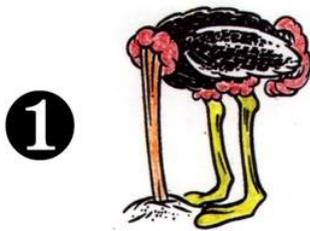# Proven Success in Faculty SLO Training:
"Getting" Assessment and Improving Teaching

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Texas Christian University
2011 Assessment Institute | Oct-Nov
Indianapolis, Indiana

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Learning Outcomes Training:

Day One:

9a - noon:

- Learning Outcomes: the shift from the teaching paradigm to the learning paradigm
- The syllabus: SLOs connected to what the course is all about

    Action verbs in SLOs
    Mapping course activity to SLOs
    The card-sort activity

LUNCH!

1:30p - 4:30p:

- Rubrics

    The p. 217 activity
    Introduction to weighting assignments for SLO assessment

- One-on-one as faculty begin working on outcome rubrics

Day Two:

9a - noon:

- Drop-in as faculty bring back their "homework": their rubrics filled out on the template for the SLO they will work on the upcoming term

    Weighting assignments – "final" decisions
    Rubric wording – "final" decisions

First One-on-One: Learning Outcomes Manager (LOM):

20-minute meeting to show faculty their rubrics set up in LOM and how to use LOM to assess student artifacts

Second One-on-One: What are the results?

LOM data examined, lessons learned & action steps, artifact exemplars

Spring 10 LOM Pilot RT02

Faculty	Dr. Darren Middleton
Department	Religion
College	AddRan
Course:	RELI 10033 Understanding Rel:Texts&Ideas 056 (Middleton - LOM)
Core Outcome Assessed:	RT02
Learning Statement:	Students will demonstrate knowledge of one or more major religious traditions through the study of some foundational texts, figures, individuals, ideas or practices.
Number of Students Assessed:	35
Artifact Stored:	2010 Spring REG eCompanion Term

Rubric Used:

	Strength (Weight %)	4	5	7
DMiddleton2_RT02_RELI10033_Test1Essay: RT02_Test One – Essay Question on the first eleven chapters of Genesis RT02_Test One – Essay Question on the first eleven chapters of Genesis	x 1 (33.34%)	Student unable to demonstrate that they know the basic information required, such as the authorship, date, occasion, purpose, and the main religious themes on which the text focuses.	Student demonstrated an adequate knowledge of the information required by stating the basic information, but the description of the four themes of Creation (in the context of other creation narratives), Fall, Flood (in the context of other flood stories), and Babel displays little or no textual support and, therefore, lacks a richness of content.	Student demonstrated advanced knowledge of the information required by describing the text's compositional history, by explaining the text's content and meaning(s), and by tracing relationships between the text and other foundational writings of the time, detailing how they are alike and how they are different.
DMiddleton2_RT02_RELI10033_Test2Essay: RT02_Test Two – Essay Question on the ideas and practices associated with Amos and Isaiah, two Hebrew prophetic figures	x 1 (33.33%)	Student unable to demonstrate that they know the basic information required, such as the identity, setting, and ethics of the prophets Amos and Isaiah.	Student demonstrated an adequate knowledge of the information required by stating the basic information, but the description of the prophetic themes—Covenant, Judgment, Redemption, displays little or no textual support and, therefore, lacks a richness of content.	Student demonstrated advanced knowledge of the information required by identifying Amos and Isaiah as classical prophets, by tracing the similarities and differences between them and their immediate predecessors, Elijah and Elisha, and by offering textual examples of Amos's and Isaiah's three moral and religious concerns.
DMiddleton2_RT02_RELI10033_Test3Essay: RT02_Test Three – Essay Question on the authentic letters of the Apostle Paul	x 1 (33.33%)	Student unable to demonstrate that they know the basic information required, such as Paul's identity, the setting and purpose of each	Student demonstrated an adequate knowledge of the information required by stating the basic information, but the	Student demonstrated advanced knowledge of the information required by recognizing the Apostle Paul's rôle

		authentic Pauline letter, and the main themes in the correspondence considered as a whole.	description of each authentic letter's context-specific ideas and practices and the main themes of the correspondence considered as a whole displays little or no textual support and, therefore, lacks a richness of content.	as a main figure in the New Testament's story of Christian origins, by describing the specific situation implied by each authentic letter, and by elucidating, with the aid of textual examples, the ideas and practices in each epistle as well as the main themes in the correspondence considered as a whole.

