

Closing the Loop with Assessment: Structures and Practices to Improve Student Learning

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with

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There really is joy in assessment, and it is rarely realized. Instead, the nearly universal experience at US colleges and universities is that assessment is a burden that has not climbed to its promise of producing gains in student learning. Instead, twenty five years of assessment as public policy has permitted the growth of numerous negative reactions, including misapprehensions of technique and use, distracters of workload, competing priorities, disparities in purpose, and lack of money. Consequently, assessment is seen as a burden to be done with or, even better, to be done *away* with. This interactive seminar/workshop addresses principles for constructing and using assessment devices, simplifying reporting, keeping assessment separate from evaluation of teaching, and satisfying the requirements of accrediting agencies, all while simultaneously reducing faculty workload and saving time, effort, and money. Properly, the focus remains on improvement of student learning.



Goal Ranking and Matching

[--after Angelo and Cross]

What do you hope to get out of this seminar/workshop? What goals or expectations do you wish to satisfy? This Classroom Assessment Technique (CAT) is designed to help make your goals and expectations visible to yourself and to assist you in discussing them with others, including the presenter. Part of this CAT also reveals the presenter's goals to you so you can see how well they match your own.

1. On the lines below, please write 2-5 goals you hope to achieve ---specific things you want to learn--- by participating in this seminar/workshop.

What you want to learn:	Your ranking:	Do they match the presenter's?	
		Yes	No
_____	_____		
_____	_____	Yes	No
_____	_____	Yes	No
_____	_____	Yes	No
_____	_____	Yes	No

2. Use the middle column to rank your goals in terms of their relative importance to *you*. The most important goal is ranked #1, the next most important #2, etc.
3. When you hear the presenter's goals, circle *Yes* in the right hand column next to each of your matching goals, regardless of rank. If you have goals left over at the end, circle *No* in the right hand column next to them.
4. Prepare to talk or ask questions about any of your important goals that are not also in the presenter's list.



Tuesday Teaching Tip [--from Barbara Millis]

Double Entry Journal (DEJ) [Effective in small and large classes, particularly if you assign pass/fail points for quicker grading.]

Purpose: To get students into the knowledge base, so that they come to class prepared; to motivate students; and to teach for “deeper learning.” Motivation is heightened with a DEJ for two reasons. First, when students know their homework will be reviewed by peers, they are more likely to come to class prepared. Secondly, students often become motivated when the material is relevant to their own lives and learning, as when they write reflective responses to the key points in an article. These reflective responses also promote deeper learning because students who place content knowledge in a personal context are more likely to retain the information and be able to retrieve it (the “self-referral” effect, Rogers, Kuiper, & Kirker, 1977).

Steps: Students identify on the left side of a grid (a Word table template e-mailed or distributed to students) the key points of an article, chapter, or guest lecture. Just opposite the key point they respond, linking the point to other academic material, to current events, or even to their personal experiences and opinions.

Variations: Rather than simply collecting the DEJ, have students in pairs review and discuss each others’ homework. The paired conversations should lead to both learning and genuine exchanges. Intellectually, students return to the original article or to their lecture notes to review the key points, particularly when there are dissimilarities. But, the reflective responses, too, prompt authentic “connections.” In a nursing class, for example, a student would react humanely when learning something personal about his partner: “Your Uncle Joe died of Aids? I am so sorry.” To offer “scaffolding,” the first time you give this assignment, you can complete the left-hand side of the DEJ and ask students merely to respond to the points you have identified. Or, you can provide the first three points to give students an idea of your expectations. **Easily adapted for online courses.**

Assessment and follow-on: DEJs suggest to teachers how well students understand seminal articles, chapters, or presentations. Comments written on a DEJ provide feedback for students, and you can also build a composite DEJ based on excerpts—key points and responses—from a variety of student examples. Exemplary DEJs or a composite one you create are shared with the class ostensibly to “coach” students to write better DEJs in the future. But, as part of a sequence, this final stage also promotes learning through “repetition without rote.” Speakers can gauge the effectiveness of their presentations by reviewing the DEJs that students submit.

