Doing Assessment As If Learning Matters Most

Thomas A. Angelo
Associate Professor and Director
The Assessment Center
School for New Learning - DePaul University
Chicago, Illinois 60604   USA

Tangelo@wppost.depaul.edu

After nearly two decades of uphill struggle, the "assessment movement" has reached a promising plateau. In general, US higher education has moved beyond unproductive, dualistic debates – do you remember, "four legs good, two legs bad" from <u>Animal Farm</u>? – over whether assessment should focus on accountability or improvement. Today, most faculty and academic administrators have finally, if reluctantly, come to accept that dealing with both is a political and economic inevitability. Nonetheless, most of us think assessment should be, first and foremost, about improving student learning and, secondarily, about determining accountability for the quality of learning produced. In short, though accountability matters, learning still matters most.

This realignment of opinion hasn't occurred by chance, of course. Since the mid-1980s, a dedicated and widely dispersed cadre of activists and opinion leaders from higher education associations (notably AAHE), regional and professional accrediting agencies, disciplinary societies, and campuses far and wide, have each and all urged us to use assessment to improve learning quality and productivity. In response, tens of thousands of faculty and administrators on hundreds of campuses have endured speeches, labored in workshops, and conferred at conferences on assessment. Collectively, on committees and task forces, they've produced cubic yards of plans, projects, statements and reports. Thousands have become familiar with, even expert in, assessment. Examples of clever adaptations and creative invention abound (see Banta, et al., 1996; Gardiner, et al. (1997), and Nichols (1995). All this effort has been expended despite the fact that that

involvement in assessment efforts typically "counts" for little or nothing in pay or in tenure, retention and promotion decisions. Thus, when most academics "do assessment," personal and professional values motivate them. And the strongest of those intrinsic motivators is undoubtedly the desire to improve student learning.

So, the good news is that, over the past two decades, we've made impressive progress in changing attitudes about, involving academics in, and developing better processes and practices for assessment. On the other hand, despite all these gains and efforts, we still don't have much solid evidence of learning improvement. Given the value academics, accrediting agencies, and others place on using assessment to improve learning, why hasn't so much hard work by so many smart, dedicated people led to better outcomes?

Why Hasn't Assessment Led to More Learning Improvement?

In his December 1997 Bulletin article, "Organizing for Learning," Peter Ewell provides an insightful response to this question. Commenting on a range of academic change initiatives, assessment included, Ewell argues that our lack of success in improving collegiate learning stems from two common flaws in our change strategies:

- "They (i.e., the change initiatives) have been implemented without a deep understanding of what "collegiate learning" really means and the specific circumstances and strategies that are likely to promote it."
- "The have for the most part been attempted piecemeal within and across institutions" (Ewell, 1997, p.3).

The remainder of this article takes those two general flaws as starting points and suggests ways to overcome them. Echoing Ewell, I'll argue that most assessment efforts have resulted in little learning improvement because they have been implemented without a clear vision of what "higher" or "deeper" learning is and without an understanding of how assessment can promote such learning. I'll also propose that our "piecemeal" attempts stem partly from a mechanistic, "additive" model of assessment, which needs to

be replaced by a "transformative" assessment-as-culture-change model, if we're to make real progress.

Three Steps Toward Transformative Assessment

The assessment movement needs a new, more compelling vision to reinspire and reorient our efforts. To steal a phrase from Steve Gilbert of the Teaching/Learning/ Technology Group, we need a "vision worth working toward." Secondly, we need a different concept of assessment itself, a new mental model. And third, we need research-based guidelines for effective assessment practice that will increase the odds of achieving more productive instruction and more effective learning.

A Vision Worth Working Toward: Assessment for Learning Communities

Our vision of and goals for assessment have led us to less-than-optimal outcomes. For example, we've sometimes confused means and ends, doing assessment as if the assessment process itself matters most, losing ourselves in the fascination of technique and method. More often, we've aimed at rather "mean" ends, doing assessment as if winning matters most – whether the prize is status, higher funding, or re-accreditation. Though means and extrinsic ends are important, it's now time to put the highest priority on doing assessment as if learning matters most.

