

# Spring 2015: Do Tablets Make a Difference? Report on the Results

## Proposal

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- University Level Outcome/Fundamental Learning Competencies
  - Intellectual and Practical Skills
- Public Health Promotion Outcome
  - Demonstrate knowledge of public health and health education program planning; theories of health behavior; change assessment and intervention and multicultural influences impacting the delivery of public health interventions.
- Course Level Outcome
  - Students in HSCI 331 (formerly HSCI 237) must learn the concepts and principles of Public Health including the basics of epidemiology, the history of public health, community needs assessment, program planning, the responsibilities that define the scope of the Health Education profession, the ethical standards under which we practice, etc.
- Assignment or Activity Level
  - Students will gain knowledge on the Determinants of Health, be able to identify each determinant, provide an example of each, and be able to describe how the determinants of health interact and influence the health of individuals and communities. Students will be able to apply the information to their personal lives and community.
- What will you do with the iPad? What will students do? How will it compare to the non-iPad method?
  - I will lecture with the iPad and students will use the iPad for notes. Students will be required to go out to their community (CSUN, where they live, where they work) and document examples of the Determinants of Health (photos and video) with their iPad. Then using Storehouse, create a "story" that will explain the influence of the Determinants of Health on the health of individuals and communities.
  - In the non-iPad class in fall 2014, students participated in the lecture and an in class brainstorm/discussion. The students in the non-iPad class will have the same questions on the exam.
- How do you anticipate that the iPad will help students achieve this student learning outcome?
  - I think the students will have improved exam scores over the non-iPad course. Students will use the app Storehouse to complete a Determinants of Health assignment. Overall in the course, I expect students will be more engaged in class with note taking, participating in Socrative mini quizzes and exit tickets, etc.

- How will you measure the results?
  - Questions on the determinants of health will be included on midterm exam. I will compare the results to the scores of the non-iPad class (237/331) I taught in Fall 2014 as well as to the scores of the iPad class (237/331) I taught in fall 2014. I want to see if the scores are higher than the non-iPad class and I also want to compare the scores to the previous iPad class since in 2014, it was the first time I used this assignment and I want to see if the scores improve as I have more experience with the assignment.

## Results

- How well did the students achieve the outcome originally identified in Step 1? Think about the results you found after students engaged in the activity or assignment cited in Step 2. What do the results tell you about student learning?
  - The overall exam scores and points earned on the specific "Determinants of Health" questions did show differences between the iPad and non-iPad sections of Health Sciences 237/331.
  - The students in the iPad section scored higher on the exam overall and on the questions directly related to the assignment.

	Spring 2015		Fall 2014	
	Exam average	Determinants of Health Questions	Exam Average	Determinants of Health Questions
<b>iPad</b>	78.6	11.2	79.8	9.1
<b>Non-iPad</b>	N/A	N/A	73.9	5.3

- What do the results mean to you?
  - One important lesson I can take away from the class assignment and the assessment is that students really enjoyed the idea of learning something in class (via lecture or textbook) and then using their iPad outside of class to apply their knowledge on the subject. The "Storehouse" assignment not only asked the students to learn the material it also required the students to apply the content to their own world, therefore personalizing the learning process and the content of the class. I believe this activity allowed the students to see, in a much more personal way, how their personal health, the health of their families and of entire communities are impacted by factors such as the built environment, lifestyle factors, proximity and access to healthcare services, etc.
  - While I cannot be sure that the iPad made the difference in the exam scores, from my perspective, the iPad has many benefits and potential benefits. To me, one of the important take aways from this assessment and from this and past semesters teaching with iPads is that iPad students are "forced" to do something in class whether it is a quiz, a poll question, group work, a Moodle submission, etc. In traditional classes, students have more opportunity to sit and be a passive learner; they may not take notes, they may never raise their hand to contribute to discussion, they may never ask a question. The iPad allows for participation, engagement, and mini assessments throughout the semester.

- In spring 2015, some of the additions and changes I made to the class included adding regular Moodle uploads for credit, additional quizzes, and including mini-lectures and accompanying assignments posted on Moodle.
- Are there any content, course, or pedagogical changes you would make or recommend on the basis of these results?
  - In fall 2015, I plan to continue quizzes and Moodle uploads but I plan to increase the points possible for these activities.
  - I will assign the same Storehouse activity but I will make some changes. First, I will provide more in-class instruction and coaching on using the app. Second, I will instruct the students to provide more explanation for the photos and videos they take.
  - I will increase my use of mini-lectures so that I can free up class time for in-class activities.
- Concluding comments.
  - While not a preferred method for evaluation. A few weeks into the spring semester, I did check in with my students about how they were using the iPad and to ask how they thought the class and using the iPad was going. Student comments are listed below.
  - Additionally, at the end of the spring semester, I polled students about their interest in taking another iPad class in fall and the majority of students expressed interest and were enthusiastic about subsequent Public Health iPad courses.