Example: Sample Double Entry Journal [for this example, only two points cited below]

Name: Barbara J. Millis

Article: “The Mental Health Crisis: What Colleges Must Do” by Richard D. Kadison (from Point of View, *Chronicle of Higher Education*)

Key Points	Responses
Mental health issues—including suicide and depression—are growing on campuses, requiring more resources to solve them.	I have been hearing this for years, particularly from teachers in schools with open enrollments. Resources are always an issue, it seems, no matter what the problem. As a faculty developer, I want to see—selfishly—more resources spent to bolster teaching. But, on the other hand, if the students we attempt to teach have barriers to learning that transcend the classroom, then these issues need to be addressed.
Fortunately, most common problems, including eating disorders substance abuse, anxiety, are treatable but only if students recognize the symptoms and seek help.	I think faculty and teaching assistants can definitely help in this arena if they recognize key symptoms and steer students toward the appropriate resources. I am glad we are adding this semester a new mental health component to our three-day TA training. I will now be certain that we continue to offer workshops on “Distressed and Distressing Students.”

Double Entry Journal

[--after Angelo and Cross]

Direct response or observation	Thoughts and reflections
<p><i>How colleges and universities teach writing:</i></p>	
Modified idea or concept	What caused a change of mind?
<p><i>How I might guide my students to learn to write better:</i></p>	

An Example of Grading Standards

[--after Angelo and Cross]

Grading Standards for Papers

A-level work (EXCELLENT)	(1) Responds fully to what the assignment asks; (2) Presents a manifest topic statement containing the issue to be analyzed and the position to be taken; (3) Exercises good critical thinking that is clear, logical (coherent & relevant), deep, broad, and discriminating; (4) Expresses its purpose clearly and persuasively; (5) Invokes and uses disciplinary facts correctly; (6) Provides adequate supporting arguments with reasons, evidence, and examples; (7) Is focused, well organized, and unified; (8) Uses direct language that is appropriate for the audience; (9) Invokes discerning sources when appropriate; (10) Correctly documents and cites sources; (11) Is free of errors in grammar, punctuation, word choice, spelling, and format; and (12) Displays originality and creativity in realizing items (1) through (9) above.
B-level work (VERY GOOD)	Realizes high quality in (1) through (11) fully and completely --- but does not reveal originality or creativity.
C-level work (ADEQUATE)	Realizes adequacy in (1) through (11) 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 compensate for poor or careless writing. A “C” paper is adequate in all regards but could use polish and usually looks and reads like a next-to-final draft.
D-level work (WEAK)	Fails to realize some elements of (1) through (11) adequately and contains several relatively serious errors or flaws or many minor ones. A “D” paper is less than adequate for public presentation and often looks and reads like a first or second draft.
F-level work (POOR)	Fails to realize several elements of (1) through (11) adequately and contains many serious errors or flaws as well as many minor ones. An “F” paper usually contains fatal errors of thought or execution and usually looks and reads like private writing.

Rubric for Grading Standards for Papers

[--after Angelo and Cross]

Writing Assignment Assessment/Evaluation Form

Abbreviated Title: _____ Student's Name: _____ Date: _____

(1) Responds fully to the assignment	EXCELLENT	VERY GOOD	ADEQUATE	WEAK	POOR
(2) Presents a manifest topic statement identifying the issue and the position	EXCELLENT	VERY GOOD	ADEQUATE	WEAK	POOR
(3) Exercises good critical thinking	EXCELLENT	VERY GOOD	ADEQUATE	WEAK	POOR
(4) Expresses its purpose clearly and persuasively throughout	EXCELLENT	VERY GOOD	ADEQUATE	WEAK	POOR
(5) Invokes and uses disciplinary facts correctly	EXCELLENT	VERY GOOD	ADEQUATE	WEAK	POOR
(6) Provides adequate supporting arguments with reasons, evidence, and examples	EXCELLENT	VERY GOOD	ADEQUATE	WEAK	POOR
(7) Is focused, well organized, and unified	EXCELLENT	VERY GOOD	ADEQUATE	WEAK	POOR
(8) Uses direct language that is appropriate for the audience	EXCELLENT	VERY GOOD	ADEQUATE	WEAK	POOR
(9) Invokes discerning sources when appropriate	EXCELLENT	VERY GOOD	ADEQUATE	WEAK	POOR
(10) Correctly documents and cites sources	EXCELLENT	VERY GOOD	ADEQUATE	WEAK	POOR
(11) Is free of errors in grammar, punctuation, word choice, spelling, and format	EXCELLENT	VERY GOOD	ADEQUATE	WEAK	POOR
(12) Displays originality and creativity	EXCELLENT	VERY GOOD	ADEQUATE	WEAK	POOR