Let me make a comparison with the US space program. NASA, under great political pressure, first focused mainly on winning the space race with the Soviets. When NASA made gains, the agency was rewarded with accolades and bigger appropriations. Along the way, many NASA scientists and engineers became fixated on the scientific and technological aspects of the enterprise, on designing more ambitious, more complex, and more costly equipment and missions. The Hubble Space Telescope and the always delayed space station are outcomes of those aims. The overarching, "higher" aims and vision of space exploration – to discover new worlds and extend our understanding of the Universe – were often obscured or lost in the shuffle. Thus, even before the Soviets

disappeared, NASA found that most Americans had lost interest in the race and didn't share its fascination with the ever more sophisticated technology. Now NASA is struggling to rebuild public support by focusing more attention on cultivating the intrinsic human interest in discovery and tapping our innate curiosity – our collective desire "to boldly go where no one has gone before."

In a widely read and discussed <u>Change</u> article, Barr and Tagg (1995) developed the thesis that US higher education is in the midst of a historic shift from a teaching-centered to a learning-centered paradigm. In this emerging paradigm, Barr and Tagg see the primary purpose of colleges and universities as producing learning, rather than providing instruction, and traditional teaching as only one of many means of learning production. Drawing inspiration from their article, I predicted that one major outcome of this paradigm shift would be the transformation of colleges and universities from "teaching factories" into "learning communities" (Angelo, 1997). By learning communities, I meant carefully designed groupings of students and faculty working intensively and collaboratively toward shared, significant learning goals – often by focusing on themes that cut across several traditional disciplines.

As K. Patricia Cross (1998) has pointed out, strong support for engaging students in interactive, collaborative learning communities can be found in the research on learning outcomes, on development, and on cognition and motivation. She also notes important pragmatic reasons for creating learning communities, among them workforce training and citizenship education. There are already a variety of learning community models in play on hundreds of US campuses, and the best of them draw on lessons from research on effective learning and development to enhance the cognitive, emotional, and social connections that produce powerful learning (Gabelnick, et al., 1990; Tinto, 1997).

In my view, the learning communities ideal, and many of its best current manifestations, represent a vision worth working toward, not just for assessment, but also for educational change efforts in general. Having the construction of learning communities as a goal is quite different than aiming at incrementally improving our present system. It's a whole

new ball game. If we accept, at least for the moment, creating productive learning communities as an orienting vision, then our concept of assessment must also change to support that vision.

Changing Our Mental Models: Assessment as Culture Transformation

One reason our assessment efforts have been less successful than desired has to do with our concept of assessment itself. That is, assessment is too often viewed as a fundamentally mechanistic, technical process -- a collection of monitoring and problem-solving devices that can simply be dropped into or added onto our existing academic programs, much as we might connect a tachometer or a smog device to a car engine. Others, probably conditioned by program evaluation and accreditation experiences, see assessment as a necessary, periodic bother – like an annual physical check up or a visit to the accountant at tax time. In either case, assessment is seen as something that might result in small changes, usually adding data-collection and reporting processes here and there. At this point, we have enough collective experience to realize that these "additive," episodic approaches to assessment rarely work or last.

To improve learning and promote learning communities, we must recognize that successful assessment is <u>not</u> primarily a question of technical skill, but rather one of human will. To return to the space analogy, all the advanced rocket science in the world is of little use if there is no widely shared interest in exploring the Universe – as NASA painfully discovered. Assessment may not be rocket science, but the same principle holds. That is, all the assessment technique we've developed is of little use unless and until our local academic cultures value self-examination, reflection, and continuous improvement. In general, already existing assessment techniques and methods are more than sufficient to meet the challenges we face. It's the ends toward which, and the ways in which, we use those tools that are the problem.

