

Teaching Tip #2 for 2015: Creating an Instructional Plan Based on SoTL

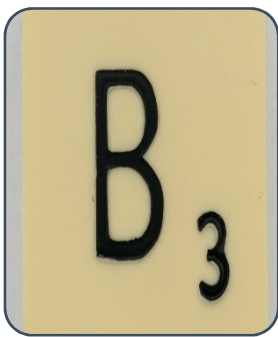
Questions: How can recent research into teaching inform my instructional plans? Does the BOPPPPS format for a lesson plan match research findings?

Key Words: adult learning principles, attention, instructional plans, motivation, prior knowledge

Scholarship of Teaching and Learning

Documentation is a key construct in all continual improvement processes. Some form of lesson/instructional plan is needed and it should include proven sections and practices.

I've taken the BOPPPPS format for instructional design which is explained at [Teaching Tips from Prior Years](#) and looked up research to support and highlight each section. *An example BOPPPPS lesson plan follows.



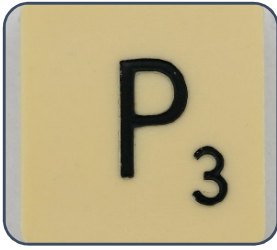
Bridge-In

Grab attention. Rosegard & Wilson (2013) provide "empirical support that implementing a hook, trigger, attentiongetter/grabber, and/or anticipatory set-up enhances learning and memory through increasing arousal (decreasing boredom) and focusing attention. ...The results of this study found that students exposed to a topic-relevant, 90-second external stimulus (i.e., poem, game, puzzle) before a 30-minute lecture demonstrated significantly better information retention, as measured by response performance on an exam, than students exposed to a neutral stimulus." Note: The neutral stimulus in the study was taking attendance.



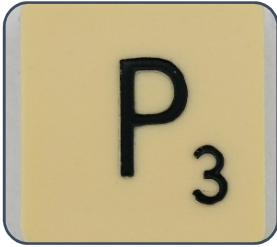
Outcomes

Be transparent. Anderson, Hunt, Powell, & Dollar (2013) had faculty share outcomes and rationales for activity choice with students in university sociology courses. Outcome and activity choice transparency helped students to better understand the purpose of the class. This resulted in motivation to "put in more effort" and work more "efficiently."



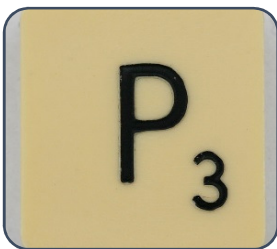
Pre-Assessment (Activating and Checking Prior Learning)

Test the waters. Being able to gauge how new learning relates to what students know already is important. Learning theory suggests that "schema-consistent information can be learned quickly, while schema-inconsistent information and new schemas will be learned more slowly." (McClelland, 2013). Deliberately activating prior learning with a few pre-questions can be very helpful. Don't focus on what the 'strongest' students know or can do.



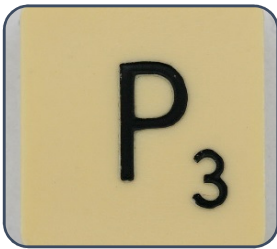
Presentation of New Material

Share your knowledge and skills. "The lecturer's personal mediation helps learners connect to the abstract nature of the subject... The emotional connection between lecturer and student body is important and transitions play an important role in learning. The transitions can be eye contact, significant pauses, arm gestures and personalized stories, images, models and metaphors. The lecturer's presentation makes things human, quirky and interesting; makes it worth doing." Wood, Joyce, Petocz, & Rodd (2007)



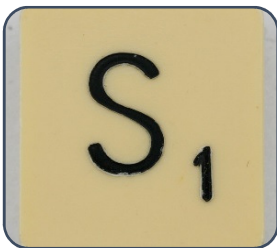
Practice and Participation

Provide practice and active engagement throughout. In an experimental study of 3 designs for one marketing course, Black, Daughtrey, & Lewis (2014) found that "active learning designs are likely to be more effective than traditional passive designs. In many cases, the results of this study suggest that traditional lecture design produces outcomes that are statistically inferior to those of active learning designs."



