Technology and the Classroom

As we have more and more technology and resources available, we need to assess how we are using it to effectively impact learning in the classroom. There are too many classrooms that are still being organized and taught in a traditional lecture format and are not reaching students. There is a wonderful description of the problem at http://www.morrisflipsenglish.com/index.html. As we strive to reach each and every student in our classroom, a couple of important questions some to mind. First, what is the best use of classroom time? Also, how can we use technology to help vary the classroom and provide students with multiple ways to explore, learn, and master material? Centered on these questions, the idea of the flipped classroom has many classrooms and schools using technology and resources in new ways.

What is a flipped classroom?

The flipped classroom idea was partly inspired by the videos created by Salman Khan which can be found on the Khan Academy web page: http://www.khanacademy.org. The classroom is considered flipped when students spend time at home watching videos or doing other tutorials instead of doing traditional homework problems and the traditional lecture time in the classroom is replaced with more classroom activities, discussions, and time for student to work in class. Since this frees up time in the classroom, it can make it much easier for the teacher to differentiate instruction and give student more individualized help. Salmon Khan discusses his videos, how it all got started, and the flipped classroom at http://www.khanacademy.org/talks-and-interviews/v/salman-khan-talk-at-ted-2011--from-ted-com.

Potential Positive Aspects of the Flipped Classroom
There are many different ways to “flip” a classroom and several hold great promise. There are many things that we should consider as we incorporate these resources and the flipped concept into our classroom. Here are some positive aspects of the flipped classroom:

- The extra time that can be created in the classroom could be monumental for our typically struggling students.
- Students can watch videos when it fits into their schedule. They can pause, rewind, replay and/or watch related videos to help them understand the concept.
- The variety of video tutorials available can help teachers to scaffold learning for students and help them fill in gaps needed to learn current classroom objectives.
- With extra time to work with students in the classroom can enhance the ability for teachers to differentiate the instruction for each student’s need.
- You don’t have to create your own videos there are so many resources on the web including the Khan Academy, YouTube EDU, and PBS.
- There are many resources to help implement a flipped classroom; you do not have to reinvent the wheel.

**Concerns and Considerations**

Just because we flip the classroom does not mean that suddenly we will start reaching all students. In addition to many positive promises of a “flipped” classroom (or some hybrid version), there are also some concerns that we should consider as well.

- Are we using the time in the classroom to truly engage our students? If students are simply getting lectured by a video at home and then doing “homework” in the classroom, it is simply a slight improvement on the same old model.
- Will many of our typically struggling students who we struggle to motivate actually watch the videos as home?
• There will be many students who will not have access to a computer or broadband internet. How do we address the equity and equal access to these videos at home?

• If we implement the idea into schools and classrooms, will give teacher the proper support? We need to build the capacity of our teacher and help them use technology, increase differentiation, student engagement, and inquiry based learning.

**Does the Flipped Classroom Work?**

In education we see new ideas come and go as we often we swing from one extreme to the other. Many ideas of flipping the classroom have promise. But we need to be careful. Simply flipping the classroom, where all lectures are delivered via videos at home and traditional assignments are completed in the classroom, will not necessarily increase student learning. The more I read, the more I found that many who have tried the flipped classroom ended up abandoning the traditional flip for other alternatives that have even more promise. It may not be a bad place to start as we transition to a modern classroom and meets the need of our modern students.

For instance, there article by Shelly Wright where she describes her journey with a flipped classroom. As she put it “my brief love affair with the flip has ended. It simply didn’t produce the transformative learning experience I knew I wanted for my students.” Her post can be found at [http://plpnetwork.com/2012/10/08/flip-love-affair/](http://plpnetwork.com/2012/10/08/flip-love-affair/) and would be a great article to read before implementing a flipped classroom.

Shelly’s article made me start digging a little deeper and the more I read, the more I found that there are additional and slightly different definitions of the flipped classroom. One of my favorites describes the flipped mindset as having three pillars:
1. Teachers make the best use of their face-to-face time with students.

2. The classroom uses student-centered pedagogy.

3. There is an intentional focus on higher-level thinking, rather than rote memorization.

That definition came from [http://www.morrisflipsenglish.com/1/post/2012/07/so-you-want-to-flip-your-class.html](http://www.morrisflipsenglish.com/1/post/2012/07/so-you-want-to-flip-your-class.html); a webpage filled with information I believe would be very useful to transform the classroom to student centered and could be very useful to teachers as we struggle to implement common core. The site was put together by Cheryl Morris, Andrew Thomasson, Karl Lindgren-Streicher, Crystal Kirch, and Kate Baker. After defining the previous three pillars, they give the follow advice:

Those three pillars are the three things you need to flip your class. And guess what: YOU DON'T NEED VIDEO! And guess what: YOU DON'T NEED TO HAVE STUDENTS DO HOMEWORK!

**If you really want to know whether your class is flipped, ask yourself these questions:**

1. Do I intentionally plan my face-to-face time in order to allow for the tasks that require the highest cognitive load? Do I use that information to guide my students as they learn the content and processes?

2. Are students at the center of my classroom? Am I in a "guide" role, rather than a "sage on the stage" role? Am I emphasizing collaboration over competition? Can students see me as a learner, including when I make mistakes?

3. In the assignments I create and assessments I give, is the emphasis on knowledge that is not "Google-able"? Am I asking students to analyze, apply, synthesize, evaluate, and create, rather than just know and understand?

Morris also does a great job of describing why it is hard for teachers to break away from
the traditional classroom model. “So teachers, most of whom were raised in the traditional model in which the teacher is the master and controller of all learning in the classroom, now have to learn how to do something they never saw modeled for them. They have to learn how to take 30-40 kids and figure out what they need, how to get it to them, what will engage students, how to keep them accountable, how to assess their learning, how to reteach what students didn’t learn…so it is no wonder that many quit within the first five years. Teachers who expect to teach students from 50 years ago will always be disappointed, because the world has changed, and so have the students.”

As we work to build the capacity of our teachers, understanding both the need for change and why it will be tough is important. It will take constant gently pressure to make a real change happen. Morris claims that “in the flipped classroom model, it becomes possible to make the realities of the modern classroom model something that works for modern students. Instead of delivering information and hoping students can apply it outside of class, teachers can differentiate and engage all students IN class while students make meaning and engage with the content. It becomes possible to meet the needs of every student, every day. When all students are active, rather than passive learners, the class becomes more like the world students ALREADY live in - one where things happen asynchronously, where any fact is available at their fingertips, and where learning happens at all times, in all places. Teachers can spend the class time they have with students in the way that best meets their needs, and help them grasp the higher level thinking skills they need to understand the world and job market they are in today. Teachers no longer try to do the impossible, which makes the job far more sustainable for the long term, thus ensuring that those who have a heart for teaching are able to make it in the profession. Flipping your class will not only give your students what they need, but you need as
well.”

Common core is being thrust at us and it’s not going away. I don’t see how we will not experience several years of struggling by both students and teachers and we must actively address these issues now. Student, who have been trained in mostly the traditional classroom environment, are not going to become great problem solvers and collaborators overnight. Teacher who were taught and trained in the traditional classroom are not going to understand how to transform their classroom overnight either. I believe aspects of the flipped classroom can help us get there if it is built upon the three pillars Morris described. These pillars align beautifully with the practices described and expected in the common core state standards. Good Luck!
References


