Doing Assessment as if Teaching and Learning Matter Most

Materials for a concurrent session in the
2016 Assessment Institute in Indianapolis
10:15-11:15 AM – Monday 17 October 2016

Tom Angelo

Clinical Professor of Educational Innovation & Research in
The Division of Practice Advancement and Clinical Practice, and
Director of Educator Development in *The Academy*
UNC Eshelman School of Pharmacy
University of North Carolina at Chapel Hill

thomas.a.angelo@gmail.com

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Values Affirmation – [I, III, VI]   *Schnabel, et al. (2013); Steele (2010); Yeager (2014)*

On the lines below, jot down 2 or 3 educational/professional values you hold that motivate you
to invest your time and energy in assessment efforts in your institution.

_____

_____

_____

_____

Goal Ranking & Matching – [I, III, VI] *Morisano, D., et al. (2010) and Oettingen, G. (2014)*

What specifically do <u>you</u> hope to learn/gain through participating in the 2016 Assessment Institute?

On the lines below, please list three or four <u>specific learning goals</u> you hope to achieve –
things you hope to learn – and/or <u>questions</u> you hope to answer through participating actively.

Your <u>Learning Goals/Burning Questions</u> for the *2016 Assessment Institute*

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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.

Background Knowledge Probe – [VI, VII]   *Chronicle of Higher Education* (2016)

Please do not attempt to answer these until you receive verbal directions.

1. **Of 1st-year students at 4-year US colleges in Fall 2015, what percentage . . .**

    A. Graduated from a public school (not charter or magnet)?   ___ %

    B. Graduated from a charter/magnet public school?   ___ %

    C. Graduated from a private religious/parochial school?   ___ %

2. **Of those same students, about what percentage rated the following reasons as "very important" in deciding to go to college . . .**

    A. To be able to get a better job?   ___ %

    B. To learn more about things that interest me?   ___ %

    C. To get training for a specific career?   ___ %

    D. To gain a general education and appreciation for ideas?   ___ %

    E. To be able to make more money?   ___ %

    F. To prepare myself for graduate/professional school?   ___ %

    G. To make me a more cultured person?   ___ %

3. **Of those same students, what percentage thought they had a "very good chance" of doing the following in college . . .**

    A. Socializing w/someone of different racial/ethnic group   ___ %

    B. Earning at least a B average?   ___ %

    C. Communicating regularly with professors?   ___ %

    D. Participating in student protests or demonstrations?   ___%

4. **About what percentage of those 2015 FYs had a . . .**

    A. First parent with at least a 4-year degree?   ___ %

    B. Second parent with at least a 4-year degree?   ___ %

SIX DIMENSIONS OF HIGHER LEARNING OUTCOMES – [II, III, IV, VII]

Approximate percentage of the total assessment, grading & feedback *you* received during *your* own undergraduate degree program focused on . . .

What percentage of *their* total assessment, grading & feedback *your students* will need during 2016-2020 that focuses on . . .

FACTUAL LEARNING
>   Learning ***What (Level 1)***
>>   **Learning facts and principles**

CONCEPTUAL LEARNING
>   Learning ***What (Level 2)***
>>   **Learning concepts and theories**

PROCEDURAL LEARNING
>   Learning ***How***
>>   **Learning skills and procedures**

CONDITIONAL LEARNING
>   Learning ***When and Where***
>>   **Learning applications**

METACOGNITIVE LEARNING
>   Learning ***How to Learn***
>>   **Learning to direct and manage one's own learning**

REFLECTIVE LEARNING
>   Learning ***Why (and Why Not)***
>>   **Developing self-knowledge, cultural awareness, ethics, etc.**

100%   **100%**

Plus-Minus-Question Mark Technique – [II, VII]

Some key terms and concepts that *might* be of use . . .

