CIS 610 Teaching Effectiveness
Fall 2021 Week 2

Agenda

Check in – [discussion] How did the first week go? Tips from the text people tried:

- setting a welcome, opening tone
- visit the classroom ahead of time
- introduce yourself to class; set a welcome, opening tone
- ask student what they hope to achieve
- invite questions (explicitly)
- invite students to office hours
- start learning names

Check in – What do you do if you don’t know the answer to a question asked in class/lab?

- This is ok!
- Work on it with the class.
- Ask the class.
- Suggest resources.
- Get back to them.

Topic 1 – In the classroom – leading a lab or discussion (prepare/deliver/reflect)

Break

Topic 2 – What are the skills/traits of an effective teacher?

Handouts – Ten Methods to Get Participation at Any Time; Advice from GEs
Recall: Here’s what we did last time – First days of class

(0) Organizing and Coordinating

- Visit the classroom / tech check with available equipment.
- Check in with the class instructor and other course GEs about what material is to be covered in the lab/discussion section.

(1) Start Preparing

- Read the material the students are reading.
- Look ahead to next week’s material to provide context and direction for current material.
- Create/review the lab outline and run through any problems you will be covering.
- Choose 1-3 suggestions from Ch. 3 and 4 of Tools for Teaching to try.
- Practice delivering the material, to friends or zoom recording.

WE ARE HERE.

(1) (More) Preparing – Designing a learning experience.

You’ve read the material for this week and next, and started working some of the problems yourself. Now what?

- PROMISE, then DELIVER
- Try for a student/beginner perspective.
- Determine key concepts.
- Think of helpful examples, extra problems, leading questions.
- Anticipate questions and difficulties students might have and think of helpful responses.
- How will you check in with students; how will students participate?
- Leave time for redundancy, student questions, checking in.
- Prepare written materials, to emphasize/enhance spoken presentation, and for students to refer back to.
- Practice your presentation, in the classroom (including REMOTE classrooms) or a similar space. Check your tone of voice, speak slowly, breathe, pacing over the time available, etc.
- Review student names.
- Have a backup plan for non-working equipment and other problems.
Based on ‘Asking Questions’ chapter in the text – anticipate difficulties students might have in this second week of class, for example:

- technological issues
- understanding the assignment
- syntax issues
- not being sure about grading standards

(2) Deliver - in the classroom – where your good preparation will pay off.

- Check demeanor and attitude – eye contact; speak to be heard, slowly. (TT p.153: vary pace; project; vary intonation; pause; no “um”s; breathe)
- Tell the class what you are going to do (the promise), then do it (deliver), then review it.
- Provide a map of topics you’ll be covering
- Say it/write it/show it (as per your preparation)
- Ask questions about it (as per your preparation – 10 methods to get participation)
- Use verbal markers and checkpoints.
- Leave time for recap and questions and walking around and checking in.

(3) Reflect – as soon as possible after class

- What went well?
- What would you do differently next time (material; presentation; delivery; questions)?
- Refer to Tools text for ideas
10 Ways to Get Participation Any Time

• open discussion
• response cards (can be handed in for anonymous presentation) [Zoom/private chat sort of]
• polling [Zoom pre-prepared polls]
• subgroup discussions [Zoom/breakout]
• learning partners and think-pair-share [Zoom/breakout]
• go around the group and obtain short responses to key questions [Zoom/tricky handoffs]
• panels
• fishbowl
• games
• calling on the next speaker (new speaker summarizes prior speaker)

AVOID: Any questions? Does everyone understand? And yes/no questions generally ... try for open-ended questions that will show student understanding.

Advice from former CIS 610 GEs:

“Prepare well.”

“Read the textbook as much as possible, even though you are not asked to. It is a really good resource and has a lot of handy tips.”

“I wish I had an idea of questions that would come up in class. I wish I had taken time to watch somebody else teaching the topic I was going to teach.”

“Prepare your lesson and try to predict the areas that will cause problems for the students so that you can focus on them during lecture/lab.”

“Try to identify common problems and teach the whole lab, rather than each individual separately.”

“If you are going over a problem, solve it beforehand (and don't leave your notes at home)!”

“Walk around the lab and ask students how they are doing on projects. This lets them see that you are interested.”
**Topic 2 – What are the skills/traits of an effective teacher?**

We summarized these into four general categories:

1. Knowledge of/experience in area **AND**

2. Ability to convey knowledge to others -- representations: examples, illustrations, analyses, explanations, demonstrations; awareness of what makes concepts easy or difficult; common conceptions or preconceptions; common errors on the way to understanding, etc.

3. Good people/communication skills [friendly, empathetic, etc.] **AND**

4. Good classroom skills [enthusiastic, organized, etc.]

*Text ch. 16: “Research has shown that student achievement correlates most highly with two characteristics of effective teachers (Feldman 1989). One is preparation and organization. The other is clarity and “understandableness”. [2 and 4. Presume 1, 3 is great, especially remotely.] So this is what this seminar focuses on: the fourth and to a certain extent the second of these points: general teaching skills in a computer science context.*

*Overall our approach will be practical and hands-on (rather than pedagogical). (Student who are interested in more pedagogical aspects should see me and/or consider a project focusing on computer science education.)*

Does good teaching use common sense? [sure – though common sense can be tricky]  
Can good teaching be learned by observing? [yes, this helps]  
Can good teaching be learned by doing? [yes, this helps]  
Can good teaching be taught? [YES – this class, for example – learn from others’ observations, experiences, knowledge, ideas as well as our own – faster, better]

**CIS 610 Teaching Effectiveness Seminar Fall 2021**

**Class mission:**  
Facilitate the acquisition and improvement of teaching skills to support excellent teaching and learning.

**Expected learning outcomes for students in this seminar:**  
- Reflective component – a teaching philosophy; awareness of your teaching  
- Effective component – ideas for improving your teaching; a “teaching toolkit”

**Strategies for achieving these learning outcomes:**  
- class meetings/discussion  
  (check-ins including challenges, topics per syllabus, readings)  
- short weekly assignments: hands-on experience/reflection  
- project - mainly second half of term but think about it now  
  (proposal due week 4)

*“With Aristotle we declare that the ultimate test of understanding rests with the ability to transform one’s knowledge into teaching.”*  
- Lee Shulman, educational psychologist