# Engaging with Core Learning Outcomes

## April 11, 2014

## Lane Community College

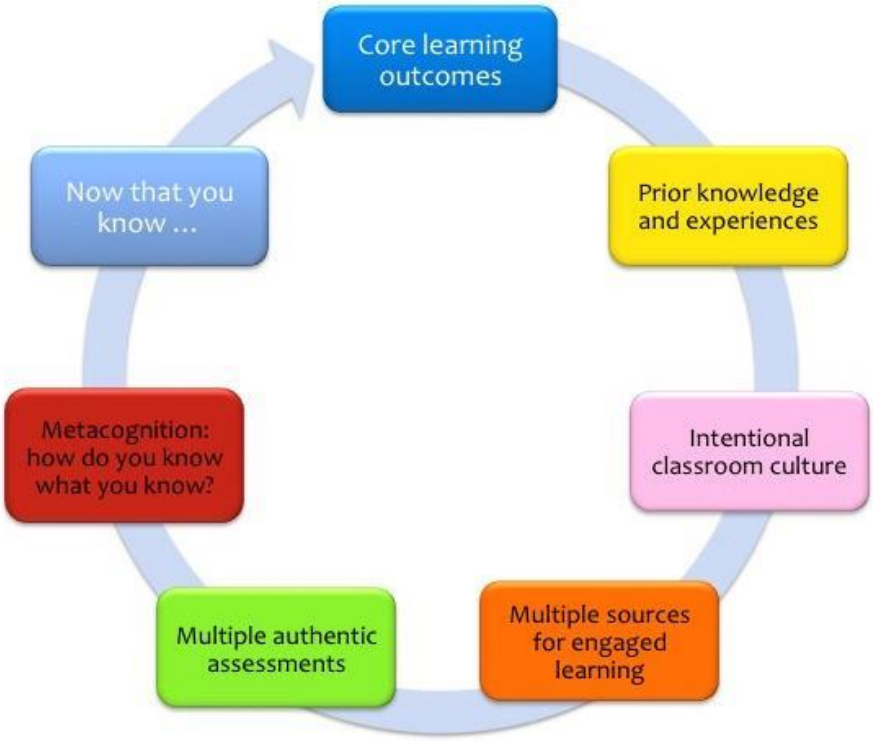
## Hosted by the Roadmap Project Team and the Assessment Team

### Workshop Goals

At the end of this workshop, participants will be able to:

- Identify examples of making CLOs visible throughout instruction in their fields of study.
- Imagine and explore how authentic assessment of CLOs strengthens our teaching and learning practices and enhances student learning.
- Create useful criteria for designing authentic assessments.
- Reflect on the role of CLOs and assessment strategies as tools for metacognition for students and faculty.
- Generate ideas for using CLOs in your courses.
- Come to new understandings about teaching and learning by engaging with multiple perspectives.

### An Arc of Learning





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**Conversation #1: How have you made CLOs visible in your classes and conversations?**

1. Write your thoughts:

   How have you learned about Lane's new CLOs?

   Which CLOs do you feel are most relevant in your courses or interactions with students?

   Have you made an effort to make CLOs visible in your courses or interactions? If not, what are your hesitations or obstacles?

2. Gather up your syllabus and other course activities and a pack of highlighters which match to these aspects of the Arc of Learning:

   | | |
   |---|---|
   | Prior knowledge and experiences | Intentional classroom culture |
   | Multiple sources for engaged learning | Multiple authentic assessments |

Thinking about CLOs that you want to be visible in your teaching and/or interactions, search in your course materials for instances where you have made a CLO more visible with any of these elements of the Arc of Learning. Highlight your materials with the markers.

TIPS:

- Start with the most obvious and easiest to find
- Keep track of your questions and insights on the chart below
- Talk with table-mates to see what they are finding out
- Don't stress if you are not marking a lot of things.
- Make notes on your materials where you notice you COULD add something to them that would make CLOs more visible.