- **Formative and summative assessment**
- **Backward design**
- **Constructive alignment**
- **Gap analysis**
- **Performative tasks**
- **Implicit bias**
- *Bus Test, Parrot Test,* and *Parking Lot Test*
- **Cognitive load**
- **Metacognition**
- *The Dance Floor* and *The Balcony*
- **Deliberate practice**
- **Novice-Expert differences**

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Seven Research-based Guidelines for Assessment to Improve Teaching & Learning

I. **Build shared trust**. *Begin by lowering personal, interpersonal and organizational barriers to risk taking and change.*

II. **Build shared language and concepts**. *Develop a collective understanding of the key terms and concepts (mental models) needed for transformation.*

III. **Build shared goals and motivation**. *Collectively determine goals worth working toward, problems worth solving and questions worth answering – and consider the likely costs and benefits.*

IV. **Design backward and work forward.** *Design backward from that shared vision and long-term goals to develop coherent outcomes, strategies, and activities.*

V. **Think and act systematically and sustainably.** *Analyze the opportunities and limitations presented by system(s) within which we operate and seek connections and applications to those larger worlds.*

VI. **Take a scholarly approach.** *Apply what has already been learned about individual and organizational learning, change and assessment to inform, explain, and examine your plans and strategies.*

VII. **Don't assume, ask.** *Practice what we preach*. *Make the implicit explicit – especially implicit biases. Demonstrate the value of assessment by using it ourselves – and on ourselves.*

Bloom's Cognitive Domain Taxonomy *(Revised)*   Anderson & Krathwohl (2001)

(6) CREATE
Generate, Plan, Synthesize, Produce the New

(5) EVALUATE
Critique or Judge based on Explicit Standards/Criteria

(4) ANALYSE
Break Down, Relate Parts and Whole, Organize

(3) APPLY
Follow Procedures to Solve Problems or Carry Out Tasks

(2) UNDERSTAND
Connect New Learning to Prior Knowledge by Interpreting, Classifying, Comparing, Summarizing, etc.

(1) REMEMBER
Elaborate, Encode, and Retrieve Information from Long-term Memory

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"Blooming" - *Categorizing Questions by Bloom's Taxonomy* – [II, IV, VI] Cook, E., et al. (2013)

Directions: Using the numbers 1-6 to represent the levels of Bloom's revised taxonomy (above), please identify the level of each question below.

___A. Give an example of "seasonal change"

___B. Why do the Earth's seasons change?

___C. What causes the Earth's seasons to change? (Explain how it works.)

___D. When it is winter in Indianapolis, USA, what season is it on Ipanema Beach in Brazil?

___E. Where on Earth would you predict the greatest seasonal variation? Why?

___F. What contribution, if any, will global warming likely make to seasonal change? Explain your reasoning.

___G. What would happen to seasonal change in Indianapolis, IN, if the Earth's degree of tilt on its axis
      changed to:
      i. 45 degrees?
      ii. 90 degrees?
      iii. 180 degrees?
      iv. 0 degrees?

___H. If the Earth's orbit moved it significantly further away from the Sun, what difference, if any,
      would you predict that increased distance would make to seasonal change? Explain your answer.

___I. If you were teaching how and why the seasons change to a 5-year-old, how would you explain it?

___J. If astronomers discovered an Earth-like planet with no seasonal variation, what would you predict
      about that planet's orbit, etc.? Explain your reasoning.

Bondy's Clinical Performance (Skills) Rating Scale   Bondy, K.N. (1983)

(6) EXPERT INSTRUCTOR *
Safe – Very Proficient – Capable of assessing, demonstrating, instructing & supporting learners in levels 1-5

(5) INDEPENDENT
Safe – Very Proficient – Requires no support

(4) SUPERVISED
Safe – Proficient – Requires only occasional support and direction

(3) ASSISTED
Safe – Mostly Proficient – Requires frequent support and direction

(2) MARGINAL
Safe only when supervised – Unskilled – Requires continuous support and direction

(1) DEPENDENT
Unsafe & Unaware – Unable to demonstrate skill – Requires direct instruction and continuous support

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* **Level Six is not in the original Bondy Scale, but is implicit in its use as a criterion-based assessment tool.**

Skills Self-Assessment Exercise – [II, IV, VI]

Using the Bondy Scale above, and thinking of skills you already possess and your current levels of competence, confidence and independence in those skills: Identify at least one of your skills in which you are currently "Dependent," another skill(s) in which you are "Marginal," and so on all the way up.

