Enhance Your Programs with Active Learning
Agenda

**Lecture**

Active Learning, Backwards Design, & the 5E Instructional Model
Will share examples of my own programs at Rutgers.

**Planning Programs is Hard**
Peanut butter and jelly sandwiches!

**Activity**

Why bother with Active Learning?
A poll to hear your thoughts.

**Your Programs**
Let’s take what we’ve learned and start making small tweaks to your programs!
Where would you start if you had to plan a workshop on how to teach someone to make a peanut butter and jelly sandwich?
Write on your index card:
Where would you start if you had to plan a workshop on how to teach someone to make a peanut butter and jelly sandwich?
Discuss with a partner:
Where would you start if you had to plan a workshop on how to teach someone to make a peanut butter and jelly sandwich?
What did you consider?

How would you start? What would you do first? Next? After that?

Who was the learner anyway? And had they made a sandwich before? Were they allergic to peanuts? How old were they? Should we let them have a knife?

Should we show them how first? Talk them through it? Let them have a go at it on their own?

Should we first teach them the names of all the tools and things we were going to use?

What were the critical issues in teaching someone how to make a peanut butter and jelly sandwich?

#mood

“I have to teach someone to make a peanut butter and jelly sandwich? How am I supposed to do that? What should I start with? How can this be so hard?”
Where would you start if you had to plan a workshop on how to teach someone to write a resume?
Where would you start if you had to plan a workshop on how to teach someone to search for a job?
Where would you start if you had to plan a workshop on how to teach someone to make a decision about major or career?
1. Backwards Design

Start with your outcome and work backwards.

➔ **Identify Learning Goals**
What do I want students to learn? What information is critically important? What knowledge/skills should they master?
Enduring understanding > Important to know and do > Worth being familiar with

➔ **How Will You Assess**
How will I be able to distinguish between those who really understand and those who don’t? What misunderstandings are likely, and how will I check for those? How will I know if they are “getting it”?

➔ **Plan Learning Experiences**
What would be interesting & engaging activities on this topic? How can they practice using new knowledge to gain the skills I want them to learn? How can they apply their learning? What will students do before, during, and after the workshop? How much time will I devote to the entire workshop, to each activity, to the lecture components, etc.?
2. Active Learning

What is it?

➔ Doing things
Opportunities to take knowledge and recall it, verbalize it, apply it, analyze it, evaluate it, and synthesize it.

➔ Thinking about the things they’re doing
Metacognition. Opportunities to reflect on their attempts to apply knowledge. This is the link between activity and learning.

Why bother incorporating Active Learning?

“Students engage with the material, participate in the class, and collaborate with each other. Don’t expect your students simply to listen and memorize; instead, have them help demonstrate a process, analyze an argument, or apply a concept to a real-world situation.”
- Stanford Teaching Commons

“Instructional activities involving students in doing things and thinking about what they are doing.”
- Bonwell and Eison

“Active learning engages students in the process of learning through activities and/or discussion in class, as opposed to passively listening and often involves group work.”
- Freeman et al.

“Active learning implies that students are engaged in their own learning. Active teaching strategies have students do something other than taking notes or following directions. They participate in activities to construct new knowledge and build new scientific skills.”
- Handelsman et al.
Programs I’ve Updated

LinkedIn
Job Search
Purpose Learning
WHAT IS YOUR VERB?

Name __________________

I’m learning / working in…

____________________________________
(discipline / field / major)

To impact / challenge / ignite / build / persuade…

____________________________________
(person / system / situation)
Name: Rob
I'm learning/working in: philosophy & creative expression
(target: impact/challenge/ignite to tell powerful stories about human values and flourishing ecosystems.)

Name: Aubrie
I'm learning/working in: PREMED & PRODUCT DESIGN
(target: impact/challenge/ignite)
Name Anya

I'm learning / working in...

East Asian Studies

discipline / field

to impact / challenge / ignite...

The dialogue between East and West

Name Whitney

I'm learning / working in...