**Your notes:**

Questions or confusion I have about what we're doing

Opportunities where I could make CLOs more visible or explicit


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## Conversation #2, Part 1: Authentic Assessment

1. Write your thoughts:

   Write one or two examples of authentic assessments from your experience (as a teacher or ones you experienced as a student).

   Write one or two examples of "less-than-authentic" assessments from your experience.

2. As a group, generate working criteria that distinguish authentic assessments from "less-than-authentic" assessments. Post ideas on the large poster sheet on the table. Post on the "gallery" wall.

**Conversation #2, Part 2: How do you (or might you) assess attainment of CLOs?**

1. Write your thoughts:

   What assessment practices do you use in your courses now? If you are not in the classroom, how do you use assessment practices in your interactions with students?

   How do you see these practices influencing student learning or growth?

   Have you assessed CLOs? How did you do it?

   Have you thought about assessing CLOs but hesitated? What are your concerns?

2. Share your thoughts with others at your table.

3. As a result of this conversation, what assessment practices will you add or revise?

## Conversation #3: Metacognition and Reflection

Metacognition is the ability to:

- Think about one's own thinking
- Be consciously aware of oneself as a problem solver
- Monitor, plan, and control one's mental processing (e.g. "Am I understanding this material, or just memorizing it?")
- Accurately judge one's level of learning: Know what you know and know what you don't know

1. Writing 1-minute paper: We've been offering strategies to develop your own reflective practice and gain awareness about what your students do and don't know…take 1 min and jot down the clearest point, muddiest point, takeaway OR a question on your mind.

2. Share with a neighbor. Select only one of the things you wrote and ask for feedback or reaction.

3. If you've used strategies for metacognition with students, share them with your table.

4. Generate one or more questions for the whole room about using metacognition strategies.

**Designing for Engaging Students with Core Learning Outcomes**

1. Review the Arc of Learning and your highlighted course materials. Select one element of the Arc that you want to develop to engage students with one or more of the CLOs.
   Which element will you work on today? _____

Join a table of other folks who have selected that element.

