Flipping a classroom:

Try seeking to flip the classroom BOTH ways!

Traditional Classroom	Flipped Classroom
Teacher talk > student talk.	Student talk > teacher talk
Teacher lectures about rationale and technique. Students copy notes.	Students work on performance tasks, individually or in small groups
Students can be disengaged, take notes inefficiently or ineffectively. Teacher cannot supervise note taking. Misbehavior can ensue.	Students should be more engaged. Note taking was done at home. Students work independently or collaboratively to discuss how and why steps work, assess answers.
Learn at schoolwork at home	Learn at homepractice at school
Move at teacher's pace or slow class down. Not understand how to answer questions. Frustrations with the work result in less work being done.	Work at own pace (pause, rewind, or perform additional research), <u>preparation at home affects</u> <u>performance in school the next day</u> . Teacher available to assist in applying learned techniques and vocabulary.

Rationale for converting to a "Flipped" classroom

- Make more efficient use of your time, effort, and expertise.
- The delivery of instruction can now be repeated multiple times so students can revisit lessons, take notes at their own pace.
- You can work with small groups or individuals to deliver personalized instruction as necessary.
- Students can collaborate to develop strategies on their own, and can check in with you for guidance or assistance as needed.
- Allows for EASY incorporation of station activities, including differentiation and remediation.
- Enhances incorporation of all 8 mathematical practices
 - 1. Make sense of problems and persevere in solving them.
 - 2. Reason abstractly and quantitatively.
 - 3. Construct viable arguments and critique the reasoning of others.
 - 4. Model with mathematics.
 - 5. Use appropriate tools strategically.
 - 6. Attend to precision.
 - 7. Look for and make use of structure.
 - 8. Look for and express regularity in repeated reasoning.
- Enhances incorporation of all 5 NCTM Process Standards.
 - 1. Problem Solving.
 - 2. Reasoning and Proof.
 - 3. Communication.
 - 4. Connections
 - 5. Representations.

Converting to a "Flipped" classroom

- 1. A personal/professional website will be VERY helpful. [Warning: Take steps to keep this site completely professional.]
- 2. Instruct students regarding expectations for homework completion as well as in-class and group behavior/expectations.
- 3. Set up class to facilitate station/group activities as necessary.

Lesson planning for a "Flipped" classroom

- 1. Select or create engaging video (or other) presentations to present rationale, vocabulary, techniques, etc.
- 2. Update website with new weblinks. (You can keep the previous weblinks posted for student review/reteaching/reference as necessary).
- 3. Provide quick review at the beginning of class to clear up any major misconceptions, assess completion.
- 4. Provide instruction regarding daily activities.
- 5. Allow students to complete activities (perhaps in stations!) that utilize the techniques and vocabulary from previous evening's lessons.
- 6. Teacher serves to work with individuals or small groups to focus on instruction and practice.

Create your own website...free:

http://www.weebly.com/?utm_source=internal&utm_medium=footer&utm_campaign=3

see my website:

http://mbraverman.weebly.com/

Flipped Classroom Resources

- <u>http://ctl.utexas.edu/teaching/flipping-a-class</u>
- <u>http://www.slate.com/articles/life/education/2014/02/flipped_classrooms_in_college_lectures_online_and_pr_oblem_sets_in_the_classroom.html</u>
- <u>http://flippedlearning.org/site/default.aspx?PageID=1</u>
- <u>http://www.ascd.org/publications/educational-leadership/mar13/vol70/num06/Evidence-on-Flipped-</u> <u>Classrooms-Is-Still-Coming-In.aspx</u>
- <u>http://flippedlearning.org/domain/36</u>
- <u>https://www.youtube.com/watch?v=ojiebVw800g</u>
- <u>http://thejournal.com/articles/2013/11/18/9-video-tips-for-a-better-flipped-classroom.aspx</u>
- <u>http://www.myfoxphilly.com/story/26635769/tech-talk-local-school-flips-traditional-teaching-method</u>
- <u>https://archive.org/details/WTXF_20150107_080000_Fox_29_News_at_10#start/2640/end/2700</u>