Social innovation // philanthropy // human rights

discipline / field

to impact / challenge / ignite...

an end to modern day slavery
RECORD YOUR PLAN

Tell a 1-minute story of your plan on video.

1. What did you learn today?
2. What are you excited about?
3. What are your next steps?
Let’s work on your programs!
3 Minutes to Think

Make two columns on the other side of your index card.

Think about a recent program you ran.

Identify the distinct “pieces” of this program. (e.g., asked students to introduce themselves, lectured on resumes, asked for questions, etc.)

Record each of these pieces in chronological order on one column. (i.e., number them 1, 2, 3, and so on)
Discuss with a partner.

Share each of the pieces of your program.

Discuss which pieces already represent some form of active learning: What is your intended outcome? How are you assessing? What learning experiences and opportunities to practice do you include?
2-Minute Activity: With your partner, give each piece of your program a designation of one of the “E”s.

### 5E Instructional Model

**Explore**
Present the Content – Help learner understand concepts, process/procedures, facts or principles

**Explain**
Improve Understanding – Help learner to express new learning and provide guidance

**Elaborate**
Construct New Learning – Help learner apply prior learning and acquire new

**Evaluate**
Assess Learning – Help learner measure learning against its corresponding goals
5E Instructional Model

If you could make just one change, what would it be?

**Engage**
Establish Relevancy – Help learner determine need of learning new concepts

**Explore**
Present the Content – Help learner understand concepts, process/procedures, facts or principles

**Explain**
Improve Understanding – Help learner to express new learning and provide guidance

**Elaborate**
Construct New Learning – Help learner apply prior learning and acquire new

**Evaluate**
Assess Learning – Help learner measure learning against its corresponding goals

5-Minute Activity: With your partner. Could you switch the order? Could you add a single component somewhere? Could you transform an Explain component into another type of E? If you could make just one change, what would it be?
3. Some Tips

The 5E model is a teaching sequence that's been shown to enhance learning because order matters.

➔ **Engage**
   Always start your programs with something that engages students and elicits their prior knowledge.

➔ **Explore > Explain**
   Allow for exploration before you explain or give mini-lectures.

➔ **Evaluate/Assess**
   Collect some form of assessment / evaluation from your students after every program.
### Assessing Your Program

**Table 3. Sample self-questions to promote faculty metacognition about teaching**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Planning</th>
<th>Monitoring</th>
<th>Evaluating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class session</td>
<td>• What are my goals for this class session? How did I arrive at these</td>
<td>• What do I notice about how students are behaving during this class session? Why do I</td>
<td>• How do I think today's class session went? Why do I think that? What</td>
</tr>
<tr>
<td></td>
<td>goals? How do I think students already know about this topic? What</td>
<td>think this is happening? • What language or active-learning strategies am I using</td>
<td>evidence do I have? • How did the ideas of today's class session relate</td>
</tr>
<tr>
<td></td>
<td>evidence do I have for my thinking? • How could I make this material</td>
<td>that appear to be facilitating learning? Impeding learning? • How is the pace of</td>
<td>to previous class sessions? To what extent do I think students saw those</td>
</tr>
<tr>
<td></td>
<td>personally relevant for my students? Why do I think this? • What</td>
<td>the class going? What could I do right now to improve the class session?</td>
<td>connections? • How will what I think about how today's class session</td>
</tr>
<tr>
<td></td>
<td>mistakes did I make last time I taught this and how can I not repeat</td>
<td></td>
<td>went influence my preparations for next time?</td>
</tr>
<tr>
<td></td>
<td>these?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1-minute Paper!
Time to reflect.

– One thing that you learned in this session that will influence your program planning and delivery.

– One thing that is still unclear or that you would like to learn more about.
Good luck!

Thank you for choosing to spend your time with me today.

I would love to help you after today!

Seriously.

Contact me: andrew.seguel@rutgers.edu

Also, check out the app for the handout I uploaded with additional resources, sample activities, etc.
Thank you for attending today’s session!

Let’s GO GREEN!

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