OVERALL EVALUATION **EXCELLENT** **VERY GOOD** **ADEQUATE** **WEAK** **POOR**

ADDITIONAL COMMENTS:

Student Participation: Assessment and Evaluation

(Thanks to Prof. Kathleen Tunney, Dept. of Social Work, SIUE)

Ways to Demonstrate Participation

Student's Name: _____

Positive Attributes

(1) Enters into class discussions	ALMOST ALWAYS	FREQUENTLY	OCCASIONALLY	SELDOM	ALMOST NEVER
(2) Offers questions or comments during class	ALMOST ALWAYS	FREQUENTLY	OCCASIONALLY	SELDOM	ALMOST NEVER
(3) Visits at podium after class	ALMOST ALWAYS	FREQUENTLY	OCCASIONALLY	SELDOM	ALMOST NEVER
(4) Visits during office hours to clarify ideas	ALMOST ALWAYS	FREQUENTLY	OCCASIONALLY	SELDOM	ALMOST NEVER
(5) Engages in the electronic learning forum	ALMOST ALWAYS	FREQUENTLY	OCCASIONALLY	SELDOM	ALMOST NEVER
(6) Offers questions or comments via e-mail	ALMOST ALWAYS	FREQUENTLY	OCCASIONALLY	SELDOM	ALMOST NEVER

Negative Attributes

(7) Skips class	ALMOST ALWAYS	FREQUENTLY	OCCASIONALLY	SELDOM	ALMOST NEVER
(8) Shows up late	ALMOST ALWAYS	FREQUENTLY	OCCASIONALLY	SELDOM	ALMOST NEVER
(9) Sleeps in class	ALMOST ALWAYS	FREQUENTLY	OCCASIONALLY	SELDOM	ALMOST NEVER
(10) Exhibits disruptive behavior	ALMOST ALWAYS	FREQUENTLY	OCCASIONALLY	SELDOM	ALMOST NEVER

ADDITIONAL COMMENTS:

Checklist for Editing

Checklist for Editing Your Seven Paragraph Analytical Paper

Two days before paper is due---near final draft form---reread your paper and examine it for the following points:

1. () An introductory paragraph clearly introduces the subject. A topic statement is evident within the paragraph. The position taken is clear. If the position is unclear, put a question mark in the margin.
2. () The next two paragraphs each have a single or main claim. Note each claim in the margin in a 3-4 word phrase. If you can't identify the claim, put a question mark in the margin. If two or more claims exist and tend to diverge from a coherent thought, put a question mark in the margin.
3. () The same thing holds for the next two paragraphs on the opposite side of the issue.
4. () The four paragraphs above all focus on the issue at hand; they do not wander off into irrelevant territory. If any paragraph wanders, put a question mark in the margin.
5. () The sixth paragraph weighs the conflicting claims from the four paragraphs above and arrives at a conclusion. *Why* some evidence is more convincing than other evidence is explained. The ensuing conclusion is clearly stated. Circle it. If you can't find the conclusion, put a question mark in the margin.
6. () The final paragraph returns to what was stated in the first paragraph and, in light of the evidence presented and weighed above, convincingly rephrases the position statement. If the conclusion expected by the assignment is to be finessed, justifying statements for the variance must appear here and flow from the explanation in the sixth paragraph of your paper.

Consider all question marks appearing in the margin and fix those that need fixing.

