

## Peer Observation Reflection #1

**Today I observed Biology 304: Fundamentals of Ecology.** I chose this course intentionally as it was a some-what larger class (200+) and claimed to use the 'clicker technology' which I had not yet seen in action. I was curious....

The learning environment was fairly standard for a large, lecture style class: comfortable chairs, dim lighting, big overhead, students filing into seats some with just notebooks, others with laptops, others with nothing. It is a newer classroom, so I'd say the physical environment was pretty good.

The prof began the lecture and it was immediately clear that he was quite relaxed and had an infused sense of humor, although he had a slight tendency to mumble occasionally. His body language was relaxed and open, he moved around the floor of the lecture room a fair bit, but generally kept eye contact with the class and appeared engaged in his teaching.

The lecture started with a central question, which was a nice way to frame the goals of the lecture that followed on the next slide. The prof was very organized about the overhead notes: type outlined in blue-boxes are key course concepts which are the main course overall objectives, blue type = terminology and definitions that students are required to know for the course, red type = associated readings students are expected to do. I quite like this level of organization as it allows the students to look back on the notes and really grasp what it is they should focus their study efforts on and having clear outlines of what they should know.

Not long after the outline of objectives, there was the first clicker question! The prof chose a very nice open question (no right or wrong) that is the type to prompt discussion and debate. The students were asked to discuss their 'click decisions' in groups of 2-3. This was great – much discussion was prompted and there was a little timer on the overhead which was nice to give students a short time frame to work in (2mins). It appeared most of the class was engaged, however there were still students in the back on email and photo texting. Afterwards some of the responses were discussed as a whole class with the prof facilitating. This all worked rather well.

The rest of the class went smoothly. There was not a huge amount of content, and it appeared the content had been chosen based on some responses students had to pre-assigned readings. Ie. the prof was able to identify areas of confusion and clarify them through the lecture. Very cool. There were more clicker questions which were quite effective. Only 3 in total.

Overall it was really interesting to observe this class. It was given in a style that was rather different from what I remember of larger 'survey-style' courses I took in my undergrad. The prof was humorous, clearly knowledgeable in this field (able to come up with on-the-spot examples in response to questions), and relatively engaging. I certainly can see the benefit of observing classes as it gives one an opportunity to sit back and really think about teaching techniques and delivery and learning aides etc. At the end of the lecture, the prof's assistant was asking for feedback on this new style of course layout. It appears they must have recently revamped this course with hopes to improve it and implement some new teaching techniques.

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## BIOL209 – **Non-Vascular Plants**- Lecture Observation

This is a lecture offered outside of my department and plants is not really within my area of study. However, seeing as it's an intro biology course, it's not that far off from my field of interest. I was interested in observing this course because, since having participated in intro biology courses in my undergraduate, I haven't been in an introductory type biology class setting since. I was curious how this class was organized/run and how it might be different to the recently revamped, quite impressive 300 level ecology course I observed last time.

This lecture is a large lecture style – class size approx. 200+. The teacher is an assistant prof – who I see hasn't taught too many courses...so it is interesting to see an instructor more at the beginning of their career. The teacher begins by mentioning that there is an upcoming optional fieldtrip to observe specimens that I assume the class is studying. This is a likely a nice way to apply some of the learning material to a real life context. I wonder how much attendance they get.

The teacher is not miked, he is projecting his voice, which is fairly effective once the class settles down. He began very quickly with sort-of bridge – but he did not present it in a very captivating way. I mostly missed this first example which would set the theme for next activity. For a large class like this, I think some sort of attention grabbing start is necessary.

Teacher is using an PPT pres in combo with writing notes on overhead (old school). I quite like this form of lecturing as it forces students to take notes and see the key points as they emerge from their own discussions and brainstorming.

Teacher does a brainstorming activity: poses a question, has students suggest reasons why certain forms may be advantageous/disadvantageous – at first no suggestions from crowd – so he answers his own question. However, he is good at leading questions, posing reflective questions from the few 'one-word' responses from students. Eventually, more class participation emerges, questions are posed.