Four Pillars of Transformative Assessment

I don't believe we can construct learning communities with our students, or practice transformative assessment, unless we first develop what Peter Senge calls "personal mastery" (Senge, 1990). Thus, in order to use assessment to move beyond piecemeal, superficial change toward transformation, we need to develop a learning community-like culture among the faculty and administrators involved in assessment. Four basic preconditions are key to this collective personal mastery. First, we need to develop shared trust; second, shared visions and goals; and third, shared language and concepts. Fourth, we need to identify research-based guidelines that can orient our assessment efforts toward the goal of creating productive learning communities. (Since all these preconditions need to be developed at more or less the same time, the order of their presentation is relatively arbitrary.)

1. **Build shared trust: Begin by lowering social and interpersonal barriers to change.**

Most of us learn little of positive or lasting value from people we don't trust. To form a productive learning community, then, the faculty involved in assessment must first come to trust each other. Let me suggest one simple first step. Before turning to problems, tasks, and issues to be resolved, take time to highlight what participants are doing well, and to share successes. Encouraging participants to share examples of successful teaching or assessment practices allows them to present their best "face," and demonstrates that each is a smart person with ideas to contribute to the good of the whole. Whatever the means, the big point here is to start, not with problems and debate, but by attending to academics' needs to feel respected, valued, safe, and in the company of worthy, smart, well-intentioned peers.

2. **Build shared motivation: Collectively identify goals worth working toward and problems worth solving – and consider the likely costs and benefits.**

Since goals powerfully motivate and direct our behavior, developing a set of shared learning/assessment goals is a logical next step in building a productive learning community -- once shared trust has been established. Most of us are more productive when we're working toward clear, personally meaningful, reasonable goals. While

students and faculty members typically have goals, they rarely can articulate clearly what they are, rarely know how well they match their peers' goals, and rarely focus on learning. Faculty goals tend to focus on what they will teach, rather than what students will learn; and students goals often focus on "getting through."

There are many available techniques for assessing goals, but the key here is to find or develop some learning-related goals in common. The "Teaching Goals Inventory," developed by K. Patricia Cross and myself, is a (non-copyrighted) quick self-scorable questionnaire to help faculty identify their most important instructional goals (Angelo and Cross, 1993, pp. 393-397.) An even simpler approach is to ask faculty to list two or three assessment questions they would like to see answered in the coming year, or things they would like to make certain the department's students learn well before graduating – and then to look for common goals across the lists. Whatever the shared goals are, in order to be useful, they must be clear, specific, linked to a timeframe, feasible, and most important, significant.

Goals are not always sufficient to motivate us to learn. After all, if the status quo is not problematic, why change? But not all problems provide useful starting points. As Ewell notes, "Maximum learning tends to occur when people are confronted with specific, identifiable problems that they want to solve and that are within their capacity to do so" (1997, p.4). It's critical, in any case, to connect and frame problems within a larger vision of shared goals, so that energies and resources aren't dissipated in myriad efforts that add up to little or no improvement.

Here's a three-step thought exercise for use with faculty and students to identify promising assessment problems. First, once you have a problem in mind, write down what you think the best solution would be. Second, assuming that were the solution, *could* the group actually implement it? And third, even if it could be implemented, *would* the group choose to do so? If the answer to either of the latter questions is "no," it's probably not a problem worth taking on. If the answers are "yes," on the other hand, then it's time for a cost-benefit analysis – however informal – of the proposed solution.

I recommend trying to "guess-timate" the following types of costs before committing to an assessment problem: costs in human time and effort, costs in financial resources, costs in political capital, and opportunity costs; that is, what other important problems won't you be able to tackle -- if you follow this path?

3. **Build a shared language: Develop a collective understanding of new concepts (mental models) needed for transformation.**

Building a shared vision for transformative change requires shared mental models and shared language for describing and manipulating those models. In other words, before we can collaborate productively we must establish what we mean by key terms such as *learning*, *community*, *improvement*, *productivity*, or *assessment.* Taking this step will allow us to make any implicit conflicts among our mental models explicit, so that we can work them out.

