

PANDORA EE 233 Student Focus Group¹

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INTRODUCTION

On March 6, 2003, two staff members from the Office of Educational Assessment (OEA) convened a focus group consisting of five students currently enrolled in the EE233 on-campus course. The purpose of the focus group was to gain feedback on the supplementary lab videos and online instructional materials created by the Pandora Program. One OEA staff member facilitated the focus group while another took hand-written notes. All students signed a consent form before they agreed to participate in the focus group. There was no audio recording of the conversation.

RESULTS

Lab Videos

Students were asked the following questions:

(Most students reported that they only viewed the first two videos.)

Did you find the lab videos to be helpful to your coursework in EE233? Why or why not?

- Videos were sometimes helpful
- First video bad—a lot of detail but didn't tell how to set up first lab
- Thought video would talk more about instrumentation and it's general functioning
- Expected video would instruct at a higher level
- Seemed to present irrelevant information

How often and for what reason/s did you access the lab videos?

- Instructor recommended that they watch videos
- Students watched first two videos and then stopped watching
- Equipment is now different from that in video

Were the lab videos clear and engaging?

- Sometimes video was fuzzy
- In second video, voice echoed
- Need high speed internet access to watch
- Speaker wasn't bad—kind of passive but "if she was peppy that would be bad"

Is there an advantage to using the lab videos over consulting with an instructor or TA?

- TA/instructor is better, but students would take advantage of video if improved
- If improved video to show how everything hooked up, it would be better
- If video saved students even an hour of troubleshooting, then it would be worthwhile

¹ Submitted as part of the evaluation of the Pandora Program.

- Students don't want to waste time—a lot of wait time in lab
- First video should have step-by-step instruction
- Always do repetitive steps later in labs—at beginning need steps, not later

What suggestions do you have for improving the lab videos? Would you like to have more lab video instruction available in the future?

- Have expert teach how to set up lab so students know how to do it
- Wanted hints on how a circuit should look
- It would have been helpful to get a visual to show how the equipment should look
- Speaker in video is left-handed—problem is that her hand covers writing so students have to wait to see the information
- Give students options (e.g., “If you want to know what to do, watch this video.”)
- Show circuits on the screen instead of having camera solely on speaker
- Students want step-by-step instrumentation, instruction, and examples

Online Materials

Students were asked the following questions:

(Responses were based on one student who accessed the online materials this quarter, and other students' previous quarter's experience with the online materials in EE215.)

Did you find the online materials helpful to your EE233 coursework?

- Most students unaware that they have access to online materials
- Instructor did tell them to look at the online materials but only one student did so
- Practice test available but students didn't explore
- Students felt there needs to be an obvious link to online materials on course website
- Format problem: Student had answer but had to experiment with how to enter the equation in a way that the program would accept. Need standard form and formatting instruction.
- One student mentioned that online materials were helpful at the beginning of the quarter compared to class instruction.

How often and for what reason/s did you access the online materials?

- Once TA started helping, one student didn't feel the need to access the online materials.
- Teacher needs to reinforce that there's a tutorial. Last quarter, teacher forced students to go online to do problems.
- Students this quarter forgot about online materials

Were the online materials clear and engaging?

- On small screen computer at home, couldn't grab and pull items easily
- Need icon to scroll
- Practice problems are helpful

What is the advantage to using the online materials over a textbook or lecture material?

- Online materials can't replace professor but “we need everything!” (i.e., any supplementary assistance useful)
- Textbook: two students liked; three students didn't like

- Textbook negatives: normally professor tells students to buy book and students can read as backup; 233 book not useful
- Textbook positives: new instructor teaches out of book; book not an intimidating format

What suggestions do you have for improving the online materials? Would you like to have more online materials available in the future?

- Students want as many examples that they can get—need more practice problems
- Students like the lecture and the instructor—feel that online instruction would be boring
- Materials need to mention common mistakes; Idea: think of 10-20 common mistakes that students make and put them in the video
- Idea: videotape teacher so that students can watch later—could reinforce lecture and help students get what they missed the first time around
- Students ask other students for help before they go to TA
- Need to have a way of getting assistance and need specific help—EE is a difficult subject
- Instructor teaches theory; TA gives practical applications
- TA more at students' level; provides practice problems; explains hard problems; takes a different spin on information

CONCLUSIONS

Overall, the students in the EE233 student focus group find EE to be a challenging subject and would like to have as many supplementary assistance materials available to them as possible. Students expressed an awareness of the pivotal role that the instructor and TAs serve in their learning, but were also able to see the utility of improved lab videos and online materials.

While the students did not consistently utilize the lab videos, they responded that they would use videos if they were improved. The main improvements that they wanted to see in the videos included: more explanation of how to set up the labs and instrumentation assistance; and more examples of how to approach challenging problems. Likewise, while only one student in the focus group reported that he had accessed the online materials this quarter, all were in agreement that additional online practice problems would be helpful for their learning. Suggestions for improving the online materials included: provide more practice problems; have instructor give incentives for students to access online materials, make a clear web link to online materials; and fix answer formatting and scrolling problems.