

Mitchell Harsh  
Dr. Pastore  
EdTech  
3 April 2018

## Flip Classrooms

**Read the following article: [Flip Your Students' Learning](#)**

**1.) Describe what a "flipped" classroom is and how it works.**

A flipped classroom attempts to make the best use of in class times with students by introducing the material to them outside of class, and using class time to clarify and utilize the information.

**2.) What is the role of video in a flipped classroom?**

The video introduces the course material to the students instead of a traditional in-class lecture.

**3.) Define "screencast".**

A video capturing the computer screen and the narrators voice, and sometimes a small picture of the instructor. The videos are usually about 10-15 minutes long.

**4. What do the authors mean by the following statement?**

Using videos to cover the basic aspects of taxonomy outside of class allowed for more time in class to cover the more advanced areas of the subject.

**5. How does the flipped classroom enable students to work at their own pace?**

Students can access, re-watch, and think about each video as much as they want because they can get to the information whenever they have access to a device, so they don't need to always work at the pace of their peers as they would in a classroom.

**6. Why did the authors give some students DVD's?**

DVDs are a potential alternative for students that don't have reliable Internet access.

**7. How does the flipped classroom encourage "mastery learning"?**

Students need to display a mastery of the material before they can move on to the next unit, if they perform poorly on a unit they can go back and work through as they need.

**8. In the "Universal Design for Learning" section, the authors discuss two nontraditional approaches: one for delivery of instruction and one for assessment. Describe each.**

Instruction: students have the choice concerning which resources they want to use, if they learn best from videos they can watch videos and don't have to read the textbook. Assessment: instead of forcing students to take a traditional exam, they can display their knowledge of the subject in a different way like creating a project.

**9. What do you think about flipped classrooms? What do you see as the advantages and disadvantages? Would you use this methodology as a teacher? Give an example.**

I think flipped classrooms are a great idea. I like that it would allow more time in class for critical thinking and applying concepts instead of just lecturing and probably boring students. However, this would require that all students take the time outside the classroom to cover the material and that is never guaranteed. I would use this methodology in teaching history, I could present the standard societal image put out by textbooks outside of class, then analyze primary sources for a more everyday look at ancient civilizations with class time.

## Horizon Report

**Describe each of the 6 technologies (3 to 5 sentences each). Also write a short statement (3 to 5 sentences each) of what you think about the technology, if you would (or if you do) use it.**

- 1.) Makerspaces are environments that encourage students to engage in higher-level thinking and creative learning. The environment usually has creative technology like: 3D printers, laser cutters, and animation software. These spaces are encouraged so students develop knowledge of technology and innovation to push countries towards innovation as opposed to just educating children to work in factories.
  - a. I would use this in my classroom. It is important that students aren't just force fed information all day, it won't help them and they won't like it. But, this allows students to get hands-on and work more creatively which is a refreshing pedagogy. For that reason I feel this could be great in a classroom.
- 2.) Robots are beginning to become a legitimate player in our labor force. These robots are used in professions that are dangerous or tedious, and naturally people are concerned that they will lose jobs to the technology. So, educators are starting to get students working with robotics so they are capable of working alongside, or on this technology of the future. Some educators are even using robotics to aide them in their classroom.
  - a. I would use this in my classroom. Robots have always been something people are afraid are going to take every ones' jobs. If children are familiarized with the technology they will be more likely to get a job working with the robots instead of losing a job to one. In a world becoming more technologically advanced, students should be exposed to the technology that will change the workforce they enter.
- 3.) Analytics are looking to provide information to educators that will allow them to truly understand how students are performing and what can be done to help them perform better. This technology provides in depth data on the students and teachers no longer have to only rely on grades to measure understanding. However this is certainly not exclusive to education, analytics are used all around us in places like sports, and databases.
  - a. I probably wouldn't use this in my classroom. While it's great to use to analyze how your favorite NBA player performed, I feel it's too inhuman to be used with kids. As a teacher you should be able to tell if your kids are performing, you shouldn't need advanced stats to tell you if you're doing your job.
- 4.) Virtual reality allows students to be in a computer-generated environment without ever leaving the classroom. Higher end VR devices also allow the user to interact with the environment around them. They can be used for

virtual fieldtrips, experiments, and examining things like animals. The technology will allow schools to be more progressive with their instruction.

