

# DOING ASSESSMENT AS IF LEARNING MATTERS MOST SIMPLE, PRACTICAL CLASSROOM AND COURSE-LEVEL APPROACHES

THE 2009 ASSESSMENT INSTITUTE IN INDIANAPOLIS

Materials for a Concurrent Workshop

2:15-3:30 PM on Monday 26 October 2009

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Build shared language and concepts . . .

## Directed Paraphrasing

In 1 or 2 concise sentences, define what high-quality higher learning—or, if you wish deeper learning—means to you. Write a definition below that will make sense to—and perhaps inspire—your colleagues and your students.

Higher (Deeper) Learning is . . .

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Don't assume, ask . . .

## Tri-national Background Knowledge Probe

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Please answer each question below for the following three countries: the United States, Canada, and Australia. Guessing is encouraged and expected!

	USA	CAN	AUS
1. Population?	_____	_____	_____
2. Area in sq kms?	_____	_____	_____
3. Capital city?	_____	_____	_____
4. Name of current head of national gov't	_____	_____	_____
5. Name of most likely next head of gov't?	_____	_____	_____
6. % eligible voting in last national election?	_____	_____	_____
7. % Indigenous?	_____	_____	_____
9. % with Bachelors degree or above?	_____	_____	_____
10. Corruption ranking?	_____	_____	_____
11. Per capita income?	_____	_____	_____
12. Greenhouse gas per capita ranking?	_____	_____	_____
12. %-age GDP to Defense?	_____	_____	_____
13. %-age child poverty?	_____	_____	_____

## Build shared goals and motivation . . .

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# Goal Ranking & Matching Exercise

What do you hope to learn through your participation in this workshop?  
How can it best address your needs and expectations? This is a Classroom Assessment Technique (CAT) designed to help you identify your goals and expectations and share them with the workshop leader—and each other.

1. On the lines below, please list three or four learning goals you hope to achieve—things you hope to learn or questions you hope to answer—through participating actively in this workshop.

List your Learning Goals for this workshop

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2. Now, rank your goals in terms of their relative importance to you. Make the most important goal #1, the next most important #2, and so on.
3. Next, working with your group of 3-4 colleagues, determine quickly whether you have any first- or second-ranked goals in common. Determine which one or two key goals are most widely shared.
4. Prepare to report out which goals were shared within your group and to what extent. For example, "Three out of four of us wanted to learn X."

Reference: Angelo, T. A. & Cross, K. P. (1993). Classroom Assessment Techniques: A Handbook for College Teachers, 2nd edition. San Francisco: Jossey-Bass, pp. 290-294.

## Build shared trust . . .

### Collaborative Learning Technique #1

## Buzz Groups

Useful for stimulating engagement in discussions and, and encouraging students to rehearse, express, and compare their ideas, opinions, and/or reactions with others.

### Estimated Time and Effort Required for

Faculty to prepare this CoLT LOW

Students to use this CoLT LOW

Faculty to assess/follow up LOW

Complexity LOW

Risk of Failure LOW

Duration & Location 10-20 minutes/In class or online

Group Size & Structure Triads to Quintets Informal/Little or no pre-organizing

### Description

Buzz groups give students the opportunity to exchange ideas, opinions, and information in a low stress environment. Because buzz groups can build interest in and enthusiasm for a subject, they are useful in introducing a new topic and in assessing students' prior knowledge or beliefs about that topic. Buzz Groups can also serve as in-class lead ins to out-of-class assignments.

### Procedure

1. The instructor prepares a list of open-ended discussion questions that will tap students' ideas, prior knowledge, or opinions about the topic at hand. These should be questions for which there is no one correct answer.
2. In the context of a semi-structured, time-limited conversation, small groups of students discuss their responses to the prepared questions. It may be useful to assign roles such as time keeper, summarizer, and reporter.
3. Groups summarize their responses – including the range of agreement and diversity – and report them to the instructor in writing and/or, if useful, to the entire class, orally. Alternately, in a large class, the instructor can sample responses from a few groups.

## Seven Transformative Guidelines for Doing Assessment as if Learning Matters Most

1. Build shared trust. Begin by lowering personal, interpersonal and organizational barriers to risk taking and change.
2. Build shared language and concepts. Develop a collective understanding of the key concepts (mental models) needed for transformation.
3. Build shared goals and motivation. Collectively determine goals worth working toward and problems worth solving – and consider the likely costs and benefits.
4. Design backward and work forward. Design backward from that shared vision and long-term goals to develop coherent outcomes, strategies, and activities.
5. Think and act systematically. Analyze the opportunities and limitations presented by the larger system(s) within which we operate and seek connections and applications to those larger worlds.
6. Take a scholarly approach. Consult relevant valid theory and research. Use what has already been learned about individual and organizational learning, change and assessment to inform, explain, and examine your plans and strategies.
7. Don't assume, ask. Practice what we preach. Make the implicit explicit. Demonstrate the value of assessment by using it ourselves—and on ourselves.