Oh – here comes a clicker question!! Fill in the blanks, gives them one minute. Interesting, the responses are across the board, indicating that the collective class is not certain. He then works through the problem on the overhead, using a diagram and leading questions. Then goes back to the question and helps class go through finding answer. Quite effective. I actually learnt how to answer this question and understood the process clearly.

Overall:

- teacher is fairly knowledgeable on the subject – able to explain situations, draw useful diagrams, answer questions...explain things (this is important for this class as much of the material is rather detail oriented).
- the teacher character is average. His personality is not super captivating which detracts slightly from the energy of the lecture. He obviously loves his topic, but isn't really conveying the information in a "isn't this cool" kinda way. Could show more enthusiasm for topic.
- lecture material is rather full of detailed information – he does a good job of covering this and explaining things. But it could be jazzed up with some audiovisual or something.

I really am starting to see, that for detail oriented learning objectives, it is really crucial to have a good understanding of the subject matter. This makes me reflect on my desire to teach – what field of knowledge am I learning within and would like to teach within. This is still not entirely clear to me. Where will my area of expertise lie? It still feels very restricted by my learning scope which is so focused at the moment.

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### Peer Observation #3 – CONS 486

I decided to observe a upper level 400 course (also offered as a graduate 500 level option) course taught by my supervisor – CONS 486 – Fish Conservation and Management

The environment was a small classroom of approx 30 students, good physical set up in a smaller room, semi circle seating, students close to instructor and overhead. Overall, the potential for an 'intimate and interactive' classroom was very possible.

The format of the lesson would be considered a traditional lecture. The instructor is an engaging personality, very knowledgeable, humorous and personable. He used only an overhead projector to write notes regarding what he was talking about along with one handout to illustrate some diagrammatic concepts (old school teaching!!). I had a hard time trying to assess the effectiveness of this lecture. With my growing pedagogical toolbox, I can certainly see the potential for his lecture to be enhanced by more interactive activities, some audio visual aids, discussion, group work...etc. Just listening to instructor speak is a bit of a focus challenge at times. However, because not all information was on the overheads, one needed to remain engaged in the note taking process. Also, because prof is close to students, the 'lecture' feels a bit more like a discussion (just largely one sided). He made good use of leading questions and personal/research antidotes, and students were familiar with the material so they participated and responded to questions often. I can notice though, that not all students are really engaged. Is that just those students? Would a more interactive environment engage them? I'm not really sure. I've TAed some of these students, so I know many of them are just more introverted by nature.

For this lecture however, the context of the course is important. There is a 2hour lecture and also a 2 hour tutorial. The instructor is also present at the tutorial and this time is used for group discussion of papers, student presentations on papers, more contextual application of lecture concepts. So this aspect of the course allows for more interactive, creative, reflective activities. Does that then justify the 'traditional lecture' format in the session I attended who's primary function (I'm assuming) is to introduce core concepts and material that will later frame discussions? My response would be – sort of.

I think that the general format of a 'lecture type' lesson would be acceptable because there is another opportunity to engage in a more intimate interactive manner. However, this particular instructor's lecture style could be greatly enhanced by perhaps making more of a connection between 'core concept' material and the specific reading material from discussions. Also, the engagement of students might be enhanced by soliciting more of their direct involvement/feedback throughout the lecture. Finally, I found it quite hard to grasp some of the key 'take home' points of the lecture – what is it the instructor wants students to learn? Clear learning objectives would perhaps guide lecture flow and continual summary of concepts.

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## Teaching Peer observation #4 – ENRN 200

I decided to sit in on this ENVR 200 course as it is the type of course that I imagine I would love to teach. My undergraduate degree was in an environmental program that consisted of many similar ‘core courses’ but I was unaware until just recently that a similar environmental science program existed at UBC. Here are the details for the course:

### Learning Goals

By the end of this course, students should be able to:

#### **Basic scholarly skills:**

- Iteratively monitor and improve their own process of learning
- Find relevant information regarding environmental science topics
- Identify and evaluate the sources of environmental information, and their potential biases
- Formulate and ask relevant questions
- Synthesize environmental information from a variety of sources and viewpoints
- Understand and differentiate among the range of media types (newspaper, radio, TV, position papers, research papers.)