- a. I have used this personally and I enjoyed it. I would also use it in a classroom. Many students are visual learners and it would be a great tool for them to get an idea of what they're discussing looks like. Especially in a lower budget school this could be used to supplement field trips

5.) Artificial intelligence is a computer that is designed to be "intelligent" and resemble interactions with a human. They use advanced data sets and language processing to enable this. Many children are being exposed to this at home with devices like Alexa, Siri, and Google Home. This technology can be used in a classroom in the future to potentially help students on the autism spectrum to practice interactions with a person who won't judge them.

- a. I think this a good idea. Especially to help students that struggle socially to practice social skills in a low risk environment. Also, it could provide opportunities for the average student to practice a debate or defense.

6.) The internet of things connects items that we don't usually associated with the internet to the internet. This could include lights, refrigerators, or thermostats. Some cities are even using the technology, cities including Rio Di Janeiro, and Santander have utilized this to help with traffic and overpopulation issues. However there are concerns about the security of these devices.

- a. I use this personally at home to turn music or lights on or off. But, I'm not sure I would use this in a classroom. If I can't get up and turn things on and off at work I shouldn't turn to technology to solve that. And tracking where students go with them swiping in with a card seems too much like a big brother deal.

## Badges

**Visit the links below and give your opinion about the future of digital badges and whether or not you would use them, how you could use them, and if they have a future ( 5 to 10 sentences - 5 points). Note: This is one statement only, not a statement for each web site below.**

Digital badges can be used to display someone's accomplishments and achievement. They are supposed to be a more in depth indicator of how someone performed and retained knowledge than traditional grades. I feel this is pretty unnecessary. In my opinion a resume as is does a pretty good job of listing accomplishments and qualifications. And from there I feel the most important aspect of analyzing someone, for a job at least is to interview them and have a real conversation with them. I feel the badges are an unnecessary tweak to a system that already works.

## Augmented Reality

**Define Augmented Reality:** A view of the physical world overlaid by digital content.

**Give an example of how you could use augmented reality in the classroom? Be specific.** I could use this on a field trip so students could understand the significance of things around them and help them navigate through something like a museum.

**Do you see a future for this technology?** I feel there is a future for this technology, but I feel virtual reality will be much more significant. I'm not sure many people want to add layers to what they can already see.

**What is the difference between augmented reality and virtual reality?**

Augmented reality adds layers to what we already see. Virtual reality puts us in another environment entirely.

## Disruptive Learning

**Many persons believe that online education, K–12 blended learning, and technology are going to change the entire school system. Michael Horn is a coauthor of "Disrupting Class" and many other blogs and activities relating to this topic. Visit his blog post and write a 5 to 10 sentence summary of the blog including your opinion of this concept. (10 points)**

The post begins defining what they mean by disruptive innovations, innovations that change an industry in a way most couldn't imagine. They transition into pondering if blended classrooms should be considered a lasting disruptive innovation. They note that the blended classroom could in fact completely change how schools are run. I think this would be considered a disruptive innovation. I especially like the idea of a flipped classroom, and I feel that many educators in the future will gravitate towards this and blended classrooms will become the norm. As morbid as it sounds, I'm sure many parents are looking into ways to educate their children without sending them to a classroom for 35 hours a week in fear of an act of violence against the school. I feel blended classrooms are the future.

## Virtual Field Trips

If time permitted, I would do more with this topic but for this class, I am only going to ask you to visit the links below and **CHOOSE** one virtual field trip that interests you and how you could use it in class. (5 points) Follow this format:

- **Name and Address of Web Site for the Virtual Field Trip**
- **Why it interests you**
- **How you could use it in class (Education majors only have to answer this one)**

**Name and Address of Web Site for the Virtual Field Trip:** The British Museum <http://www.ancientegypt.co.uk/life/home.html>

**Why it interests you:** This interests me because as a history major it provides a good insight into Ancient Egyptian life. I enjoy how it looks into a citizen's everyday life as opposed to the facts that are usually the focus of a history lesson.