Assignments Assessed:

Title	Location	Raw Average	Weight	Weighted Calculation
Test 1 Essay	Unit 0: Course Home	5.2/7	33.34%	5.2 x 0.3334 = 1.73
Test 2 Essay	Unit 0: Course Home	5.2/7	33.33%	5.2 x 0.3333 = 1.73
Test 3 Essay	Unit 0: Course Home	5.07/7	33.33%	5.07 x 0.3333 = 1.69

Results: RT01 Buckets Based on Score

Weighted Mean	Median	Mode
5.16/7	5/7	5/7

Students 4	Students 5	Students 6	Students 7
Student, 10 Student, 08 Student, 13 Student, 16 Student, 07 Student, 17 Student, 05 Student, 12	Student, 06 Student, 02 Student, 18 Student, 14 Student, 20 Student, 22 Student, 25 Student, 08 Student, 24 Student, 04 Student, 23 Student, 19 Student, 21	Student, 15 Student, 11	Student, 03 Student, 01 Student, 26 Student, 12 Student, 09

Display Course Code	Course ID	Term	Redacted Identifier	Student Login ID	Student Last Name	Student First Name	RT02 Score	RT02 Possible Score	RT02 Percentage
RELI 10033	3813502	2010 Spring REG eCompanion	03	106878270	Student	03	7	7	100%
RELI 10033	3813502	2010 Spring REG eCompanion	04	106912550	Student	04	5	7	71.43%
				ETC.					

Faculty Comments on Scoring

Redacted Identifier	Student Last Name	Student First Name	DMiddleton2_RT02_ RELI10033_Test1Essay Comment	DMiddleton2_RT02_ RELI10033_Test2Essay Comment	DMiddleton2_RT02_ RELI10033_Test3Essay Comment
02	Student	02			
03	Student	03	Succinct and detailed		
04	Student	04	Links to Enuma Elish and Epic of Gilgamesh need to be more explicit		Specific situations of letters absent.
05	Student	05			
06	Student	06			
07	Student	07	Enuma Elish content lacks detail	Key details missing.	
			ETC.		

(Lessons Learned and Action Steps below are from a different instructor's End-of-Term Report. The instructor, Andy Fort, also provides a big-picture analysis about his take on the training in a separate statement which follows below his E-o-T Action Steps.)

Lessons Learned:

"Working with learning outcomes has helped clarify my exact goals and how I prioritize them, see more clearly how each fits into the core competencies, and illuminate how each of my assignments meets a particular outcome. It has also helped me clarify when, where, and how much I actually focus on each of my course goals, and to measure the success of each student in meeting them (the outcome). This work has helped me refine my goals, though not actually changed any.   This effort has reinforced my recognition that my primary emphasis early in the course is on method (understanding the study of religion), and shifts more to content as the semester progresses."

- Students demonstrated achievement of the RT01 outcome at different points during the semester (different points for different students).
- Assessment of the RT01 student learning outcome can be effectively accomplished using a 3-level instead of a 4-level scale (got it well, got it sufficiently, didn't get it) because the distinguishing characteristics between the levels (clarity of description, specific examples) really do tell me which level of achievement the student reached.
- Using a brief, holistic rubic (3-level, as above) helped direct my thinking about assessing outcomes achievement away from "grading" and toward a focus on recognizing those instances which demonstrate student outcome achievement.
- Feeling completely confident that a student's expression in a learning artifact which tells me she "got it" at some point in the course (whether in an exam question or in the electronic journal) means she will "keep it" in all contexts or in subsequent years is probably impossible.
- Learning that the benefit for me and students can in fact outweigh the time invested despite the low reward built into the university merit structure.
- One-on-one work with Koehler mentors allows effective learning and builds trust but is highly time-intensive for them as well.
- Learning outcome language is unfamiliar to many faculty and in many cases might need the time spent and trust built, particularly among humanities faculty.

Improvement Plan/Changes to Course

- Spring 2010 will focus on RT02.
- Score based on 7-got it well, 6-got it sufficiently, 4-did not get it sufficiently.
- Collect date of posting to pull LOM comments into LOM example of high, medium, and low. (This will help track the "when they got it" aspect of the RT02 outcome.)
- Define the RT02 rubric with more details explicitly distinguishing between three levels (as done after rubrics revision of RT01 in Fall 2009).
- Select two postings to assess all students. Suggestion to select one discussion post in February, one in April.