#### **Communication skills:**

- Communicate a coherent synthesis, both orally and in writing
- Defend a position, on an environmental issue, that is not necessarily your own viewpoint

#### **Group Work skills:**

- Effectively contribute to group projects as a group leader
- Effectively contribute to group projects not as a group leader
- Evaluate the work of other groups, from an external perspective
- Evaluate the work of other individuals

The instructor starts the lesson – she announces that this class will be a review class – they are going to discuss what the course covered, how the students felt about the course, what went well, what didn’t. I like this idea – a reflective feedback type session. Likely very useful for the instructors.

The class size is approx 25+. Classroom size is decent. All the students are sitting at the back (classic). The chairs are fixed, which is unfortunate, it would likely be nice to be able to move seats around so students can face each other – better for discussion. Teachers appear very relaxed, conversation with students seems casual and relaxed.

The structure of the class is a discussion. The teachers had the students number off, 1 through 6 and then the students all rearranged themselves in the room to form small discussion groups. The discussion topics are: which of the top 3 learning goals were best achieved, which are the bottom 3 learning goals that were less achieved, and why. Instructors are drifting around the room, joining groups to listen in to conversation. Students are definitely discussing within their groups, so group dynamic appears to be working. I imagine that this format was used throughout the course to discuss class topics. Towards the end, the instructors stop by each group to just ‘check in’ and see that each group is ready to wrap up and share their discussion points.

Instructors close the discussion and pull out an excel sheet to “collect data” on the information that was discussed. One instructor facilitates, the other types info into the excel sheet. Each group’s findings are entered into sheet:

Achieved learning goals:

- asking relevant questions (3 groups)
- Synthesize environmental information from a variety of sources and viewpoints (3 groups)
- defending a position (6 groups)
- finding relevant info on environ topics (3 groups)
- Iteratively monitor and improve their own process of learning (2 groups)

Least achieved learning goals:

- evaluating the work of others (4 groups) – didn't always have the opportunity to do this
- asking relevant questions (1)
- not everyone had the option to be a group leader (3)
- Understand and differentiate among the range of media types (4 groups)
- Iteratively monitor and improve their own process of learning (2)
- Identify and evaluate the sources of environmental information, and their potential biases (1 group)

Now the students discuss why they chose what they did. Discussions are very much student led – students respond and add points on to each other. It does appear that comments come more frequently from a few students – but a pretty good scope of responses from different students. Students appear very honest with their responses, they are sharing their criticisms of the course very openly. I can also see that there are some students on facebook (I can see 2 from my spot here). Really interesting to see how some students will bring something up as a 'less effective teaching technique' and then another student will take the same point and say how they felt it was useful. Clearly, this reflects the diversity of learning styles!

**Students bring up:**

- wanting more information from a perspective other than environmentalist – ie. economic, commercial
- would like to know what presenters are going to present on – would allow them to better prepare questions
- textbook mentioned to not be especially valuable to the class. Would like resources that are more dynamic. (this makes me think of a wiki type resource that could be made available). Prof brings up that they are considering an on-line textbook. Others say they liked the textbooks, that it provided a good reference for subjects. Cost was brought up. Environmental issues are constantly evolving, so the value of keeping of the text is little.
- students would like to have access to the presentations from presenters
- liked it when presenters offered areas to go to for more info
- peer evaluation would have been appreciated at earlier stages of projects and papers.
- formative feedback was super useful and students mentioned that they would use it to inform their next assignments

Overall, I am really impressed by this session. I have never experienced such a constructive feedback session in an university courses. This session must be hugely informative to the instructors, but also quite useful from a reflective perspective of the students. They get an opportunity to see how each other struggled through the material – what others enjoyed, what others didn't.