## Seven Core Concepts from Theory & Research

- Intended Learning Outcomes
- Deep, Surface, and Strategic Learning
- Threshold Concepts
- Prior Learning
- Metacognition
- Cognitive Load
- Constructive Alignment

Build shared language and concepts . . .

## Defining Features Matrix Comparing Confusable Concepts

Directions: In the left-hand column below are features we could use to identify, distinguish, and classify reptiles and amphibians. Place plus signs "+" next to features that typically characterize reptiles and/or amphibians. Place minus signs (-) next to features which do not.

DEFINING FEATURES	Reptiles	Amphibians
Are vertebrates		
Are tetrapods (four-limbed)		
Are exothermic (warm-blooded)		
Usually lay eggs in water		
Usually lay eggs on land		
Usually have scaly, dry skin		
Usually have damp, smooth skin		
Some are native to Indiana		
Many species are endangered		

Build shared language and concepts . . .

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STATISTICS FOR EVERYDAY LIFE – SPRING 2004 - ANGELO

FIRST CONCEPT REVIEW: STANDARD DEVIATION

Circle the one variable in each row that you would expect to have the largest relative standard deviation:

- |  |   |
|--|---|
| 1. adult humans' heights                         | adult humans' weights                               |
| 2. domestic dogs' weights                        | domestic cats' weights                              |
| 3. oral language skills of 12-year-olds          | mathematics skills of 12-year-olds                  |
| 4. hours students spend <u>in</u> this classroom | hours students spend studying <u>for</u> this class |
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Introduction to US Foreign Policy course

Background Knowledge Probe

- |      |       |   |
|------|-------|---|
| True | False | 1. As of today, credible evidence has been found demonstrating a close working relationship between Saddam Hussein's regime and al Queda.           |
| True | False | 2. As of today, credible evidence has been found that Saddam Hussein's regime possessed weapons of mass destruction (WMDs) in Iraq.                 |
| True | False | 3. During the most recent Iraq war, most citizens of most US coalition partners (e.g., Spain, Britain, Italy) supported the US-led invasion of Iraq |

## Design backward and work forward . . .

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# An Example of Grading Standards

## Freshman Writing Seminar

### Grading Standards for Writing in Seminar Portfolios

- "A" work (1) Responds fully to the assignment; (2) Expresses its purpose clearly and persuasively; (3) Is directed toward and meets the needs of a defined audience; (4) Begins and ends effectively; (5) Provides adequate supporting arguments, evidence, examples, and details; (6) Is well-organized and unified; (7) Uses appropriate, direct language; (8) Correctly acknowledges and documents sources; (9) Is free of errors in grammar, punctuation, word choice, spelling, and format; and, (10) Maintains a level of excellence throughout, and shows originality and creativity in realizing (1) through (7).
- "B" work Realizes (1) through (9) fully and completely -- and demonstrates overall excellence -- but shows little or no originality or creativity.
- "C" work Realizes (1) through (9) adequately -- and demonstrates overall competence -- but contains a few, relatively minor errors or flaws. A "C" paper may show great creativity and originality, but those qualities don't make up for poor or careless writing. A "C" paper usually looks and reads like a next-to-final draft.
- "D" work Fails to realize some elements of (1) through (9) adequately -- and contains several, relatively serious errors or flaws, or many minor ones. A "D" paper often looks and reads like a first or second draft.
- "F" work Fails to realize several elements of (1) through (9) adequately -- and contains many serious errors or flaws, and usually many minor ones, as well. An "F" paper usually looks and reads like a zero draft.

Design backward and work forward . . .