2. Which CLO/s will be the focus of the element you are developing?

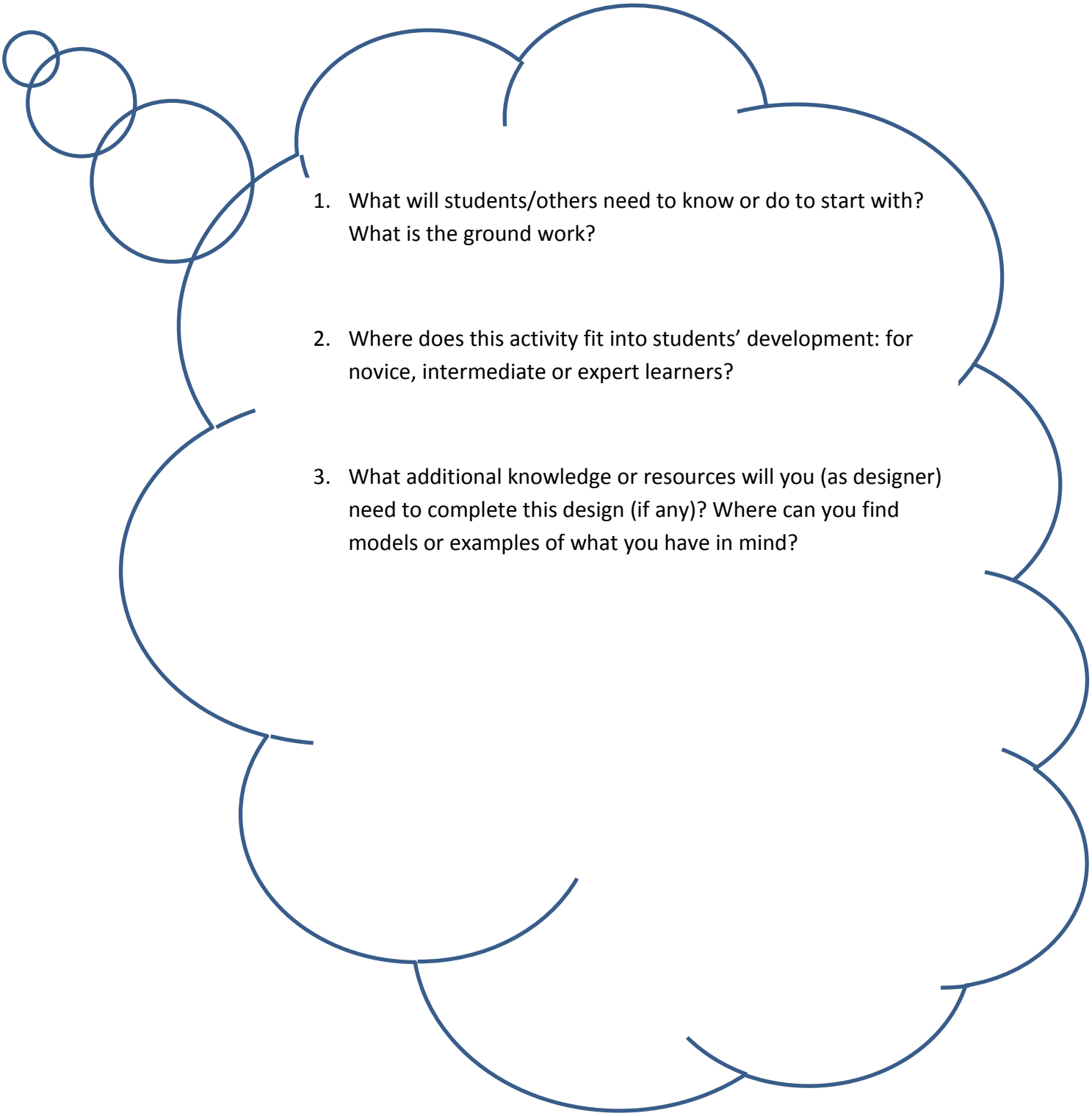
   _____

   _____

3. Write your specific goals for the learning opportunity – assignment, syllabus, classroom practice, learning activity, other document, assessment tool, conversation, etc. What are all the ways you want this to effect student growth and learning?

4. How will you know that you have met some or all of your specific goals? What will you see, hear, feel, measure (if needed)?

5. Now design what you need to do and what students need to do to make that happen!
   Here's a few guiding questions to get you started.



1. What will students/others need to know or do to start with? What is the ground work?

2. Where does this activity fit into students' development: for novice, intermediate or expert learners?

3. What additional knowledge or resources will you (as designer) need to complete this design (if any)? Where can you find models or examples of what you have in mind?

## Notes page

**Notes page:**

## Active Learning Techniques

From the Center for Teaching and Faculty Excellence at
George Mason University (http://ctfe.gmu.edu/teaching/active-learning)

The following tools and techniques can be used to incorporate active learning strategies into a traditional course or learning environment. They can also be used as resources for fully redesigning or flipping your course, and/or for teaching in an active learning classroom.

**Minute Paper**
At the end of class, ask students to answer a question or reflect on something from that day's class to turn in.

*Useful Minute Paper Questions*:

- What was the most important idea, concept, or point you are taking away from today's class (this week's class)? This can be very illuminating for both you and the students.
- What do you understand now that you didn't before today?
- What was the most difficult or confusing thing in today's class (this week's class)?
- Give an example of how _____ can be used to explain _____.
- What's one question about today's course material you want answered?

**The Fish Bowl**
Ask each student to write one issue or concept they want clarified on a card and place it in a fish bowl (cardboard box, hat, etc.) as they enter class. During class, you can select cards from the bowl to clarify these issues or concepts. This gives students who are hesitant to participate an opportunity to ask questions.

*You can also do this activity at the end of the class. Reviewing the feedback from the class as a whole gives you insight on the distribution of questions and concerns across the students in your class. At the next class, you can clarify the issues that were shared by the greatest number of students.*

**Interactive Lectures with Clarification Pauses**
After 10-15 minutes of lecture, circulate around the room for two minutes while students review their notes alone and then in pairs. Then follow up with oral or written questions from students. If you prefer, you might use "clicker" technology to create interactive opportunities with your students.