**How you could use it in class (Education majors only have to answer this one):** I could use this in a classroom to provide a look into what people in Egypt actually lived like, I enjoy doing this because it makes you realize ancient people aren't all that different from ourselves.



## Social Networking in Education

**Write a 5 to 10 line paragraph of what you learned from this and your opinion of the use of social media in the classroom. (10 points)**

I never thought of social media being encouraged and used in a classroom. Any teacher I had in high school would blow a gasket if social media was even mentioned, and now people want to integrate it into schools. I agree with the author that we should be realistic and understand that students are going to use social media, so we should educate them with it instead of shunning it. I think this is a great way to get students to collaborate especially in an age where people tend to shy away from face-to-face interaction. I was unaware that there were actual educational social media sites, these are a good alternative to limit distractions on the sites.

## BYOD

Check out these 4 links that I have on Livebinders for BYOD <http://www.livebinders.com/edit/index/569002>

Answer the questions below. Please be sure to copy the question followed by your response or you will not receive credit.

1. What is BYOD? Bring your own device, students bringing their devices to school.
2. What are some BYOD devices? Phones, laptops, tablets.
3. What BYOD devices do you own? Phone, laptop.
4. What are some of the advantages of BYOD? It allows students to work on a device they're around all day (their phone). It also allows them to work on a platform they're familiar with for example if they have a mac and the school uses PC the student can work on an operating system they work well with.
5. What are some of the disadvantages of BYOD? Some students may not have a device, and if they do they may have an older model that may cause other students to not include them.
6. Which "myths" do you agree with and which "myths" don't you agree with? I agree that teachers won't have to be the expert, I agree that BYOD won't encourage bad behavior. I disagree that BYOD won't cause a divide.
7. Will you use BYOD as a future teacher? Why or why not? I will, just because it's unrealistic to assume students won't already have them with so why not use them?

Not related to this topic but related to the format of the reading are these two questions which you should answer...

8. What is an "infographic"? A visual image to present data

9. What is "livebinders"? A virtual binder

Tech Skills for Teachers

**Visit 10 Tech Skills Every Teacher Should Have. For each of the 10 skills, write a short statement in Google Docs as to what your experience and skills are in that area. Please be sure to name the skill followed by your response or you will not receive credit.**

- 1.) **Searching the web efficiently:** I've been using the internet and Google searches since I was 7 so I know how to use keywords and quotes to get results I want. I can also differentiate between credible and non-credible sources.
- 2.) **Mastering Microsoft Office:** I was taught Microsoft office all throughout my education and use it everyday in college. I can use word, excel, PowerPoint.
- 3.) **Being willing to learn new technology:** I get bored with technology that I've mastered. I mastered an iPhone, then switched to android to give it a try, mastered that and chose Apple.
- 4.) **Connecting with social media:** I've used social media since high school and have generated a large following on apps like twitter and instagram. I can effectively use and influence on social media.
- 5.) **Sharing and collaborating via youtube and blogging:** I've created personal youtube videos, as well as videos for classes before this one and for this class. I don't have much experience with blogging, which is worth taking the time to work with.
- 6.) **Unlocking the potential of mobile devices:** I use my smartphone in classes all the time for productive reasons like notes, schedule organizing, and reminders. I could use this to help students do the same
- 7.) **Reaching out with Email:** I've been emailing people for years, part of how I got into college. I email professors, employers, and schools.
- 8.) **Making your point with presentation software:** I know PowerPoint and I have worked with it all through my education career.
- 9.) **Googling it:** I can effectively search google, I've also used google docs for years to collaborate and keep my work online.
- 10.) **Getting ahead in the cloud:** I've used google docs to save documents and access them on other devices for years.

