

# Generating Effective Feedback from Demonstration Lectures

**WATERLOO**  
**ENGINEERING**

[engineering.uwaterloo.ca](http://engineering.uwaterloo.ca)

Gordon Stublely, Engineering  
Julie Timmermans, Centre for  
Teaching Excellence

Opportunities and New Directions  
April 2013

# Outline

- Workshop Description
- Student Observations
- Session Impact
- Summary

# Workshop Description

**WATERLOO**  
**ENGINEERING**

[engineering.uwaterloo.ca](http://engineering.uwaterloo.ca)

# Setup

- **Objective:** Observe a “novice” lecturer from student perspective to develop constructive feedback
- **Participants:**
  - five 4<sup>th</sup> year mechanical engineering students
  - 16 faculty observers
  - 2 facilitators: “novice lecture” , guide student/faculty discussion

# Simulated Demo Lecture

- “novice” lecturer role played
- 10 minute topic taken from a 4<sup>th</sup> year ME elective course
- Intended attributes:
  - Emphasis on complete derivation of equations
  - Focus on comprehensive content and board
  - Limited focus on students
  - Expert knowledge, background, vocabulary

# Discussion

- Student Observations (30 min.)
  - 5 – 10 minute reflection
  - Group discussion of lecture experience
- Strengths and Weaknesses (10 min.)
  - brainstorming with complete group
- Action Plan: building on strengths (20 min.)
  - Observer group work: 2 habits for adoption, 1 long term vision

# Student Observation

**WATERLOO**  
**ENGINEERING**

[engineering.uwaterloo.ca](http://engineering.uwaterloo.ca)

# Themes (students)

- Note – taking
  - board: flow into notes
  - pace: verbal and written
  - clarity: verbal and written
- Interaction
  - eye contact
  - “no welcoming space” for interruptions
  - “big picture not clear”



# Observer Questions

- Would visual highlighting help?
- Would handouts help?
- Would PPT help?
- Would it be helpful to have students contribute to derivation?
  
- Focus on “how-to’s” of instruction

# Session Impact

**WATERLOO**  
**ENGINEERING**

[engineering.uwaterloo.ca](http://engineering.uwaterloo.ca)

# Post-survey

- 5 months after session
- 3 questions:
  - Intended session outcome?
  - Influence on teaching?
  - Influence on collegial discussion?
- LEARN community page – Survey
- 40% participation rate

# Results

- Intended session outcome:
  - effective feedback on lecture
  - awareness from student perspective
- Impact on teaching practice:
  - focus on student learning context
  - easily adaptable “best practices” as habits
- Impact on collegial discussion (80%)
  - reflect on impact on student learning

# Summary

**WATERLOO**  
**ENGINEERING**

[engineering.uwaterloo.ca](http://engineering.uwaterloo.ca)

# “Take Aways”

- Positive partnerships
  - Students and faculty observers
  - Facilitators:
    - Discipline “expert”
    - Instructional developer (CTE)
- Lasting impact



**WATERLOO**  
**ENGINEERING**

[engineering.uwaterloo.ca](http://engineering.uwaterloo.ca)