**Promoting Active Listening**
After student A has given an answer, ask student B to summarize in their own words the points made by student A. You can also ask a student to rephrase a difficult point you have made.

**Problem-Solving / Problem-Based Learning**
Provide students with problems or exercises to cooperatively work through in groups. This can be an extended project or a problem-set to be solved during a class period. Circulate to provide instruction and feedback as students work, but let them struggle through the process and arrive at the solutions in a variety of ways. Student groups can also compare and critique their respective approaches to solving the problems.

**Writing Discussion Questions**
Students, at some point during the class, are asked to write a question that will solicit thoughtful discussion on the issues at hand. Or ask them to think about what you've just discussed, and write a suitable quiz question.

**Think, Pair, Share**
Ask question or pose situation, have students write 1 or two lines about the question, then talk to partner for 1-2 minutes. The professor should circulate in the room to hear the discussions and help encourage student to stay on task.

**Critical Reading**
Have students read a paragraph or short piece. They write down the most important point. Or have students cite an example of inference, or good analysis, or an unanswered question from the text, then compare their thoughts with a peer. Poll the class.

**On-Line Writing Partners**
Assign students into pairs or groups of 3. Have each student write weekly (bi-weekly) about class readings, discussions, and related current events. This assignment can involve analytical writing, asking questions, integrating ideas across texts and discussions, etc. Students then share their writing with their partners who respond with their ideas, responses, and perspectives. This works well on blogs or in Blackboard. Ask students to periodically share their learning with the larger class.

**Pass a Problem**
Ask students a complex question which requires higher order thinking. Groups get 10 minutes to think about the problem and write a paragraph about the problem. This is put it in a folder and passed to another group. Groups get another 5 minutes to rethink the question, and write again. These thoughts are put in the folder with the original entry. Repeat. Groups then report out their solutions and how seeing others' ideas and approaches helped them.

**Peer Teaching / Student-Led Reviews**
Assign students topics to research and then prepare a presentation about their topic to share with the class, either formally, informally, or electronically in Blackboard.

**Icebreaker Review**
Write a set of 15-30 questions reflecting knowledge you expect students to bring into your class. In first class, give every student all the questions. Give each student a 3"x5" card with one question and its answer. Give the students 20 minutes to find someone with the answer to each question, get the answer and have it "signed off." Students meet each other and they review necessary material.

**Additional Techniques**
Lab activities, working with case studies, simulations and games, role playing and dramatizations, debates, and assignments such as oral presentations and interviews all engage students in the learning process and help them apply course concepts and theories.

## Habits of Mind that Lead to Academic Excellence

From the Learning Community at Cal State Monterey Bay (http://leap.aacu.org/toolkit/wp-content/uploads/2013/07/CSUMB-Learning-Community-Sp-2013.pdf)

These habits of mind can be shared with students as you define your expectations for student learning and their success in your classroom.

*Metacognition:* Reflecting on your own thinking and the processes used to structure knowledge.

*Flexibility:* Developing the ability to adapt to situations, expectations, and demands.

*Creativity:* Trying novel approaches for generating, investigating, and representing ideas.

*Responsibility:* Taking ownership of your actions and understanding the consequences for yourself and others.

*Persistence*: Sustaining your interest and attention to short and long-term projects.

*Openness*: Being willing to consider new ways of thinking and being in the world.

*Engagement*: Cultivating a sense of investment and involvement in learning.

*Curiosity*: Desiring to know more about the world around you.

## Useful Resources


Ambrose, Susan A., Bridges, Michael W., DiPietro, Michele, Lovett, Marsha C., & Norman, Marie K. (2010). *How learning works: 7 research-based principles for smart teaching.* San Francisco: Jossey Bass.

Angelo, Thomas A. & Cross, K. Patricia (1993). *Classroom assessment techniques: A handbook for faculty, 2nd Edition*. San Francisco: Jossey-Bass.