Post-Assessment (Formative Feedback and Assessment)

Give feedback before high stakes assessments. Students need feedback on the degree to which they have processed information, made connections, learned skills, etc. In "A Faculty Toolkit for Formative Assessment in Pharmacy Education" the researchers argue that "in order for students to achieve optimal learning outcomes, faculty members and preceptors must learn to effectively integrate a variety of formative assessment strategies." (DiVall, Alston, Bird, Buring, Kelly, Murphy, & Szilagi, 2014) The authors also provide many examples.



Summary

Have a clincher. Despite the fact that "a strong and powerful ending often stays clearly in the students' minds," Cheng (2012) found that few professors provide a rich ending to class. Many find themselves out of time and stop suddenly. I know from my personal experience that until students helped me by giving me 10 minute warnings, I often found myself saying something like, "That's it." There are rich ways to end a session - a memorable quote, an overall conclusion, a student testimonial, an image that sums up the learning, etc.

Suggestions and Innovations:

- Document your instructional plans. Decide on a flow for your lessons and document each section. After each class, go back and make adjustments to the plan. Course updates will be easy to do each semester.
- You may want to also monitor the volume of teacher versus student talk in each section. The better planned your lessons are, the harder the students will work and the less you will speak during the class time.

References

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BOPPPPS Review

B₃ = Bridge-in, Bias for Best, Beg for Attention

O₁ = Outcomes

P₃ = Pre-Test, Predict Challenges, Plan for Back-Filling Gaps

P₃ = Present New Information, Parse Into Points and Sub-Points, Power Point Judiciously

P₃ = Practice One (Controlled), Practice Two (Less-Controlled), Practice Three (Free) – See [In-Class Practice and Student Practice](#)

P₃ = Post-test, Plan for Review Needed, Practice Test Questions

S₁ = Summarize key take-aways

3 | Kathryn Brillinger, Organizational Development, Conestoga, 2015

*Lesson Outline: Instructional Strategies (ADED1050)

Teacher/Trainer of Adults Program

Class 1 of 12 (3 hours)

Date: January 29, 2015

Focus of Class: The Principles That (SHOULD) Guide Instructional Strategy Choices

| | Lesson Part | Brief Description | Time Allotted |
|---|--------------|---|--|
| B | Bridge-in | Graffiti walk with groups of 3-4 going to 5 different sheets of paper and responding to prompts about education. Ask them to introduce within group. | 10 (start them as soon as a group enters the room) |
| O | Outcomes | #1 Apply the principles of effective pedagogy to the design and implementation of learning opportunities. *Also introduce self and ask them to ask you 5 questions. Pull up eConestoga outline and review other outcomes for course and evaluation. | 15 |
| P | Pre-Test | List 7 principles of adult learning on board. Have group Think-Pair-Share what they recall from previous courses. | 15 |
| P | Presentation | <ul style="list-style-type: none">• Video of TedTalk on educational paradigms with Closed Captioning on – Minutes 2-7.• PowerPoint lecture reviewing 7 principles with class participation after each principle. How does this apply to your planned teaching or training? | 60 |
| | | 15 Minute Break | 15 |

| | Lesson Part | Brief Description | Time Allotted |
|------------|------------------------|---|--|
| | | Take attendance on eConestoga. | |
| P | Practice | Handout with mini case studies. Groups of 2-3. Must be different from original groups. Full group debrief. | 20 |
| P | Post-Test | Fill in Venn diagram on board – principles and constraints. Add teaser for next class. Debrief. | 20 |
| S | Summary and Next Steps | Market the principles (student volunteers to do a sales job on why trainers must attend to them). Quickly preview the first evaluation due in Week Three. Highlight the use of eConestoga discussion board for Q and A. | 10 |
| Total Time | | | 180 minutes with 15 minutes of flex time |

Resources and Handouts**

- Copies of this lesson plan for the class. Put copies where students should sit. Tip up unneeded rows at back so no one sits there.
- Blank name tents (the ones with attendance and comments printed inside)
- 5 flip chart sheets
- 30 unscented flip chart markers in darker colours
- 3 black white board markers with 1 dark blue for circling
- Cue the Ted Talk at start and put CC on. Check volume and lighting. Pull up eConestoga
- Notes with 7 principles
- iPad to take photos of board and flip chart sheets to post on eConestoga as memory aid

**I prefer to have my resources listed here for easy gathering but many prefer them as an extra column in the table.

Notes: Revisions for Next Semester