Next:

7. () Is each claim in paragraphs 2-5 supported by evidence? Are there any naked claims supported only by variations of "I believe..."? If so, put a big X in the margin beside that paragraph.
8. () Is each claim backed up by a reference? If a claim stands naked of supporting evidence or argument, put a big X in the margin.

Consider any X appearing in the margin and fix those that need fixing.

Another thing:

9. () Does the paper do more than simply but gloriously restate the question? Examine the case study and cross out all ideas that appear in *both* the case study and in your paper.

What remains uncrossed out is your analysis. It should constitute the majority of your paper. If it doesn't, you haven't done an analysis.

Rewrite as necessary. When you've finished, let it sit at least one night before doing the final step below.

Finally:

Up to now, you've been working on substance and thinking. **Now, on the final morning over breakfast on the day the paper is due, check out the mechanics.** Sweep your paper with a spell checker and comb it for the common fatal errors in the list below. If you find such an error, put a check in the box.

(For a longer listing of mechanical errors, see [How to Rite Rite](#)).

10. () A sentence lacks either a subject or a verb; a sentence does not begin with a capital letter or end with a period (citations in parentheses go ahead of periods, not behind them).
11. () A sentence begins with a relative pronoun such as *Which, Who, That, Where, and When*.
12. () A pronoun lacks a clear antecedent; that is, a word such as *it, he, she, or they* does not have an obvious link to a noun (especially noticeable if a sentence begins with *it, he, she, or they*).
13. () A pronoun or verb fails to agree with its antecedent in number; that is, a single person or agency is referred to as *they*, or a plural subject is given a singular verb (such as, "members of the school board.... gives their vote...").
14. () A sentence runs-on or uses a comma to splice independent ideas together; that is, complex ideas are not split into two sentences but are linked, often by a comma, into an overly long, wandering sentence.

The five check boxes in the list above should be empty. If not, fix the errors.

When you're done, hand in the paper and take in a day at the beach. You've done a good job!

* * * * *

A Fatal Error List

[--after SIUE]

1. Each different word misspelled
2. Each sentence fragment
3. Each run-on sentence or comma splice
4. Each mistake in capitalization
5. Each serious mistake in punctuation that obscures meaning
6. Each error in verb tense or subject/verb agreement
7. Lack of conformity with assignment format
8. Each improper citation, or lack of citation, where one is needed

Papers with more than three fatal errors marked by an instructor on any one page, or more than a number specified by the instructor for the entire document, will be returned to the student subject to a grading penalty as prescribed by the instructor....

How to Rite Rite

<http://www.siue.edu/~deder/rite.html>

1. Don't abbrev.
2. Check to see if you any words out.
3. Be carefully to use adjectives and adverbs correct.
4. About sentence fragments. Like this.
5. When dangling, don't use participles.
6. Don't use no double negatives.
7. Each pronoun agrees with their antecedent.
8. Just between you and I, case is important.
9. Join clauses good, like a conjunction should.
10. Don't use commas, that aren't necessary.
11. Its important to use apostrophe's right.
12. It's better not to unnecessarily split an infinitive.
13. Never leave a transitive verb just lay there without an object.
14. Only Proper Nouns should be capitalized. also a sentence should begin with a capital and end with a period
15. Use hyphens in compound-words, not just in any two-word phrase.
16. In letters compositions reports and things like that we use commas to keep a string of items apart.
17. Watch out for irregular verbs that have creeped into our language.
18. Verbs has to agree with their subjects.
19. Avoid unnecessary redundancy. It's highly superfluous.
20. A writer mustn't shift your point of view.
21. Don't write a run-on sentence where instead you've got to punctuate it to break it up when necessary because smaller sentences are often better at making the point.
22. A preposition is not a good thing to end a sentence with.
23. Avoid cliches like the plague. They're old hat.
24. Avoid alliteration always.
25. Be more or less specific.
26. Exaggeration is a billion times worse than understatement.
27. One-word sentences? Eliminate.
28. The passive voice is to be mostly avoided.
29. Go around the barn at high noon to avoid colloquialisms.
30. Even if a mixed metaphor sings, it should be derailed.
31. Who needs rhetorical questions?
32. Profanity sucks.

