

**When Assessment is About Deep Change, Not Grades:
*Pressure from Stakeholders Leads to Breakthroughs in Tracking Student and
Institutional Progress***

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It was no accident that the keynote speaker at the January 2003 NLII Annual Meeting was asked to discuss transformative assessment, even if few realized at the time that that was the topic. During the first two years of development of the NLII's Transformative Assessment Project (TAP – see description below), NLII director of projects Vicki Suter frequently lamented the lack of models available to describe the project's intentions. "I'd love to explain transformative assessment by example," she'd say, "but there just aren't many examples yet." When the Student Learning Objectives (SLO) system (<http://www.washington.edu/slo/>) at the University of Washington (<http://www.washington.edu/>) came on the radar, Suter knew she'd found an early model.

She also knew that assessment is the one topic that can send higher education administrators running for cover. When Debra Friedman, University of Washington associate provost of academic planning, took the podium, she managed to do what few believed was possible: she brought the topic of assessment to life, making it compelling, relevant, and accessible.

With roots in undergraduate education and educational innovation, Friedman has a unique perspective on educational transformation as it applies to real faculty, real students, and real university needs. She was involved in the development of the groundbreaking SLO system, which identifies learning objectives for undergraduates across the university. Powered by a Web front end that represents a significant technological advancement, the system is designed to facilitate—rather than restrict—the transformation agenda. Quite simply, it offers a new set of metrics for student learning that expands on the limited metrics currently available to keep track of student progress.

Transformative Assessment Project

The NLII envisions transformative assessment as institutionwide assessment strategies that are based on institutional goals and integrated across all levels—including courses, programs, and the institution at large—to systematically transform teaching and learning. The NLII’s Transformative Assessment Project (TAP, see <http://www.educause.edu/nlii/meetings/nlii014/tap.asp>) is a joint project of the National Learning Infrastructure Initiative (NLII), the Flashlight Program of the TLT Group (<http://www.tltgroup.org/programs/flashlight.html>), the Coalition for Networked Information (CNI) – <http://www.cni.org/>, the American Association for Higher Education (<http://aahe.org/>), and for the Center for Teaching, Learning and Technology at Washington State University (<http://www.ctlt.wsu.edu/>). The project is designed both to elicit new ideas about assessment practices and systems that will transform teaching and learning and to help institutions of higher education put those ideas into action. TAP activities to date have included three focus sessions and a six-week online workshop, two new branches of the READY system (<http://www.educause.edu/ready>), Alignment in Planning and Transformative Assessment, and two reference documents, the Transformative Assessment Rubric (see <http://www.educause.edu/ir/library/pdf/EDU0251.pdf>) and the Transformative Assessment Conceptual Framework (see <http://www.educause.edu/ir/library/pdf/NLI0348.pdf>).

Understanding the learning process is nothing new to educators, many of whom have been attempting to measure it, model it, and understand it since the early days of classroom-based education. As Friedman points out, learning defies easy capture. “It happens in its own way and in its own time,” she said in her keynote speech. “We’ve been chasing it, but we still don’t really know what students know while in college.”

Today colleges and universities are under considerable pressure by state legislators and accrediting organizations to capture and quantify what students know. “We are partly responsible when asked to report on things like retention and graduation rates,” said

Friedman. “We complained that the demands for these reports missed the point of our mission. We said our job was to focus on what students learn. And the result is, they called our bluff.”

The University of Washington is a public research university of roughly 28,000 students and 4,000 faculty spread among 18 colleges and encompassing 170 curricula and 130 programs. The breadth of academic programs, departments, research initiatives, and administrative functions that drive its mission underscored the challenge of identifying learning objectives and creating a mechanism for achieving academic success.

Friedman’s team of developers began with a unit of analysis composed of the instructor plus the learning experience because, as she points out, “if I teach intro to psychology and someone else does too, it is fundamentally a different course from mine, and this is a good thing.”

The SLO initiative was born out of the discontinuity that exists between the demands of educational innovation and accountability and accreditation, which, she said, exist in paramount tension. “The challenge is to serve two masters—the university and the legislators—while preserving faculty control over the definition of teaching and learning,” she said.