## Comments from Students

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The following are comments from HSCI 331 students collected in class via Socrative in February 2015. All comments are presented exactly as they were written by the students.

- Question: "Please tell me a little bit about how you are using the iPad for this class. How is it going?"
  - I mostly use the ipad in class. for all the apps but im starting to use it to open documents in my other classes too. I like it.
  - its convenient to have an ipad in class, but i learn better when i hand write notes, so that makes it a little difficult. as well ss the many apps i have to get use to and use. apple produxts arent really my strong suite. but having an ipad is nice when you have to look up something or carry it around.
  - So far I have learned alot about the different ways of using my ipad. I'm definitely not a pro, but I find the step by steps posted on moodle to be helpful when I'm at home. At times because I am so new to the shortcuts I notice I fall behind during class and have to try catching up. By doing this I am noticing how much quicker I've become when accessing apps.
  - i use my ipad for when i need to study on the go. it is easy for me to access my notes and moodle if i have wifi connection. i dont like the concept of the ipad because even though we bought the device, we still need to buy the book. i bought an ipad for my previous bio class and a book wasnt necessary.

- I was a little weary about using an iPad for a class but so far I have been really enjoying using this as a resource for studying. At first it was a bit weird looking at my iPad for notes because I was so used to just writing my notes down and looking at them in the note book but now I have adjusted to using the device and along with the apps they have been very helpful.
- The fact that I get to use my iPad in this class to learn is very convenient. I don't have to carry an extra book, or look for loose leaf sheets with notes in them. I have all my work within reach based on what devices I have linked up to my iCloud. What I don't like is that due to the iPad being critical in this class, when I have forgotten it it defeats the purpose and to some extent there is no point in arriving to class since it's the backbone of the class.
- I enjoy using my iPad for this class, because I actually get to use it. I've had iPad classes in the past where I would get really frustrated, because some of the apps had to be used through a laptop. For this class it is different, because we do almost everything on the iPad and it is much easier than carrying a laptop. I've also learned more about the different things that I could do on my iPad!
- I really enjoy using it and it is very practical. I am able to open and edit files in Adobe which has been useful in other classes as well. I also paid a good amount of money for it, so I am happy that I am able to use it as much as possible.
- I still use the iPad only for this class. There have been no changes into my daily life with the use of the apps that we use in class. The only item I use for class assignments in other classes would be Explain Everything.
- I had mixed feelings about taking the iPad class initially. Honestly, I only use the iPad in class and for homework when I'm at home I like to use the computer or take notes by hand when possible. However, I find that the iPad was really helpful, like when we had the mini-lecture. It's also really convenient to have when I'm at school. Now that everyone is more familiar with how to use an iPad, I feel that this class is going very well.
- Using the iPad has allowed me to keep better track of my notes. The programs help me take better notes. When everything is so convenient because of the iPad it makes me want to do everything and actually look over notes that I would never look over, well maybe before a test I would. It is so much better when everything is on and iPad because you just have to open it rather than turning on a computer. I have also learned so much about my iPad I am able to use it more effectively in everyday life and in other classes.
- Since the class started, I have noticed that I like to use my iPad for many things such as notes and PowerPoint lectures for my other class. It's easy and lightweight to pull out of my back pack at any time. I have learned about many of the features that iPads have to offer. I really like the Explain Everything app because I can take notes on it and add other slides. Also, since I have to carry my iPad everywhere I will take notes from my phone or laptop and save them on my iCloud so I can have it on the iPad for another class or for future use.

- so far so good! i use it for note taking and staying organized
- At first I was nervous about using an ipad for class but i have found it to be useful to in class. Even though I can take notes in the ipad i still however write notes in my notebook. I find that the ipad is useful to have for other classes as well i notice that i am constantly checking my moodle etc. Overll i have enjoyed it so far but still prefer paper and pen.
- My used and experience with the I Pad has been a good experience. I enjoy having everything available for me right in my purse- because I carry it almost to everywhere-. I feel empowered when I work with different apps and get the job done. The I Pad is not only helping me with this class but also I am able to use it in other classes as well. I like the fact that I can use this way of technology to get the job done.
- The i pad is not going so great with me in this class. Most times i feel that i spend more time trying to figure out the difficulties i face or how to operate the i pad than actually studying for this class.however i pads are helpful because they are more convenient and easy access to internet.But interms of class work with i pad its not so great.i dont think i would take an i pad class in future.
- It's going good! I really enjoy using the iPad in the classroom because I can follow along your lectures through the Explain Everything app. I think an issue I have is a way to directly upload a word document to moodle from my ipad without having to use the box app, but I can always just access a computer for that.
- I am using the iPad for studying the materials we are covering in the class, and taking notes on it.
- I enjoy using the ipad. In the begining of the semester I was nervous because I am not good with technology, but I believe it is pretty easy to navigate this class on the iPad. I also enjoy being able to take notes directly on the powerpoints using explain everything.