## A SAMPLE ASSESSMENT/GRADING RUBRIC

Title of piece: \_\_\_\_\_ Author: \_\_\_\_\_ Date: \_\_\_\_\_

(1) Responds fully to to the assignment	EXCELLENT	VERY GOOD	ADEQUATE	FAIR	POOR
(2) Expresses its purpose clearly and persuasively	EXCELLENT	VERY GOOD	ADEQUATE	FAIR	POOR
(3) Is directed toward and meets the needs of a defined audience	EXCELLENT	VERY GOOD	ADEQUATE	FAIR	POOR
(4) Begins and ends effectively	EXCELLENT	VERY GOOD	ADEQUATE	FAIR	POOR
(5) Provides adequate supporting arguments, evidence, examples, and details	EXCELLENT	VERY GOOD	ADEQUATE	FAIR	POOR
(6) Is well-organized and unified	EXCELLENT	VERY GOOD	ADEQUATE	FAIR	POOR
(7) Uses appropriate, direct language	EXCELLENT	VERY GOOD	ADEQUATE	FAIR	POOR
(8) Correctly acknowledges and documents sources	EXCELLENT	VERY GOOD	ADEQUATE	FAIR	POOR
(9) Is free of errors in grammar, punctuation, word choice, spelling, and format	EXCELLENT	VERY GOOD	ADEQUATE	FAIR	POOR
(10) Maintains a level of excellence throughout	EXCELLENT	VERY GOOD	ADEQUATE	FAIR	POOR
Shows originality and creativity in realizing (1) through (7)	EXCELLENT	VERY GOOD	ADEQUATE	FAIR	POOR
OVERALL EVALUATION	EXCELLENT	VERY GOOD	ADEQUATE	FAIR	POOR

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## Think and act systematically . . .

Discussion Draft Questions for an  
Undergraduate Course/Teaching Feedback (not Evaluation!) Form

Questions about yourself (1= Always, 2=Usually, 3=Sometimes, 4=Rarely, 5=Never, NA= Not Applicable)

1. I was self-motivated to learn this course material	1	2	3	4	5	NA
2. I was well-prepared for each class session	1	2	3	4	5	NA
3. I asked the instructor for help/guidance when I needed it	1	2	3	4	5	NA
4. I invested enough time and energy to meet/exceed course requirements	1	2	3	4	5	NA
5. I participated actively and contributed thoughtfully in class sessions	1	2	3	4	5	NA
6. I attended class sessions and/or individual appointments	1	2	3	4	5	NA
7. Overall, I gave my best possible effort to learning in this course	1	2	3	4	5	NA

Questions about the course (1= Always, 2=Usually, 3=Sometimes, 4=Rarely, 5=Never, NA= Not Applicable)

8. The course was well-organized to help students learn	1	2	3	4	5	NA
9. The objectives and criteria for meeting them were made clear	1	2	3	4	5	NA
10. The assignments contributed to my learning	1	2	3	4	5	NA
11. The assessments/evaluations were clearly connected to the objectives	1	2	3	4	5	NA
12. The amount of work required was appropriate to the objectives	1	2	3	4	5	NA
13. The level of intellectual challenge was high	1	2	3	4	5	NA

Questions about the instructor (1= Always, 2=Usually, 3=Sometimes, 4=Rarely, 5=Never, NA= Not Applicable)

14. The instructor clearly connected the course objectives to course activities, assignments, and assessments	1	2	3	4	5	NA
15. The instructor encouraged me to connect my experience to the course	1	2	3	4	5	NA
16. The instructor provided clear and useful feedback to improve learning	1	2	3	4	5	NA
17. The instructor inspired interest and excitement in the course material	1	2	3	4	5	NA
18. The instructor was available and helpful when asked	1	2	3	4	5	NA
19. The instructor communicated ideas and information clearly and effectively	1	2	3	4	5	NA
20. The instructor evaluated and graded fairly	1	2	3	4	5	NA
21. The instructor treated students and their ideas with respect	1	2	3	4	5	NA
22. The instructor used required texts/other required materials effectively	1	2	3	4	5	NA

Summary Questions: Compared w/ other courses: (1=extremely high, 2=high, 3=adequate, 4=low, 5=very low)

23. This course increased my desire to continue learning about this material	1	2	3	4	5	NA
24. If a friend asked about taking this course, my recommendation would be	1	2	3	4	5	NA
25. Overall, I would rate the quality of this course as	1	2	3	4	5	NA
26. Overall, I would rate the effectiveness of the instructor as	1	2	3	4	5	NA
27. Overall, I would rate the amount I learned in this course as	1	2	3	4	5	NA
28. Overall, I would rate the value of what I learned in this course as	1	2	3	4	5	NA

Don't assume, ask . . .

## Applications Card

DIRECTIONS: Please take a moment to recall the ideas, techniques, and strategies we've discussed -- and those you've thought up -- to this point in the session. Quickly list as many possible applications as you can. Don't censor yourself! These are merely possibilities. You can always evaluate the desirability and/or feasibility of these application ideas later.