ECollege LOM Notes, 1/10 – Dr. Andy Fort

Working on e College's Learning Outcomes Management with Jeff King and Romy Hughes has helped me clarify when, where, and how much I actually focus on each of my course goals, and to measure the success of each student in meeting them (the outcome). This work has helped me refine my goals, though not actually changed any. This effort has reinforced my recognition that my primary emphasis early in the course is on method (understanding the study of religion), and shifts more to content as the semester progressed. This is, of course, a difficult balance; a professor must always include some of both, and one is no good without the other.

I should note that I have taught this course, apparently successfully, for over 25 years, and I began with some real reservations about whether working on "learning outcomes management" would be worth the time invested. I feared that I would be asked to add or alter some outcomes to fit someone else's purpose, and it took a lot of reassurance and experience to persuade me that my partners wanted to affirm and facilitate what I was already doing. I also insisted on taking on only as much as would fit into an already busy schedule. I am pleased to affirm that I have been able to work at my own pace, with goals I set. As a consequence, as time went on my trust and enthusiasm increased, and I am certain it has been worth the time invested. While learning this approach certainly demands time up front, I am persuaded it saves time over later semesters due to having clearer goals and (in my case simple) rubrics for student outcomes, which allow for easier measurement and future improvement. One can transfer the outcomes and rubrics to other courses. This can also eventually assist with the separate issues of how a course outcome fits with a departmental program, university core curriculum, or overall university mission.

(Below is a 1-page handout summarizing key concepts about learning outcomes.)

From the Teaching Paradigm to the Learning Paradigm

The key concept about teaching with a learning outcomes focus is that your effectiveness is determined by how well your students demonstrate they know, can do, and/or value the things the course is supposed to teach them. Your teaching effectiveness is *not* determined by which or how much "content" you have presented during the course.
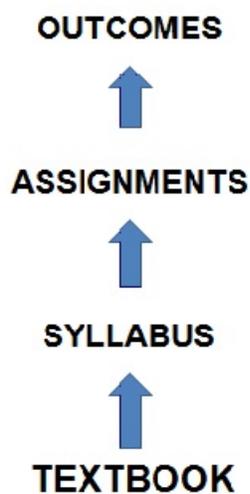
The teaching paradigm is a *delivery* or *transmission* model of education: the teacher "transmits" information to the students, and the students do or do not learn it. If they don't learn, in the transmission model, the teacher can still be considered a "good" teacher if she presented all the content that the curriculum says should be presented.

Barr & Tagg, though, say that the learning paradigm seeks to "produce learning" — that is, quality teaching is evidenced by students who can demonstrate they have learned.
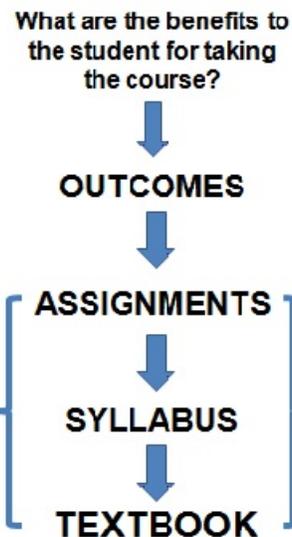
In the teaching paradigm, the first step is usually to assemble content you're supposed to "deliver," and then chunk that content across the semester. All you're doing is dividing up information students should know by the end of the course. Content delivery is the objective, and you hope the students learn based on what and how you deliver.

In the learning paradigm, the *first* thing you do is determine the course outcomes and then work backwards from that point to determine the content, texts or readings, homework and class activities, etc., that will best help students to achieve the outcomes. Ken Bain, author of *What the Best College Teachers Do*, provides a perfect first step when planning to teach a course: Ask yourself, "What are the biggest questions that my course will help students begin to answer, and how can I raise those questions in ways that they will find intriguing?"

Teaching Paradigm   Learning Paradigm

OUTCOMES

ASSIGNMENTS

SYLLABUS

TEXTBOOK

What are the benefits to the student for taking the course?

OUTCOMES

ASSIGNMENTS

SYLLABUS

TEXTBOOK

In the graphic to the left, a teaching paradigm instructor starts with the content (textbook), divides it up into chunks to put on the syllabus, devises assignments to go along with the chunks, and hopes students learn by the end of class.