Five Conditions That Foster Deep Learning

[Halpern & Hakel, Marchese, DeWinstanley & Bjork, Marchese, Shpancer,
National Research Council]

Deep learning is enhanced when students:

- 1. Become actively engaged.**
(So they can learn to self-assess, reflect, and learn to learn for themselves.)
- 2. Practice retrieval and presentation in varied environments.**
(And activate multiple neural pathways --- sensory, motor, and association.)
- 3. Link new learning to prior learning.**
(In order to use existing knowledge as a foundation for new knowledge.)
- 4. Apply learning to new situations that they care about.**
(Because generating applications is a powerful way to make connections.)
- 5. Receive timely and relevant reinforcement.**
(So they can learn to self-assess, reflect, and learn to learn for themselves.)

Seven Principles for Good Practice in Undergraduate Education

Good Practice:

- 1. Encourages active learning.**
(Writing, applying, doing, thinking, and thinking about what they're doing.)
- 2. Gives prompt feedback on performance.**
(So they can learn to self-assess, reflect, and learn to learn for themselves.)
- 3. Develops reciprocity and cooperation among students.**
(Deepens understanding, improves thinking, enhances communication.)
- 4. Emphasizes time on task.**
(Practice improves learning because learning = time \times effective energy.)
- 5. Encourages contact between students and faculty.**
(Especially contact focused on the academic agenda---in and out of class.)
- 6. Communicates high expectations.**
(Reward the positive and encourage students to learn high *self*-expectations.)
- 7. Respects diverse talents and ways of learning.**
(And engenders respect for the many forms of genius.)

Memory Matrix

	Description	Example	Application
Goal Ranking and Matching			
Double Entry Journal			
Grading Standards			
Performance Dictionary			
Fatal Error List			
Memory Matrix			

The Minute Paper

In concise, well-planned sentences, please answer the two questions below:

1. What are the [two, three, five] most central, [useful, meaningful, surprising, scary] things you have learned during this topic/seminar?

2. What question(s) remain uppermost in your mind from this topic/seminar?

* * * * *

The Muddiest Point

**What was the muddiest point in this topic/seminar?
That is, what was least clear to you?**

ASSESSMENT USE OF BLOOM'S TAXONOMY

Bloom's Taxonomy is a well-known description of levels of learning. A taxonomy such as this one may be a useful guide when defining or examining learning objectives for assessment. It is also useful for content analysis of such things as the seemingly simple Minute Paper.

LEVEL	SOME COGNITIVE BEHAVIORS
Evaluation	Appraisal of own or someone else's Analysis or Synthesis Exam question at this level: Evaluate another physical therapist's program to strengthen the rotator cuff.
Synthesis	Assembly of Application Exam question at this level: Design a physical therapy program to strengthen each component of the rotator cuff.
Analysis	Disassembly of Application Exam question at this level: How does the throwing motion stress each component, in turn, of the rotator cuff?
Application	Use of Understanding Exam question at this level: Why does throwing a curve ball cause rotator cuff injury?
Understanding	Management of Knowledge Exam question at this level: How does the rotator cuff help you to raise your arm?
Knowledge	Memorization of facts, language, concepts, principles, theories Exam question at this level: Name the muscles of the rotator cuff.

Some relevant and useful verbs for assessments at each level appear in the table below [--after Harding].

Knowledge	Understanding	Application	Analysis	Synthesis	Evaluation
define	arrange	apply	analyze	arrange	appraise
identify	classify	compute	calculate	assemble	assess
indicate	comprehend	construct	categorize	collect	choose
know	describe	demonstrate	compare	compose	compare
label	discuss	dramatize	contrast	construct	contrast
list	explain	employ	criticize	create	decide
memorize	express	give examples	debate	design	estimate
name	identify	illustrate	determine	formulate	evaluate
recall	locate	interpret	diagram	integrate	grade
record	manage	investigate	differentiate	organize	judge
relate	paraphrase	operate	disassemble	perform	measure
repeat	recognize	practice	distinguish	plan	rate
select	report	predict	examine	prepare	revise
underline	restate	schedule	experiment	produce	score
	review	shop	inspect	propose	select
	suggest	sketch	inventory	set up	value
	summarize	translate	question	synthesize	weigh
	tell	use	relate		
	translate		solve		
			test		

Annotated Word Journal

Read the designated text and write one word that captures the essence of what you've read and summarizes your response to it.

