

Web-Enabled Devices.

- Discuss the growing number of distractions in a classroom and the importance of learning to deal with distractions.
 - Many people think that cell phones in a classroom or meeting or training session are distracting and should be banned. Should they really be banned, or should we start using them to our advantage? If we engage our students by using their technology to learn, aren't we doing better by them?
- What are 1:1 device initiatives?
 - In an office or corporate setting, 1:1 is pretty normal. Everyone has at least one laptop or desktop. The difficult trend in the corporate world is BYOD. How does a service or support organization support BYOD? Do they learn how to support whatever comes through the door? Do they try to place restrictions for security, or support reasons? If they restrict is that still true BYOD?
- What are some initiatives you are familiar with?
 - At HBS we fully support true BYOD. Particularly for faculty. In fact, every fiscal year each faculty member gets \$5,000 to spend on "research" but this money usually goes to technology purchases.
 - I helped in the planning stages of Hopkinton's 1:1 program. We had many discussions about the options of a 1:1 program and how to go about doing it. It's not as simple as just giving every student a laptop. What do you think are some of the questions that need to be asked, or the challenges that an administration faces when implementing 1:1?
- How are they going? What is used to evaluate these programs?
 - I think the measurement of any program like this is incredibly difficult. Particularly in a corporate environment. What sort of corporate metrics can you use that will work across the entire company? What ways can you measure employee engagement and productivity?
- What devices are being used?
 - Every device you can possibly think of. For example, at HBS we have faculty who are on the board of directors at major technology companies like Microsoft, Nokia, Google, etc. So they are constantly bringing the newest sometimes yet to be released technologies to campus and expecting us to support them.
- Discuss iPhones, Chromebooks, Netbooks, Smartphones, eBooks and other devices.
 - At a place like HBS where money generally is not a factor when making purchases, things like Chromebooks, netbooks, eBook readers, etc are not very popular. Something like the brand new Chromebook Pixel can come up a few times because it is a premier laptop with Chrome OS. But these devices are generally for lower budget schools who can't afford laptops for all

students. They are all great options but none of these provides everything that a student needs. Only a laptop can do that.

- How are 1:1 initiatives different from one another?
 - 1:1 initiatives differ in many ways, from what devices are being used, to how they are being distributed and paid for. Some schools have optional 1:1 programs, or tiered programs where students can pick from a standard set of devices. Additionally in some 1:1 programs the devices replace computer labs. In others, the 1:1 devices supplement the computer labs. What do you think is the most advantageous setup for a 1:1 program? If money weren't a factor, how would you set up 1:1 in your school or workplace?
- What are differences between school provided devices versus BYOD (Bring Your Own Device)?
 - In a BYOD setting the school has to be ready to accept any kind of device that a student brings. For example, a teacher can't necessarily do a Photoshop workshop because if a student brings an iPad or a Chromebook they are going to be limited or unable to participate. 1:1 allows for a standard device that is much easier to support, and easier to teach with. However, if students aren't familiar with the device they are given, is there an unfair learning curve for them to get over?
- Are these devices causing distractions?
 - Obviously. But it is increasingly important for students to learn how to succeed despite the distractions. Let the students learn when it's time to put the laptop away and pay attention. If a student wants to day dream or not pay attention, they're going to do just that. A laptop doesn't make it easier for them to not pay attention, it just gives them something else to do. Do you think teachers are responsible for engaging students enough to not create a desire to let their minds wander off? In other words whose fault is it that students don't pay attention? The students or the teacher?
- Lehrer discusses how the mind is most creative when there are many things going on (Imagine: How Creativity Works, Jonah Lehrer). How does this relate to the use of devices?
 - Is it possible that students learn better when they are doing other things? Think about it, if I don't have a laptop in front of me, I'm just going to put my head down and sleep. Then I miss everything. If my laptop is in front of me and on, I'm going to be awake, my mind is going to be working, and I'm probably going to catch a significant amount more of the lecture than I would if I slept through it.
- What "good" are they doing?
 - They keep students awake and engaged in *something*. It may not be the lecture going on in the moment, but at least they're not asleep missing the whole thing.
- End with discussion about varied experiences and backgrounds of students as it relates to technological use.

- One of the most controversial components of 1:1 or BYOD or computers in education in general is the unfair learning curve that they create. If a student is not a good typer, and they are required to use a computer to type their assignments or do any work, are they at a disadvantage. If a student doesn't know how to use Google Docs, is it fair to force them to use it simply because the school chose to give all of its students Chromebooks? Some students may be digital natives, but others may not be. Some may really struggle.

This is a Ted Talk by Mitch Resnick from MIT talking about the need to teach kids how to code. He makes an EXCELLENT point about how students aren't really all digital natives. Take a look at the video:

http://www.ted.com/talks/mitch_resnick_let_s_teach_kids_to_code.html

Here's an interesting infographic on BYOD:

<http://pinterest.com/pin/129830401728313023/>

Another infographic on Educational Technology in the U.S.:

<http://www.k12educationtechnology.com/2012/06/21/infographic-state-educational-technologies/>

Questions to consider:

1. How can you use web-enabled devices to "meet your students where they're at" and take advantage of their enthusiasm for those devices?
2. What do you think is better for the student? BYOD or 1:1? How about for the school/district?
3. What challenges might a 1:1 or BYOD program bring up that might not otherwise be issues?