National Institute for Learning Outcomes Assessment Making Learning Outcomes Usable & Transparent

To Imagine a Verb: Assignments and Learning Outcomes

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NILOA Track Keynote

Assessment Institute October 26, 2015

National Institute for Learning Outcomes Assessment Making Learning Outcomes Usable & Transparent



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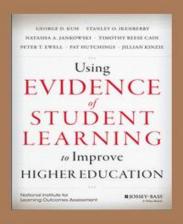
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Keeping Up with Competency

Tue, Sep 29, 2015 - 08:00 am Paul Fain in Inside Higher Education

Competency-based education continues to expand in practice and conversations.

College officials even plan to get to together at a meeting called CBExchange to further discussions about the benefits and usefulness of competency-based education. This is a timely meeting given that the meaning of competency-based education is still evolving.

Produce Thinkers, Not Docile Workers

Tue, Sep 29, 2015 - 08:00 am David Gooblar in Vitae

David Gooblar made a passionate case for faculty members to embrace studentcentered learning rather than credential-centered learning, reflecting on the insights of professor Cathy Davidson from the Graduate Center at the University of New York.

The New College Scorecard

Tue, Sep 29, 2015 - 08:00 am Michael Stratford in Inside Higher Education

Have you seen the new college information website called the College Scorecard? Visitors to the website can see information about how much federal loans former students at college and universities have been able to pay back in addition to achievement data and students average incomes after graduation.

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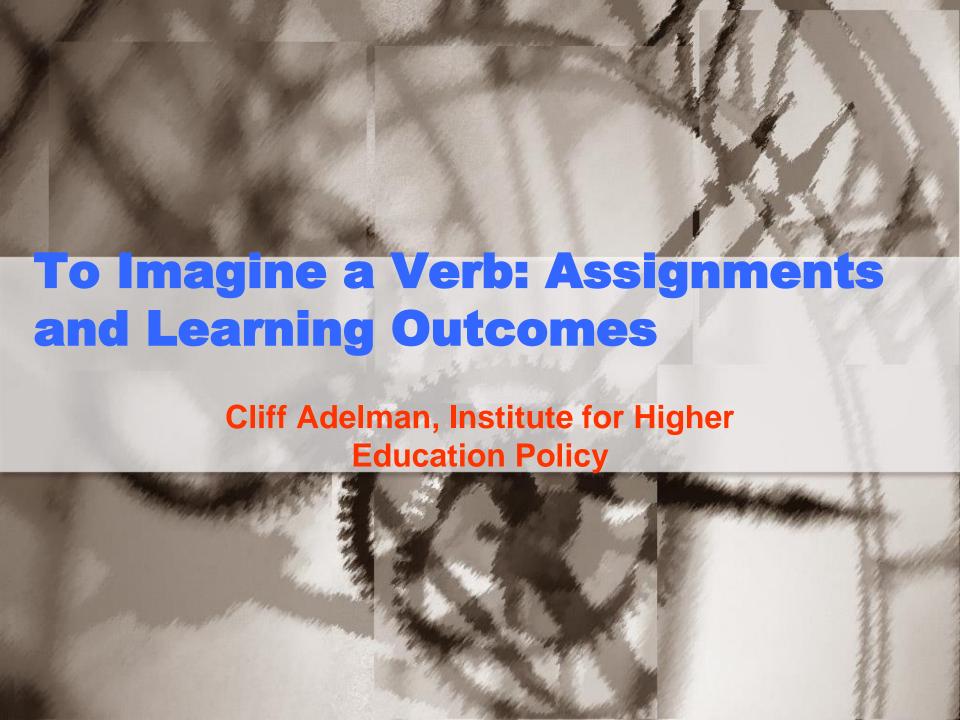
Monday, Indiana Ballroom E

- ➤ 12:30-1:30 Developing Meaningful, Operational Learning Outcome Statements (Panel)
- ➤1:45-2:45 Better Ingredients. Better Pizza. (Town Hall)
- ➤ 3:15-4:15 Embedding Assessment in the Design of Effective Assignments
- ➤ 4:30-5:30 Supporting Community College Faculty and Administrator Engagement in Learning Outcomes Assessment: Updates from the Field

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Tuesday Indiana Ballroom E

- ➤ 10:15-11:15 Competency-Based Education: Has This Idea's Time Come?
- ➤ 11:30-12:30 The Role and Importance of Student Learning Outcomes: Assessment at Minority-Serving Institutions
- ➤ 2:00-3:00 Communicating Campus Assessment Work: The VSA EIA Designation Program
- ➤ 3:15-4:15 Learning from Others: Designing Assessment Practice to Fit Your Institution



This one is about language

- The diction, syntax, and semantics of learning outcome statements
- The diction, syntax, and semantics of assessment prods
- You are smart, so you are going to contribute to the richness of the portrait; you are going to expand it and rein it in.
- You are going to work backwards from assignments to outcomes; forward from outcomes to assignments.

Assignments versus Assessment: the position of this presentation

- Assignments are discrete prods. Faculty give them to students every week, and they are statements of expectations for student learning. Faculty are in complete control of their presentation, along with the judgment of student responses to the prods.
- Assessment is an aggregate or meta-evaluation. It
 may or may not be tied to student learning
 outcomes. When it is tied, it is a system embracing
 multiple assignment-type prods covering either a
 discipline or a particular set of cognitive or
 psychomotor operations, e.g. synthesizing. It
 requires convergence and consent of many players.