Bain, Ken. (2004). *What the best college teachers do.* Cambridge: Harvard University Press.

Barkley, Elizabeth F., Cross, K. Patricia, Major, Claire Howell (2005). *Collaborative Learning Techniques: A handbook for college faculty.* San Francisco: Jossey-Bass.

Barkley, Elizabeth F. (2010). *Student Engagement Techniques: A handbook for college faculty.* San Francisco: Jossey-Bass.

Barr, Robert B. & Tagg, John (1995). "From teaching to learning: A new paradigm for undergraduate education." *Change: The Magazine of Higher Learning, 27(6),* pp. 12-25.
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Berrett, Dan (February 10, 2014). "Dissecting the classroom." *Chronicle of Higher Education*.
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Blumberg, Phyllis. (2014). *Assessing and improving your teaching: Strategies and rubrics for faculty growth and student learning.* San Francisco: Jossey-Bass.

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Davis, Barbara G. (2009). *Tools for Teaching* (2nd Ed.). San Francisco: Jossey-Bass.

Doyle, Terry (2008). *Helping students learn in a learner-centered environment.* Sterling, VA: Stylus Publishing.

Fink, Stephen & Markholt, Anneke (2011). *Leading for instructional improvement: How successful leaders develop teaching and learning expertise*. San Francisco: Jossey-Bass.

Finkel, Donald L. (2000). Teaching With Your Mouth Shut. Portsmouth, NH: Boynton/Cook Publishers, Inc.

Malnarich, Gilles & Lardner, Emily (2003). "Designing integrated l for students: A heuristic for teaching, assessment and curriculum design. Washington Center Occasional Paper, Winter, No. 1.
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http://www.evergreen.edu/washingtoncenter/docs/intlearning/intdesignoccasionalpaper.pdf

Svinicki, Marilla & McKeachie, Wilbert J. (2011). *McKeachie's teaching tips: Strategies, research, and theory for college and university teachers* (13th Ed.). Belmont, CA: Wadsworth (Cengage Learning).

Walvoord, Barbara E. & Anderson, Virginia J. (2009). *Effective grading: A tool for learning and assessment in college* (2nd Ed.). San Francisco: Jossey-Bass.

Wiggins, Grant & McTighe, Jay (2005). *Understanding by Design* (2nd Ed.). Alexandria, VA: Association for Supervision and Curriculum Development (ASCD).

## Online Resources

Centers for Teaching and Learning have a great deal to offer in terms of resources and support for enhancing student engagement, as well as other online resources. Here are some sites that you might find particularly useful:

- The Center for Teaching and Faculty Excellence at George Mason University
  - http://ctfe.gmu.edu; Twitter: @MasonCTFE
- The Center for Teaching at Vanderbilt University
  - http://cft.vanderbilt.edu; Twitter: @vandycft
- The Derek Bok Center for Teaching and Learning
  - http://bokcenter.harvard.edu/icb/icb.do; Blog: blog.bokcenter.harvard.edu
- Faculty Focus: Higher Ed Teaching Strategies from Magna Publications
  - http://www.facultyfocus.com
- The Southern Center for Active Learning Excellence (SCALE)
  - http://scaleinstitute.com

McGuire, Saundra Y (2013). "Metacognition and Motivation: Advancing STEM Learning for All Students." Plenary presentation for the *Transforming STEM Education: Inquiry, Innovation, Inclusion, and Evidence*, *Network for Academic Renewal Conference*, Oct. 31 – Nov. 2, 2013, San Diego, California
http://www.aacu.org/meetings/stem/13/documents/McGuirePlenary.ppt

McGuire, Saundra Y (2013). *Ace Dr. Cook's Chem 1201: Metacognition is the Key!* Presented at the *Transforming STEM Education: Inquiry, Innovation, Inclusion, and Evidence, Network for Academic Renewal Conference*, Oct. 31 – Nov. 2, 2013, San Diego, California.
http://www.aacu.org/meetings/stem/13/documents/StudentPresentation.ppt