The learning paradigm instructor defines the learning outcomes first (big questions to help students answer), then devises assignments and finds content that will help students learn the answers to the questions and how to demonstrate that they know, can do, and/or value those answers.

Teaching Paradigm = *Deliver Content* | Learning Paradigm = *Produce Learning*

Rubrics

The Difference Between
Grading and Assessing Outcomes

Task 1 + Task 2 + Task 3 + Task 4 + Task 5
80   90   100   80   90

80
90
100
80
90
―――
440 /5 = 88, right? So this must mean
the student achieved the
learning outcome, right?

Well . . . most probably not, for a host of potential reasons:

- Task 1 was group work, and the student was in a group with two majors.
- For Task 2 (a test), the sorority had a copy of a prior version of the test.
- Task 3 (a paper): getessay.com or custom-writing.org
- Task 4 (multiple-choice exam): Adderall scored at the library = "successful" all-nighter but no memory of what was studied two days after the test

Also, grades must often include points off (or added) for things not related to the outcome which the assignment is supposed to be focused on. Examples: Five points off for each day late. Two points off for each incorrectly cited source.

Grades — by their nature — are usually only proxies for learning achievement.

Assessment of outcomes, though, when using quality rubrics applied to authentic tasks (meaning, "real-world" or actually proving by doing or showing), is a true evaluation of whether students have learned.

Course Re-design

What we call the "card sort activity" makes explicit the hidden connections, lack of connections, or redundancies in connections between class and assignment activity and course learning outcomes. The card sort also places activities along the time line of the class.

Our faculty have discovered:

- "Oops – I don't have any assignments or activities that help students achieve one of my course outcomes."
- "*Now* I see why my students have always griped about February's and April's assignment due dates."
- "Why do I have all these activities and assignments that map up to that one outcome? There's way too much work focusing toward that outcome and hardly any focused to the outcome about _____."
- "The way this outcome is worded means it isn't really measurable."

> # Lessons Learned as Necessary for Success in Working with Faculty on Learning Outcomes & Their Assessment

- **BABY STEPS!** — For example, allow faculty to assess only some of their students and only one of their course learning outcomes the first time they assess SLOs in their courses. This is new, it can be overwhelming, and faculty need time to get comfortable with things. (Additional lesson learned: It's probably good for faculty to stick with assessing only one outcome for at least 2-3 semesters when they start doing this. We've found that some faculty like to stick with the same outcome for two or three iterations before moving to another outcome, but other faculty like to try a new outcome each term as they continue working with SLOs.)
- **Reward faculty somehow for doing this!** — We paid faculty a stipend out of our Center's budget, knowing that such compensation both honors their time and work *and* sends the message that such a commitment to assessing learning outcomes is important.
- **Key a-ha moments must occur for faculty themselves to "get it."** — For example, if there's no understanding of the difference between grading and assessing outcomes (a misconception held by many faculty), assessing outcomes will fail because it will become "an extra grading step." (Now *that's* a thought that will surely chase faculty away!) Three critically important a-has that must occur:

  - difference between grading and assessing outcomes

- why rubrics are absolutely critical and how one constructs and uses them (this one often connects with the one above because faculty still not completely clear on the concept will bring in rubrics that are grading rubrics, not outcomes rubrics; support faculty in grasping this — it's way different from how the majority of faculty have thought about knowing whether their students have learned or not; Eric Mazur's experience with the Force Concept Inventory [see references] is a perfect example *and* a good demonstration of moving from the teaching paradigm to the learning paradigm)
- that course activity should be designed with the learning outcomes in mind and that *all* course activity should occur because it helps students achieve the course outcomes

Selected Resources

Bain, K. (2004). *What the best college teachers do.* Cambridge, MA: Harvard University Press. — Bain's book is an oft-quoted source about what to focus on, big-picture-wise, to teach well in college. One dean at a liberal arts university summarized Bain's research and recommendations by saying good teachers: 1) hold students to high academic standards while being, 2) warm and cuddly in the process. Translation: hold students to high standards but let them know you care about them and their learning. Regarding learning outcomes, this approach means you work to help students see and know for themselves that they are making progress toward outcomes.

