

# Lecture Plus: How to Lecture More Effectively

Selçuk Doğan<sup>1</sup>, Iliya Smithka<sup>2</sup>, and Douglas Whitaker<sup>1</sup>

<sup>1</sup>School of Teaching and Learning, College of Education, University of Florida

<sup>2</sup>Department of Geology, College of Liberal Arts and Sciences, University of Florida

## Purpose

- Many of the 10 participants in the larger Teacher of the Year winner study reported they used lecture in their courses
- We sought to identify the ways lecture was used among these participants and the reasons why lecture was chosen as a teaching strategy

## Conclusions & Implications

- The participants that relied heavily on lecture did so intentionally and augmented it with other strategies (detailed below) to address some of the common criticisms of lectures
- Lecture served as an important strategy for teaching content and the extent of its use is consistent with the level of emphasis on content within the discipline

## Findings: Intentionality

- Participants often used lecture to teach content.
  - *I really just think ... what do I want them to learn and then try to make sure that the reading that I assign and my lectures kind of are catered towards helping them achieve those things. [P1; I1; 34:14-21]*
- Lecture was used as a way to address student needs.
  - Lecture-based courses can prepare students for future courses and tasks.
    - *I have a really baby step kind of [approach] where I'm trying to figure out where students are at each step of the way and move them to the next level. So there's not a magic way that I can do that ... The other thing that I do is I talk to the students. [P3; I2; 10:37-43]*
  - Participants also were attuned to their students as an audience.
    - *I often stop during lectures after I talked about something, and I'll ask questions of the class at large to see if they've followed along. [P4; Int1; 11:38-12:11]*
- Lecture allowed the participants to control the pace of the class.
  - *Look, if you use the board, you cannot write any faster than your students can write. You will automatically be working at their pace if you use the blackboard. [P9; I1; 7:29-32]*
  - *I think I focus a lot on pace. I think the pace is, okay, maybe a little boring, but the pace is fine. And I think the interaction with the students is good ... they feel comfortable with me, and if they're stuck they don't feel inhibited to ask me. [P3; I2; 11:23-27]*
- Lecture was sometimes paired with formal assessment to identify the appropriate level for the class.
  - *It's kind of an art ... you know, giving a quiz. First quiz was too easy, second quiz was too hard, now I've hit my stride everything else from there ... It's this adaptation and ... I'm really in tune with that ... on a real time basis. [P3; I1; 6:164, 166-167, 169-171]*

## Complementary Strategies ("Plus")

- Participants use questions to ensure students are understanding (informal assessment).
  - *Well. My main intention is to see through it that the students are paying attention on what is going on in the class. I want them to follow with me as effectively as they can. That is why I do the questions. The questions are, in essence, saying "are you listening to what I am talking about? Are you paying attention?" and most of them are, some are not, following along [P4; I3; 14:2-15]*
- Demonstrations/Experiments commonly support lecture in the sciences.
  - *One of my goals, in addition to teaching, it is to make [the class] a good experience. ... That's what the demos and all this [is for,] because that does stick with them ... learning doesn't end at the university level. We would like them to have that [experience.] [P3; I2; 11-12; 36-42, 1-9]*
  - *Any demonstration I do is intended to support the lecture at hand. All the time. It is an integral part of the lecture. [P4; I3; 15:40-45]*
- Participants used more discussion and hands-on activities depending on the goals for the course and their field.
  - *So you can talk about that until the cows come home, but if you have never done it, you know that is when the little things come up [P5; I1; 7:12-14]*
- Other Engagement Techniques
  - One participant would fine themselves for mistakes to keep the class engaged.
    - *... there's a little fine system ... because of the way I'm doing this, what I write on the board has got to be correct. ... so there's a little system that if I write an error on the blackboard and the students catch it and they point it out then ... for each error I make, I have to take a dollar out and lay it on the table. And those dollars accumulate. And for the final exams then I bring cookies, and that's how- that's where the fines go to. [P9; I1; 10:13-42]*
  - Clickers have been popular in lectures, too.
    - *... clicker will give me immediate feedback ... [P2; I2; 27:6]*

Participant 1 • Participant 2 • Participant 3 • Participant 4 • Participant 5 • Participant 9