Instructional Strategies for Student Learning

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CTL
Workshop outcomes

Outcomes:

1. You will be able to discern appropriate instructional strategies to match intended learning outcomes.

2. You will be able to incorporate active learning strategies to break up lectures and other modes of information delivery.
Which of the following instructional activities do you think would be most effective in meeting today's learning outcomes?

- Listen to a lecture about classroom activities
- Experience some instructional strategies for myself
- Examine and select activities on the outcomes I have for my students
- Brainstorm with my tablemates about possible activities for my class

Text a CODE to 37607  Submit responses at PollEv.com/instrategies

Total Results: 0
What does it mean to understand?

- We are encouraging a view of teaching that is clear about “what it means to ‘understand’ content in the way we want it to be understood and what kind of teaching/learning activities are required to reach those kinds of understandings”

(Biggs & Tang, 2007, p.19)
How do our students obtain that understanding?

1. Creating learning outcomes that use specific verbs identifying what your students should know or be able to do.

   Students should be able to identify…

2. Choosing teaching and learning activities that allow students opportunity to experience or engage with material related to the learning outcomes.
Overview of instructional methods & strategies

Instructor-Centered
- Lecture
- Structured Overview
- "Think-aloud"
- Didactic Questioning
- Panel/Guest Speaker Model

Interactive
- Debate
- Role Playing
- Student panel
- Brainstorming
- Peer Partner Learning
- Discussion
- Co-operative Learning
- Group assignments
- Think, Pair, Share
- Jigsaw
- Send a problem
- Interview a classmate

Students learn through an instructor’s direct transmission of knowledge and monitoring of its successful acquisition

Individualized
- Case Studies
- Concept Mapping
- Writing to Inform
- Compare/contrast
- One Minute Feedback
- K-W-L Chart

Students learn through working on their own, possibly with self-selection of rate, method, topic, content

Experiential
- Field Trip
- Simulation
- Games
- Survey
- Interviewing
- Community Service Learning

Students learn through involvement in authentic or simulated situations

Interactive
- Students learn through working with other students and the instructor

Experiential
- Students learn through involvement in authentic or simulated situations

Individualized
- Students learn through working on their own, possibly with self-selection of rate, method, topic, content
“[T]he teacher’s fundamental task is to get students to engage in learning activities that are likely to result in their achieving those outcomes.... It is helpful to remember that what the student does is actually more important in determining what is learned than what the teacher does” (Shuell, 1986, p. 429).
Activities for a specific kind of understanding

Sociolinguistics (300-level course)

- **Outcome**: Students can *explain* in their own words how social variables correlate with language use

- What activities can support that learning?
  - Assigned readings
  - ‘Double-response reading check’ before the lecture
  - ‘Lecture’ (explain how language correlates with social stratification, give examples, questions)
  - ‘Group discussion with passport’
**Course Design Organizer – EDPY 501**

**Course:** Introduction to Research Methods  
**Level:** Master and PhD students

<table>
<thead>
<tr>
<th>Module Goal: Experience interpreting and discussing issues in research through authentic tasks</th>
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<tbody>
<tr>
<td><strong>List Learning Outcome(s):</strong> Students will design, deliver and analyze questionnaires</td>
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</table>
| **Teaching / Learning Activities**  
Designing, setting-up, answering, and analysing a questionnaire | **Assessment Tasks, Products** |
| **Resources:** Questionnaire found online and used by instructor in his or her own research  
Chapter 12 on questionnaire design |
Considerations when selecting instructional strategies

- Start small: use one or two techniques as “lecture breaks”
- Adapt them so that they address learning outcomes in your class
- Consider the learning context
  - Student characteristics
  - Program of study and course content
  - Physical environment and resources
- Consider your strengths, limits, and comfort zone
Why lecture breaks?

- To mitigate lapses of attention (Bunce et al., 2010)

- To introduce **student-centered activities** and promote **active learning** that can...
  - reinforce important concepts and skills
  - provide frequent and immediate feedback to students
  - provide students time to think, talk, and process material
  - allow students to practice skills, like collaboration, through pair/group work

  (Bonwell & Elison, 1991)
How do I incorporate active learning strategies?

- Use activities to draw attention to critical content.
- Establish expectations for appropriate participation.
- Explain the learning benefit.
- Facilitate: Introducing the activity? Time? Debriefing? What will you collect?
- Tie it to the next part of your lecture.
Different types of lecture breaks

- **Break-in**: assess understanding
- **Break-up**: regain students’ attention mid-lecture
- **Break-through**: help students elaborate on new concepts or connect with prior knowledge
- **Break-down**: check understanding through the session

Desrochers, 2005
On taking an instructional risk

“Some come with the anticipation that I would speak to my slides and then they get to go home.”

- Dr. Clive Hickson, Associate Professor and Associate Dean (Education)

“If you want to try a new approach or idea, it’s terrifying because you don’t know what’s going to happen.”

- Dr. Alex Brown, Associate Professor (Chemistry)

(Winners of the Rutherford Award for Excellence in Undergraduate Teaching)
On initiating a process of change

- When adopting a new teaching paradigm, one should...
  - Acknowledge the different classroom experience for our students
  - Inform students of the reasons for the shift
  - Use reflective logs during the term
  - Solicit and share feedback often
  - Reinforce that the course is about their learning
  - Reflect on the experience on our own and with our students

Mezeske (2005)
Activity: Choosing a strategy

1. Choose one learning outcome for an upcoming class or lecture. Make sure you use an observable behaviour to describe the outcome (e.g. classify).

2. Devise an instructional strategy – see “Instructional Strategies and Learning Activities for Different Levels of Understanding” or a lecture break – see “Multi-purpose Lecture Breaks” that would align with your learning outcome.

- Remember to consider who is performing the learning outcome!