

**Today's Learning Outcomes...**

- Get to know your SEPAL Scientific Teaching Institute colleagues!
  - Discuss the relationship between innovative teaching and the biological basis for learning.
  - Investigate evidence that suggests changes in undergraduate STEM teaching are necessary.
  - Explore principles of Backwards Design in planning courses and lessons.
  - Construct a common understanding of “assessment” and its role in learning.
  - Compare and contrast different forms of assessment tools for uncovering student ideas.
  - Examine Bloom’s Taxonomy as a tool for evaluating and modifying assessments.
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<b>9:00 - 9:40</b>	<b>Introductions: Getting to Know You...</b>
<b>9:40 - 9:50</b>	<b>Reflection: A Time to Reflect on Your Own...</b>
<b>9:50 - 10:00</b>	<b>Big Idea: Summer Institute Overview and Scientific Teaching Framework</b>
<i>*10 min - Bathroom Break *</i>	
<b>10:10-10:40</b>	<b>A Common Experience: Keeping Your Eye on the Big Picture</b>
<b>10:40 – 10:55</b>	<b>Discussion: Content Coverage and Prioritizing Student Learning Outcomes</b>
<b>10:55 - 11:25</b>	<b>Big Idea and Movie: On Myth of Content Coverage</b>
<b>11:25 - 12:00</b>	<b>Big Idea: Problems with Undergraduate Science Education</b>
<b>12:00 - 12:10</b>	<b>Big Idea: Focusing on a Single Course &amp; Thinking about the Future...</b>
<b>12:10 - 12:55</b>	<b>LUNCH</b>
<b>12:55 - 1:10</b>	<b>Big Idea: Using Backwards Design to Prioritize What to Teach</b>
<b>1:10 - 1:40</b>	<b>Activity: The Purpose of Assessment and the Role of Questions</b>
<b>1:40 - 2:20</b>	<b>Activity: Assessment A-Go-Go Part 1</b>
<i>*10 min - Bathroom and Snack Break *</i>	
<b>2:30-3:00</b>	<b>Activity: Assessment A-Go-Go Part 2</b>
<b>3:00 - 3:45</b>	<b>Activity: Exploring Bloom’s Taxonomy</b>
<b>3:45 - 4:00</b>	<b>Big Idea: Teaching Action Plans and Thursday Poster Session</b>
<b>4:00 - 4:30</b>	<b>Closing &amp; Reflection</b>

**Today's Learning Outcomes...**

- Explore how issues of inclusion, equity, and diversity affect student learning.
  - Experience how unstructured classroom environments can work against inclusiveness, fairness, and equity.
  - Discuss recent inclusion research in science education and related fields.
  - Self-assess current awareness of and use of common equitable teaching strategies.
  - Investigate group behaviors that can influence inclusiveness, fairness, equity.
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<b>9:00 - 9:30</b>	<b>Welcome and Reflections from Day 1</b>
<b>9:30 - 10:30</b>	<b>Activity: Building Mobiles Part 1</b>
<i>*15 min - Bathroom Break *</i>	
<b>10:45 - 12:00</b>	<b>Activity: Building Mobiles Part 2</b>
<b>12:00 - 12:45</b>	<b>LUNCH</b>
<b>12:45 - 1:40</b>	<b>Activity: The Invisible Variable of Instructor Talk</b>
<b>1:40 - 2:40</b>	<b>Activity: Exploring 21 Simple Classroom Equity Strategies</b>
<i>*10 min - Bathroom Break *</i>	
<b>2:50 - 3:15</b>	<b>Rock Stars of Science</b>
<b>3:15 - 3:30</b>	<b>Intro to Scientist Spotlights</b>
<i>*15 min - Bathroom and Snack Break *</i>	
<b>3:45 - 4:30</b>	<b>Jigsaw Activity: Scientist Spotlights</b>
<b>4:30 - 4:50</b>	<b>Activity: Continuation of Teaching Action Plans</b>
<b>4:50 - 5:00</b>	<b>Closing &amp; Reflection</b>

**Today's Learning Outcomes...**

- Construct a common understanding of “active learning.”
  - Experience and evaluate different amounts of time required for integrating active learning into a lecture.
  - Use the 5E model to analyze and modify a class session, identifying opportunities for active learning.
  - Applying active learning strategies to individual class contexts.
  - Reflect on how the Summer Institute is and is not likely to influence our professional work.
  - Compose a plan for implementing small changes in our professional work based on Scientific Teaching.
  - Set expectations for future activities and create individual plans.
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<b>9:00 - 9:10</b>	<b>Welcome and Reflections from Day 2</b>
<b>9:10 - 9:25</b>	<b>Brainstorm and Video: What Can Active Learning Look Like in a Lecture?</b>
<b>9:25 - 10:35</b>	<b>Activity: Active Learning in 1, 5, 10, and 20 Minutes During a Lecture</b>
<i>*10 min - Bathroom Break *</i>	
<b>10:45 - 11:05</b>	<b>Activity: How to Thoughtfully Integrate Active Learning</b>
<b>11:05 - 11:20</b>	<b>Mini-Lecture: The 5 E's</b>
<b>11:20 - 11:30</b>	<b>Activity: Assigning E's to an Individual Class Session</b>
<b>11:30 - 11:40</b>	<b>Discussion: Strategies for Using the 5E Model to Iteratively Change a Lesson</b>
<b>11:40 - 12:00</b>	<b>Activity: Tweak Your Lesson!</b>
<b>12:00 - 12:30</b>	<b>Group Photo</b>
<b>12:30 - 1:25</b>	<b>LUNCH</b>
<b>1:25 - 2:05</b>	<b>Carousel Graffiti: What Will You Use in Your Classroom?</b>
<i>*10 min - Bathroom and Snack Break *</i>	
<b>2:15 - 2:50</b>	<b>Poster Creation</b>
<b>2:50 - 3:55</b>	<b>Poster Session</b>
<b>3:55 - 4:15</b>	<b>Final Reflection</b>
<b>4:15 - 4:40</b>	<b>Celebration &amp; Closing</b>
<b>4:40 - 4:45</b>	<b>Final Announcements</b>