**Flipping a classroom:**

**Try seeking to flip the classroom BOTH ways!**

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| **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 school…work at home** | **Learn at home…practice 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), *preparation at home affects performance in school the next day*. 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**](http://www.weebly.com/?utm_source=internal&utm_medium=footer&utm_campaign=3)

**see my website:**

[**http://mbraverman.weebly.com/**](http://mbraverman.weebly.com/)

**Flipped Classroom Resources**

* <http://ctl.utexas.edu/teaching/flipping-a-class>
* <http://www.slate.com/articles/life/education/2014/02/flipped_classrooms_in_college_lectures_online_and_problem_sets_in_the_classroom.html>
* <http://flippedlearning.org/site/default.aspx?PageID=1>
* <http://www.ascd.org/publications/educational-leadership/mar13/vol70/num06/Evidence-on-Flipped-Classrooms-Is-Still-Coming-In.aspx>
* <http://flippedlearning.org/domain/36>
* <https://www.youtube.com/watch?v=ojiebVw8O0g>
* <http://thejournal.com/articles/2013/11/18/9-video-tips-for-a-better-flipped-classroom.aspx>
* <http://www.myfoxphilly.com/story/26635769/tech-talk-local-school-flips-traditional-teaching-method>
* <https://archive.org/details/WTXF_20150107_080000_Fox_29_News_at_10#start/2640/end/2700>