Barr, R. B. & Tagg, J. (1995, November/December). From teaching to learning: A new paradigm for undergraduate education. *Change, 27*(6), 13-25. Available at http://ilte.ius.edu/pdf/BarrTagg.pdf. — This is a foundational piece in the literature of learning in higher education, one often cited as an explanation of how and why Higher Ed must shift from "delivering content" to "assessing learning" as the measure of quality and effectiveness. Regional accreditors' shifts to a focus on assessing outcomes as a measure of institutional quality followed on the heels of this article and other writing by people like George Kuh, Thomas Angelo, and others, including those working in the area of the Scholarship of Teaching and Learning

Biggs, J., & Tang, C. (2007). *Teaching for quality learning at university* (3rd ed.). Maidenhead, Berkshire, U.K.: Open University Press.

Fink, L. D. (2003). *Creating significant learning experiences: An integrated approach to designing college courses*. San Francisco: Jossey-Bass. — Dee Fink reconceptualized the approach to course design and execution, drawing heavily on a learning outcomes focus. One suggestion of his for defining the big-picture outcomes you want your students to achieve and take with them after leaving the class is to ask yourself, "If I meet my former students on the street three years after the class is finished, what will distinguish them from people who haven't taken my class?"

Fort, A. O. (2011). Learning learning outcomes: A liberal arts professor assesses. *Liberal Education, 97*(1), 56-60.

King, J. (2011). Beyond the grade: Developing opportunities for course-embedded assessment. *Assessment Update, 23*(5), 9-10.

Mazur, E. (2008). From questions to concepts: Interactive teaching in physics. Video (2:22 long) available at http://www.youtube.com/watch?v=lBYrKPoVFwg.

Tagg, J. (2003). *The learning paradigm college*. Bolton, MA: Anker.

The Koehler Center "Learning Outcomes Primer"
(available at http://www.cte.tcu.edu/LOprimer.htm).

Introduction to Learning Outcomes (August 2008)

Learning Outcomes as the Currency for Promises Met (November 2010)
Formal & Informal SoTL Research (August 2011)

Understanding Student Learning Outcomes

The Logic of Confidence, the Culture of Untested Assumptions (April 2009)
What Are Outcomes? (September 2008)
Defining Outcomes (February 2009)
Valuing Learning Outcomes (October 2010)
Learning Outcomes Terminology (September 2009)
Identifying Past Students by the Learning Outcomes They Possess (July 2009)
Learning Outcomes vs. "A Bunch of Stuff" (March 2009)
Direct and Indirect Measures of Student Learning (January 2009)
Learning Outcomes and the Core Curriculum (May 2009)
Planning the Course for Students to Achieve Outcomes (December 2009)
Faculty Ownership of Learning Outcomes Assessment (June 2010)
The Affective Component in Embracing Learning Outcomes(October 2011)

Learning Outcomes and the Syllabus (October 2008)

One Approach to Outcomes and Syllabus Constructions (June 2011)

Rubrics

Rubrics: An Introduction and Good News (November 2008)
Ease into Building Rubrics by Using Pasts Student Work (May 2011)
Rubrics and Benchmarks (December 2008)
Analytic and Holistic Rubrics (October 2009)
Rubrics for Grading, Rubrics for Learning Outcomes (January 2010)
Concept Maps to Assess Learning Outcomes (February 2010)

Measuring & Tracking Student Achievement of Outcomes (November 2009)

Learning Outcome Reports: What's Most Important? (January 2011)
Student Perceptions of Class Activity Alignment with Outcomes (July 2011)
Formative and Summative Assessment (June 2009)
Setting Student Achievement Improvement Goals (February 2011)
What Does "Mapping Up" to an Outcome Mean? (August 2009)
Assignments Best Suited to Gauge Student Progress Toward Outcomes (December 2010)
Connecting Your Course Outcomes to Departmental and Higher Outcomes (April 2010)
Students' Self-Perceptions of Outcomes Achievement (May 2010)
The Fiction of the Credit Hour, the Reality of Learning Outcomes (July 2010)
Learning Outcomes, Conceptual Understanding, Test Scores: Related? (August 2010)
Learning Outcomes & Academic Rigor (Thank You, Simon Cowell?) (April 2011)
Encouraging Development vs. Finding Ability (September 2011)

Instructional Interventions to Improve Student Achievement (coming)

Rubrics Help Students Better Achieve Learning Outcomes (September 2010)
Focusing on Outcomes Promotes Deep Learning (March 2011)
Tools to Identify "Low-Hanging Fruit" (coming)
Resources for Finding Instructional Interventions that Can Improve Student Learning Outcomes (coming)