Both of these are legitimate processes in the world of learning.

But our principal focus is the assignment because that is where the individual faculty member lives.

And we're focusing on language because...

For the most part, what we read of learning outcomes is either inaccessible, impossible, or unintelligible, hence stunting assignments

To illustrate, let us start with something real from outside the academy

- You have it in front of you: a recruiting ad for the Royal Air Force that ran in the London Sunday Times, 7/7/85
- I have changed the assignment prompt:
- 1) Take out a watch and note the time when you turned over the paper to see the problem.
- 2) Identify the airfield as which you would land, the time of touch-down, and the volume of your remaining fuel.
- 3) Present the algorithms you used at each stage of reaching the conclusions of #2.
- 4) Look at your watch again, and mark the time when you finished.

Your questions

- How would you express the learning outcomes this problem elicits?
- This problem is analogous to an assignment. What would you add to turn this assignment into an assessment?
- What is right—and wrong—in the way this assignment is presented?

Principles: Operational versus Active Verbs

- Learning outcome statements and assignment prods use the same language.
- The core of that language consists of operational verbs.
- "Operational" is different from "active." An operational verb references student actions that can be directly observed in external contexts and subject to judgment.
- "Recall," for example, references an internal cognitive activity, but is not operational. One does not know that a student has recalled anything until the act of memory is externalized in another action.
- The same can be said for "recognize," "develop," "value," and "relate," for example. These are NOT operational verbs.

Principles: the syntax of learning outcome statements and assignments

- Both are complete Kantian sentences, with forms (operational verbs) and intuitions (concrete nouns), i.e. however central, the verb does not stand alone.
- Learning outcome statements are declarative; assignments can be imperatives.
 Neither is subjunctive.
- Assignments flow logically from learning outcome statements, and the operational verbs make that connection possible.

More principles: syntax

- A learning outcome statement places its verb in the 2nd position of the sentence; assignments in the imperative voice can use the 1st position.
- Those leading positions underscore the fact that the verb is what the student understands and what the instructor seeks.
- The verbs in learning outcome statements are written in the present tense. The past tense is admissible if the student is a "graduate." Assignment statements can use the future tense, even though the student demonstrates now, and not next year.

With the verb as engine...

- It follows that a learning outcome statement is incomplete without examples of assignments/ assessments designed to elicit student behaviors that allow the degree of learning to be judged.
- Hence, some verbs are rejected "because they do not describe discrete activities that lead directly to assessments." (Degree Qualifications Profile)
- But others, in the form of gerunds, are powerful engines, e.g. "gathering, sifting, analyzing, ordering, synthesizing, and interpreting evidence." (American Historical Association on mastery of methodology).

Observation: discipline drives the verbs

- Experimental science students
 measure, classify, revise, modify,
 gather, design, select, record, evaluate
- Formal science students prove, model, formulate, extract, translate, infer, and calculate
- Well, there are overlaps here, but you get the idea!

Here's the assignment: What learning outcomes lie behind it?

 Pick one of the following East Coast ports of entry: Philadelphia, Baltimore, Charleston. Find the debarkation lists for that port for any decade in the first half of the 19th century. In a paper not less than 10 pages, present a portrait of immigration for the period, including volume, flow, origins, family structures, and destination (if indicated). Offer at least one hypothesis concerning the principal function of the entry process at the port you selected, and indicate what additional information you would need to test the hypothesis.

Here's the assignment: What learning outcomes lie behind it?

- You are presented with 6 parallel graphs, 3 from a point in the Pacific near Midway, 3 from a point between New Zealand and Antarctica. Each "place pair" deals with a different chemical dominant—nitrates, phosphates, and iron. The abscissa in all cases is a month-by-month calendar. The solid line on each graph represents the concentration of phytoplankton. The dashed line represents the concentration of dissolved dominants. The ordinates indicate the concentration scale.
- You have a blank page and 30 minutes. Indicate what these curves suggest about the processes that relate the concentration of phytoplankton to each chemical dominant. Then discuss how much of a difference the place of measurement makes. Finally, propose one of the three dominants as most critical to the survival of phytoplankton in the food chain, and defend your conclusion.

Terms excluded from all learning outcome statements. For each, why?

- Able to, ability, capacity
- Appreciate
- Aware, awareness
- Recognize
- Critical thinking, critically think
- Teamwork
- Develop
- Communicate (Wow!)
- Work (yes, "work"!)

Your next challenge: add to/delete from lists of verbs drawn from Natural Language Processing

- Verbs describing student acquisition and preparation of tools, materials, and texts of various types: acquire, collect, accumulate, extract, gather, locate, obtain, retrieve
- Verbs indicating the modes of student characterization of the objects of knowledge or materials of production, performance, exhibit: categorize, classify, define, describe, determine, frame, identify, prioritize, specify
- Verbs describing what students do when they combine ideas, materials, and/or observations: assimilate, consolidate, merge, connect, integrate, link, synthesize, summarize

Our language is rich, no? So expand your language space!

What do we take away?

- Care/QC: reading and re-reading both learning outcome statements and assignments. Filtering out the garbage.
- Assuming you have students' eyes and ears, do you understand what you are supposed to do---and why?
- There's a much different way of looking at the language we use in the matter of learning and its demonstration. It starts with collections of analogous activities. Call it "meta."

Now, what did we miss? What is still foggy?



February 2015

To Imagine a Verb: The Language and Syntax of Learning Outcomes Statements

Clifford Adelman



Occasional Paper #24