Interesting  
IDEAS/TECHNIQUES  
from this session

Some possible  
APPLICATIONS of those  
ideas/techniques to my work

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# Seven Levers for Deeper Learning

## Research-based Guidelines for more Effective Teaching and Learning

Overall, research suggests that virtually all students can learn more – and more deeply – when we help them to . . .

1. Become explicitly aware of their own relevant prior knowledge, beliefs, preconceptions, and values – and unlearn, as needed
2. Set and maintain realistically high and personally meaningful learning goals and expectations for academic success
3. Learn how to learn effectively – given their own individual histories, talents, preferences, and goals – so they become increasingly self-directed and independent learners
4. Understand the criteria, standards, and methods used in assessing and evaluating their learning and get useful, timely feedback on their performance against those standards
5. Seek and find connections to and real-world applications of concepts and skills they are learning in class
6. Collaborate regularly and effectively with other learners and with teachers to achieve meaningful, shared learning goals
7. Invest as much actively engaged time and high-quality effort as possible in their academic work

## ANGELO'S SEVEN AXIOMS OF CLASSROOM ASSESSMENT

1. Don't ask if you don't want to know.
2. Don't collect more data than you can easily and quickly turn into useful information.
3. Don't simply adopt methods and techniques from others, adapt them to your subject and students.
4. Before using an assessment technique, always ask yourself: How might having data from this help both the students and me improve learning? (If you can't answer that question, the assessment is probably not worth doing.)
5. Take advantage of the "Hawthorne Effect."  
Let students know why you are assessing and how you hope it will benefit them. You'll be more likely to find what you're looking for.
6. Remember: If an assessment is worth doing, it's worth teaching students how to do it well.
7. Make sure to close the "feedback loop" by letting students know what you've gleaned from their responses – and how you and they can use that information to improve learning.

## Seven Common Misperceptions about Assessment and Seven Reasonable Responses

1. We're doing just fine without it.
  - OK, then let's use assessment to find out what works, and to help us document and build on our successes.
2. We're already doing it.
  - OK, then let's audit all the assessments we already do to discover what we know and what we don't.
3. We're far too busy to do it.
  - OK, but since we're already doing it, let's use assessment to see where and how we can save time and effort.
4. The most important things can't/shouldn't be measured.
  - And not everything measurable should be measured, but let's see if we can agree on how we can tell when we're succeeding in these most important things.
5. We'd need more staff and lots more money.
  - Since we're unlikely to get more resources: how, what, and where can we piggyback, embed, and substitute?
6. They'll use the results against us.
  - They might. So, let's build in strong safeguards against misuse before we agree to assess.
7. No one will care about or use what we find.
  - To avoid that, let's agree not to do any assessments without a firm commitment from stakeholders to use the results.

## Three Definitions

Higher learning is an active, interactive, self-aware process that results in meaningful, long-lasting changes -- in knowledge, understanding skills, behaviors, attitudes, beliefs, opinions, and/or values -- that can not be attributed primarily to maturation.

Angelo, T. A. (1993). A 'Teacher's Dozen': Fourteen General, Research-based Principles for Improving Higher Learning in Our Classrooms. The AAHE Bulletin, 45 (8), pp. 3-7 & 13.

Assessment is an ongoing process aimed at understanding and improving student learning. It involves making our expectations explicit and public; setting appropriate criteria and high standards for learning quality; systematically gathering, analyzing, and interpreting evidence to determine how well performance matches those expectations and standards; and using the resulting information to document, explain, and improve performance. When it is embedded effectively within larger institutional systems, assessment can help us focus our collective attention, examine our assumptions, and create a shared academic culture dedicated to assuring and improving the quality of higher education.

Angelo, T. A. (1995). Reassessing (and Defining) Assessment. The AAHE Bulletin, 48 (2), pp. 7-9.

Classroom Assessment is a simple method faculty can use to collect feedback, early and often, on how well their students are learning what they are being taught. The purpose of classroom assessment is to provide faculty and students with information and insights needed to improve teaching effectiveness and learning quality. College instructors use feedback gleaned through Classroom Assessment to inform adjustments in their teaching. Faculty also share feedback with students, using it to help them improve their learning strategies and study habits in order to become more independent, successful learners. . . . Classroom Assessment is one method of inquiry within the framework of Classroom Research, a broader approach to improving teaching and learning.

Angelo, T. A. (1991). Ten Easy Pieces: Assessing Higher Learning in Four Dimensions. In T. A. Angelo (ed.) Classroom Research: Early Lessons from Success. San Francisco: Jossey-Bass. *New Directions for Teaching and Learning*, no. 46, pp. 17-31

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