## Preservice Teacher Training

**Answer the following questions. Please be sure to copy the question before your response or you will not receive credit.**

1. List the 3 major themes that the author identified among participants' views of technology training: Disconnect between technology training and other aspects of teacher training, a lack of content relevance, inadequate retention and transfer.
2. Describe how one of your professors has used technology in a way that you feel is consistent with the way you feel that you are required to incorporate technology in your presentations, lesson plans, etc. (Please don't name the professor and don't use me). This professor uses a power point to keep focus and provide visuals, but their lecture isn't dependent on it and their not reading from it.
3. Do you feel there is a disconnect between your technology training and the rest of your teacher training program? Or do you feel they are sufficiently connected? Please explain! I feel there is. As education majors were taught so much about effective classroom techniques, but were only required one technology class.
4. How does the author suggest improving students' ability to transfer technology knowledge and skills to their future classrooms? The connections between technology and aspects of training should be explicitly demonstrated.
5. How do professors in your content specialty area use technology? (i.e. if you are an English major, how do your English professors use technology?) Do you think they provide good examples of how you might use technology in your future classroom? Most history professors only use PowerPoint, I intend on using powerpoint, videos, and hopefully virtual reality if available.
6. What are NETS? List 3 of the Essential Conditions from ISTE as mentioned in the article. National Educational Technology Standards. Shared vision, access, time.
7. Do you think having one technology course that covers as much as possible is better than having technology incorporated into all of your courses? Why or why not? I think technology should be in all classes. We use it in almost everything, so why not include it in every day instruction? Having it in only one class makes it seem like an afterthought.
8. Did you feel that your K to 12 teachers were able to use technology effectively? Do you think that you know more than they do about technology? Do you think they can teach you something about technology? Please explain. (5 points) Some teachers would admit that they were awful with technology, and they were. For those teachers I feel I did know more about the technology than them. That being said I'm sure every instructor I've had could teach me something I didn't know about the technology, so although I felt I knew more about the technology I'm sure they still knew things about it that I did not.

### Personal, Mobile, Connected: The future of learning

	Personal	Mobile	Networked	Accessible	Social	Multimodal	Total
Laptop Computer	3	3	5	3	4	5	23
Tablet Computer	3	4	4	2	4	5	22
Smart Phone	2	5	4	4	5	5	25
e-Reader	5	4	3	3	2	3	20

Evaluate the following devices based on those criteria using a scale of 1 to 5 with “1” indicating that the characteristic does NOT describe the device and “5” indicating the characteristic describes the device well.

2. After totaling the points for each device, identify which device has the highest total and write 3 sentences that explain why you think this is the most useful tool for mobile learning. Smart Phone, it can be used by just one person if they don’t wish to interact. It travels well as most people have one in their pocket. Most people also own a cell phone. And the phone can obviously be used to socialize and present videos, pictures, and sounds.

3. Now identify which device has the lowest total and write 3 sentences that explain why you think this is the least useful tool for mobile learning. E-reader, it is pretty much only useful for one person to read on. Some are larger and don’t really travel as well as a phone. And some only have a grey display that couldn’t provide video or pictures. It also isn’t ideal for interactions.

4. List the 4 “core skills” the author identifies as necessary for 21st century jobs. Digital literacy, inventive thinking, effective communication, high productivity.

5. The word “ubiquitous” appears frequently throughout the article. Use an online dictionary to define this term. Present everywhere.

6. List the 4 areas in which learning must be redefined as more “learner-centered”. Engagement and motivation, individualization, collaboration, learning for all students.

7. What are 3 advantages of mobile learning? Supports individuality, supports collaboration, makes learning more engaging.

8. **What are 3 disadvantages of mobile learning?** Teachers must rethink their pedagogy, some students may not have technology, technology can malfunction.

### Web 2.0

- Watch this video: [What is Web 2.0](#) and define web 2.0 in 3 to 5 sentences. Two way communication between the website and the user. Instead of just the website providing info, the user also generates information. It also encourages communication between users. A great example of web 2.0 is social media.
- Visit my [Diigo Links on Web 2.0](#) and name 10 web 2.0 tools that you never used and why you think they would be useful in your future career.
  - 1.) Engrade: I could use this for an online assignment book and grade book so students can access their grades on their own.
  - 2.) Elgg: I could use this for interaction between students regarding material.
  - 3.) PodBean: I could use this and have students do podcasts to be listened to and responded to by other students.
  - 4.) EduSlide: I could use this if I miss a day and I could just assign a learning module to the students.
  - 5.) Writeboard: I could use this for students working on a collaborative project or paper.
  - 6.) Web-Chops: I could use this to provide only the information I want to on a webpage to students.
  - 7.) Yugma: I could use this to provide instructions in a screencast for students struggling to figure something out on a computer.
  - 8.) Knowitall.org: I could use this to provide multiple different ways of learning content instead of mainstreaming each student with the same strategies.