One simple strategy for uncovering different mental models is to ask faculty to describe/define in writing what they mean by one key term, *assessment,* for example. Then collect those responses and discuss them or create a concept map from them, making visually apparent the areas of agreement and difference. You may find that *assessment* means, variously, standardized testing, student ratings of faculty, grading, institutional research, and time wasted to the various individuals. At that point, rather than arguing for one correct definition, I suggest proposing the adoption of an additional, shared working definition, much like adding another meaning after a word listed in a dictionary. This strategy doesn't force individuals to change their mental models, something many will resist. Rather, it asks only that they acknowledge differences between their models/meanings and the group's and that they use the group model when collaborating.

4. **Build shared guidelines: Develop a short list of research-based guidelines for using assessment to promote learning**

Several lists of guidelines for effective assessment already exist, most notably AAHE's 1992 "Principles of Good Practice for Assessing Student Learning." What I'm suggesting here, however, is that an individual campuses and programs can benefit from constructing their own, quite specific lists of principles or guidelines – lists which can also serve as the criteria for evaluating their own assessment plans and efforts. As an example, here's a list of principles I've developed, based on my reading of the research on improving learning and development.

10 Guidelines for Assessing as If Learning Matters Most

If learning really matters most, then our assessment practices should help students develop the skills, dispositions, and knowledge needed to:

- Engage actively – intellectually and emotionally – in their academic work
- Set and maintain realistically high, personally meaningful expectations and goals
- Provide, receive, and make use of regular, timely, specific feedback
- Become explicitly aware of their values, beliefs, preconceptions, and prior learning -- and be willing to <u>un</u>learn when necessary
- Work in ways that recognize (and stretch) their present learning styles/preferences and levels of development
- Seek and find connections to and real-world applications of what they're learning
- Understand and value the criteria, standards, and methods by which they are assessed and evaluated
- Work regularly and productively with academic staff
- Work regularly and productively with other students
- Invest as much engaged time and high-quality effort as possible in academic work

Conclusion

The limits of this article don't allow me to give examples to illustrate the guidelines above, but many appropriate examples can be found in the assessment literature. (Perhaps I could do a follow up piece in the Bulletin with examples of the 10 Guidelines?) But those

examples, and any list of assessment guidelines, will only be useful to the extent that we, the assessment activists, first establish the fundamentals. To achieve transformation in higher learning, we must develop shared trust, a transformative vision of goals worth working toward, and a shared language and set of concepts equal to the challenge. If we plan and conduct our assessment projects at every step as if learning matters most – not just the students' learning, but ours, as well – then the distance between means and ends will be reduced and our chances of success increased.

References

Angelo, T.A. "The Campus as Learning Community: Seven Promising Shifts and Seven Powerful Levers." *AAHE Bulletin*, 1997, *49*(9), 3-6.

Angelo, T.A. & Cross, K.P. *Classroom Assessment Techniques: A Handbook for College Teachers* (2nd ed.). San Francisco: Jossey-Bass, 1993.

Barr, R.B. and Tagg, J. "From Teaching to Learning: A New Paradigm for Undergraduate Education." *Change*, 1995, *27*(6), 12-25.

Cross, K.P. "Why Learning Communities? Why Now?" *About Campus*, 1998, *3*(3), 4-11.

Ewell, P.T. "Organizing for Learning: A New Imperative." *AAHE Bulletin*, 1997, *50*(4), 10-12.

Gabelnick, F., MacGregor, J., Matthews, R., and Smith, B.L. (eds.). *Learning Communities: Creating Connections among Students, Faculty, and Disciplines*. New Directions for Teaching and Learning, no. 41. San Francisco: Jossey-Bass, 1990.

Gardiner, L.F., Anderson, C., and Cambridge, B.L. Learning through Assessment: A Resource Guide for Higher Education. Washington, DC: American Association for Higher Education, 1997.

Nicols, J.O. *A Practitioner's Handbook for Institutional Effectiveness and Student Outcomes Assessment Implementation*. New York: Agathon, 1995.

Senge, P.M. *The Fifth Discipline*. New York: Doubleday, 1990.

Tinto, V. "Universities as Learning Organizations." *About Campus*, 1997, *1*(6), 2-4.