One Word Summary

Explain why you chose that word and how it provides, in a capsule, your summary of the reading.



The Learning Curve

[--from Peter Ewell, 2003. BizEd, July/August, pp. 28-33]

I was once a professor of political science, and I've spent hours grading papers. After reading a paper, I would sometimes recognize that the student had a good argument but that he had gotten many of his facts wrong. I'd write my feedback on the paper and sign it off with a B-minus. Then I would pick up the next paper, read it over, and give it a B-minus for a completely different set of reasons. But what data went into my grade book? Two B-minuses. After collecting and recording a wealth of data on how the students had responded to the assignment, I threw it all away when I handed the papers back. I had no record of where, in general, learning was going right and where it wasn't --- or what I could do about it.

...

The main problem with traditional faculty-generated assignments and grades...is exactly what my initial example illustrated. Faculty members mark students individually, but gather no information about what aspects of course content a class *as a whole* has mastered and what aspects a class has generally failed to grasp. Not only that, but the faculty also grade subjectively and idiosyncratically. They each use their own standards and create their own assignments.

The alternative to "add-on" assessment methods and inconsistently awarded grades involves the use of "course-embedded assessments" --- questions and assignments worked into each faculty member's existing syllabus. Not only do embedded assessments involve faculty on an integral level in the process, they provide a school with a written record of course performance over time.

Using an embedded approach, a faculty comes together and decides what the learning objectives for a particular course should be. Then they study the assignments in those courses to identify or include questions that systematically measure student mastery of those learning objectives. Finally, they establish consistent ways of evaluating student responses to those questions --- for example, a scoring guide that details the attributes of a good answer, perhaps on a level of one to five.

Course-embedded assessment practices serve an institution in several ways. They offer a systematic way to measure its success in teaching students that is related to what its faculty are already doing. They do so in a way that is integrated into the coursework and assignments students already must complete, ensuring that students will do their best. And, best of all, it adds very little expense to a school's budget.

Some Assessment Ways and Means

- **Assessment days and assessment centers**
- **Case studies**
- **Classroom assessments**
- **Completion and retention studies**
- **Content analyses**
- **Debates**
- **Direct observations**
- **Focus groups**
- **Graduate success**
- **Internships and service learning**
- **Interviews (including videotapes)**
- **Exams for certification and licensure**
- **Matrices**
- **Performances**
- **Portfolios of several kinds**
- **Projects (Primary Trait Analysis)**
- **Questionnaires and surveys**
(Face-to-face, telephone, web; employer, alumni, and student attitude and satisfaction)
- **Reflective essays**
- **Study and activity logs**
- **Tests and embedded questions**
(Locally-developed and standardized)
- **Transcript analyses**

Transfer & Apply

Please take a moment to recall ideas, techniques, strategies, and tactics we've discussed ---plus those you've thought up--- to this point in the seminar. Quickly list as many possible applications as you can. Don't filter or censor yourself; these are *possibilities*. You can always assess the practical nature and evaluate the desirability of these applications to your own classroom/lab/studio later.

Some intriguing

**IDEAS, TECHNIQUES
STRATEGIES, & TACTICS**

from this seminar/workshop

Some possible
APPLICATIONS

to my own classroom/lab/studio

=====

Effective Assessment:

(after Angelo, 1999)

1. Assesses what matters most.
2. Focuses on processes as well as outcomes.
3. Operates at key points in the educational process.
4. Uses multiple measures over time.
5. Generates feedback for improving learning.
6. Provides feedback to those most affected.
7. Actively involves students and members of the teaching staff.
8. Is embedded in teaching and learning.

Some References on Assessment and Feedback

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