Bondy Levels	My Skills at each Bondy level
Expert Instructor (6)	_____
Independent (5)	_____
Supervised (4)	_____
Assisted (3)	_____
Marginal (2)	_____
Dependent (1)	_____

A Detailed Assessment/Grading Rubric
Macroeconomics Essay Grading Grid – [I, IV, V]   *Rhodes, T.L. (2010)*

Assignment: Write a well-structured, enlightened critical essay about current economic conditions that demonstrates command of existing economic knowledge, appropriate interpretation and application of that knowledge, and demonstrates appropriate use of data and argumentation to support well-reasoned policy recommendations.

Basic Questions: What is the current macroeconomic situation in the U.S.?
What is the likely prognosis for the next 12 to 24 months?
What are your economic policy recommendations?

Criterion	Distinguished	Exceeds Expectations	Meets all Expectations	Meets some Expectations	Unsatisfactory	Missing or fails minimum req.
Structure	10	8	6	4	2	0
Meets all minimum requirements						
Executive summary is effective & concise						
Introduction clearly lays out a roadmap for the paper and places the information in context						
Body addresses all the Basic Questions, includes the argumentation and data						
Conclusion provides summary and closure						
Content						
Knowledge	30	24	18	12	6	0
Command of existing economic knowledge						
Use of terms, theories, and data are						
Informed judgment demonstrated by selection of terms, theories and data (shown by the exclusion irrelevant and inclusion of						
Argumentation	40	32	24	16	8	0
Argument flows logically so that early statements lay the foundation for later statements and the reader is guided through the arguments						
Appropriate application of theory is used to make argument; clearly links theory and data to conclusions						
Arguments are persuasive focuses on key points, does not wonder, uses no unnecessary verbiage						
Alternative policies, arguments, conclusions and generalizations are noted where they exist and addressed; differences of opinion, supported by evidence, are also discussed						
Data used is reliable, valid, and pertinent; it provides effective support; no superficial information or tangential data muddies the argument						
Striving for Excellence and Creativity	20	16	12	8	4	0
Presentation is neat and professional; all visuals used are well labeled, clear, and effective conveying information better than words; text contains no errors and is easy to read & understand						
Creativity – the paper clearly holds the imprint of the author. Original thought is demonstrated by innovative organization, the integration of concepts and ideas, the use of new approaches, the novel use of visuals, or						

Thanks to Dr. Richard Stratton of the University of Akron for permission to use this example.

Draft Questions for a Course/Teaching Feedback Form – [I, V, VI]

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/outcomes 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/instructors: (1=extremely high, 2=high, 3=adequate, 4=low, 5=very low)

23. Overall, I would rate the instructor's effectiveness as a teacher as	1	2	3	4	5	NA
24. Overall, I would rate the amount I learned in this course as	1	2	3	4	5	NA
25. Overall, I would rate the value of what I learned in this course as	1	2	3	4	5	NA
26. Overall, I would rate the quality of this course as	1	2	3	4	5	NA
27. My motivation to continue learning about this material in the future is	1	2	3	4	5	NA
28. The likelihood I'd recommend this course to a good friend is	1	2	3	4	5	NA

Applications Card – [III, IV, V]   Angelo, T.A. & Cross, K.P. (1993)

Interesting or promising *IDEAS/TECHNIQUES* *from this session*	*Some possible, potential* *APPLICATIONS of those* *ideas/techniques to my work*

A FEW USEFUL REFERENCES ON TEACHING, ASSESSMENT AND LEARNING – [VI]

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Session Feedback Form – [VII]

Overall Feedback – Please circle the rating for each item which best represents your experience and evaluation of this session.

1. Overall, the <u>value</u> of what I learned in this session is

5	4	3	2	1
Very High	High	Adequate	Low	Very Low

2. Overall, the <u>quality</u> of this session is

5	4	3	2	1
Very High	High	Adequate	Low	Very Low

3. Overall, I rate this presenter's <u>effectiveness</u> as

5	4	3	2	1
Very High	High	Adequate	Low	Very Low

Comments on this session

4. Which two or three specific aspects of this session were most useful/helpful?

5. Which specific aspects could have been improved?

6. What questions, if any, remain unanswered?