- 9.) Arcademic Builders: I could use this to allow students to play games and learn to take some of the stress of school off.
- 10.) What2Learn.com: I could use this to also allow students to play games for their learning, but this one records scores so I could use this for a grade.

## MOOCs

Write a short paragraph of your reaction to this video (5 or more sentences). (5 points)

I think this is a good way to allow people who don't have the time or money to attend an actual university to gain knowledge from a more credible source than some random person on the internet. However, I feel cheated for being burdened by student loans, and attending a state school when there are people who have access to Duke's professors for free. But aside from that I feel that this is a great way to educate the general public. I could definitely see universities doing anything in their power to either shoot this down, or make it cost money because they seem to want every penny. I was surprised to hear that many don't finish these programs, but I guess it makes sense considering there's no major monetary loss preventing them from stopping the course.

1. **What are MOOCs?** Online course aimed at unlimited participation and open access via the web.
2. **How did MOOCs get started?** At the University of Monitoba, all of the course materials were online and free.
3. **What are some examples of current MOOC programs offered by Universities?** Stanford Online, Khan Academy
4. **How are exams administered?** They are given online.
5. **What MOOCs have fees?** edX, Coursera, Udacity
6. **What MOOCs give credits?** edX, Virginia, San Jose State
7. **What are the completion rates?** 7-9%
8. **Who is taking MOOCs?** Diverse, but mostly English speakers in rich countries.
9. **How are MOOCs a "disruptive innovation"?** They change how higher education works.
10. **What is Coursera? What is their web site address?** A MOOC provider [www.coursera.org](http://www.coursera.org)
11. **What is Udacity? What is their web site address?** A MOOC provider [www.udacity.com](http://www.udacity.com)
12. **What is the Khan Academy? What is their web site address?** A MOOC provider [www.khanacademy.org](http://www.khanacademy.org)
13. **What is the role of technology in MOOCs?** All of the course information is accessed online, quizzes and exams are also online.
14. **What are the advantages of MOOCs?** They provide a free way to educate oneself, they also make the great minds of professors available to all with internet.

15. **What are the disadvantages of MOOCs?** They take money away from universities, and most people don't complete their courses.

## Chromebooks

**Please read the ENTIRE article below as it will help you do the following: for each of the 9 topics, list:**

- **The Topic**
- **Advantage or disadvantage or both**
- **Why it is an advantage or disadvantage or both:**

**1. Price:** \$200-\$400, this is an advantage because a mac can go for about \$1,000. If someone wanted this device they should be able to save the money up for it within weeks which is less than probable when trying to get another laptop on the market.

**2. Storage:** 32GB, but 100GB cloud storage. I would say this is a disadvantage because most other laptops have over 100 GB of local storage.

**3. Battery:** Around 6 hours. I would say this is neither an advantage or disadvantage, most laptops get about that much time on a full battery.

**4. Storage:** 32GB, but 100GB cloud storage. I would say this is a disadvantage because most other laptops have over 100 GB of local storage.

**5. Printing:** Requires google cloud print. This is a disadvantage because users have to become familiar with another application if they just want to print something out.

**6. Security:** Chrome OS has built in virus protection that is always up to date. This is an advantage because most people are forced to pay for virus protection.

**7. Software Applications:** No photoshop or Microsoft office. This is a disadvantage because many users want to have Photoshop or office readily available as they are very popular.

**8. Installing Software:** No downloads off CD's, just online. Disadvantage because a lot of users want to use a CD drive.

**9. Software Applications such as Office or Photoshop:** No photoshop or Microsoft office. This is a disadvantage because many users want to have Photoshop or office readily available as they are very popular.



