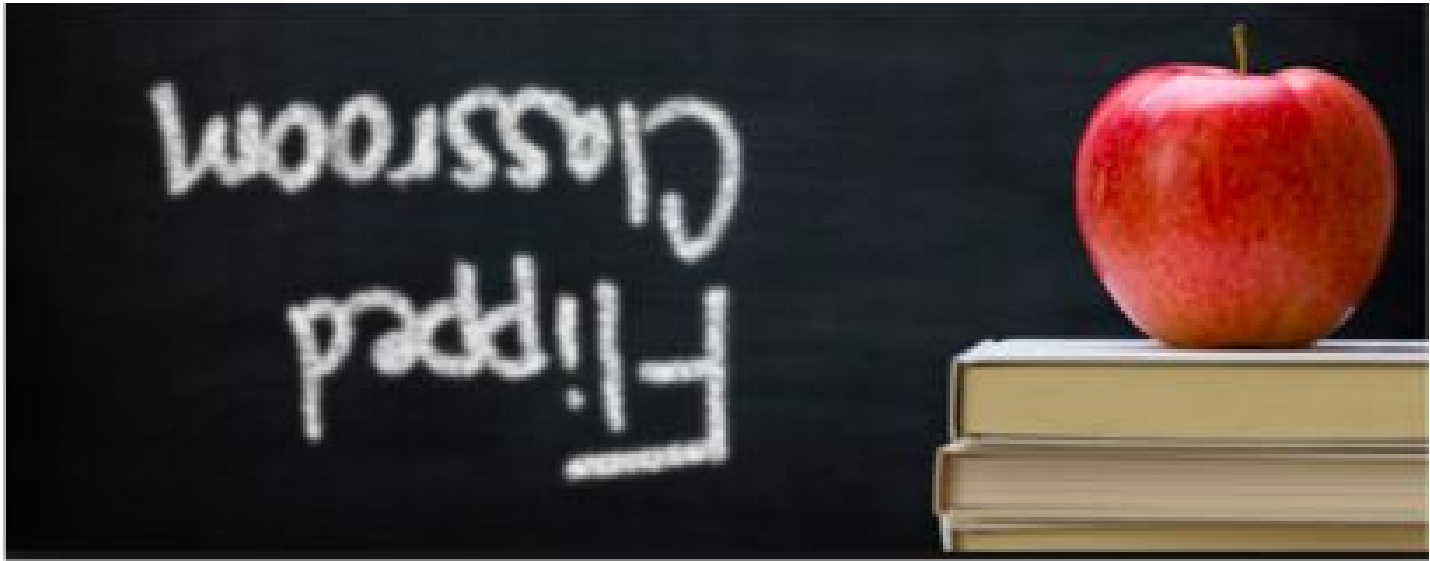
- Recall and memorization
- Drill and kill
- Study Hall
- Homework Help



What 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.
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Time for Questions