Rather than build an SLO system, Friedman attempted to purchase one, but that resulted in a failed shopping trip. The building process was governed by a set of principles not unfamiliar to colleges and universities across the board: it needed to be consistent with the goal to improve undergraduate education; it needed to allow for disciplinary differences from music to biochemistry; it needed to provide meaningful feedback for units, faculty, and students; and it needed to allow faculty to control the definition of learning outcomes. “Rubrics that substitute third-party judgment for a professor’s judgment are doomed to fail,” said Friedman. “And they should.” Most important—though certainly most difficult to achieve—the system had to be simple, efficient, and scalable.

Staff set to work collecting data and encoding learning experiences, which meant providing the means for faculty members to enter learning objectives for their courses. The system was coded in two parts: university learning objectives and department/program-specific learning objectives. The university learning objectives are recognizable—including analytic, intellectual, communication, inter-personal, and similar types of information—as they’re used in numerous national surveys, including alumni surveys. “These are not UW learning objectives,” said Friedman, “they were drawn from national surveys, and they run across all institutions. They are agreed upon, tested, and used.”

In keeping with the goal of allowing faculty to control the definition of learning outcomes, all faculty members could add any learning objectives they wished to the department- or program-specific set of objectives for any course they teach and without argument or justification. The genius of this arrangement is that the energy that faculty expend attempting to come to consensus about learning objectives is now used instead for reflection about their own objectives. Over time, as more and more faculty actually spend time reflecting on their objectives, there is greater potential for meaningful discussion at the departmental level.

Students are also benefiting from the system. Not only can they measure their progress in courses, but also they can see how the knowledge they’re gaining applies to careers in their fields of study and they can make adjustments to their learning strategies if necessary. They can choose particular courses taught by particular faculty on the basis of the learning objectives for that course as set by that faculty member, because such learning objectives are now public. And they can make their own judgments about how well the course helped them meet the learning objectives.

“The SLO is a metric that changes as the goals change,” said Friedman. “And it allows faculty to measure what they think is happening against what is really happening. It is designed to honor professors’ teaching identities and disciplinary differences while summing meaningfully across diverse units of the university.” See NLII Annual Meeting

keynote presentation, “Student Learning Objectives (SLO) and the Transformation of the Learning Experience” (<http://www.educause.edu/asp/doclib/abstract.asp?ID=NLI0337>).

In the session titled, “Transformation through Program Evaluation”, representatives from the University of New Orleans (<http://www.uno.edu/>) discussed various types of evaluation and presented a case study initiative aimed at enhancing student learning by providing faculty with laptop computers and associated training. Now in use by 860 faculty members from across all colleges and all faculty ranks as well as the vast majority of departments, the program, which was launched as a pilot, was so successful that the original goal of engaging a hundred faculty members was expanded to engaging the whole faculty (for more information, see <http://www.educause.edu/asp/doclib/abstract.asp?ID=NLI0303>).

Members of the NLII’s Transformative Assessment Project team presented the results of their work at the Annual Meeting in a featured session titled, “A Rubric for Transformative Assessment Systems” (<http://www.educause.edu/asp/doclib/abstract.asp?ID=NLI0307>). In the session, Suter defined transformative assessment systems as institutionwide assessment strategies—based on institutional vision, culture, and goals—that get implemented in an integrated fashion across the institution and that are intended to systematically transform teaching and learning for the purpose of improving student learning outcomes. They are used both as a tool for communicating the nature of the desired transformation in teaching and learning and as a mechanism for learning more about how the transformation can be realized. In the context of the NLII’s work, such systems include the design, planning, implementation, and evaluation of technology. To explain how the systems work, Suter quoted a TAP-ONLINE workshop participant who said: “Transformative assessment works by providing students and teachers with insight into learning processes and their results. It assumes that deepened insight will lead to individual, programmatic, and institutional improvements.”

At the session, Steve Ehrmann of the TLT Group's Flashlight Program argued that for something to be transformative, it must demonstrate important, qualitative changes in student learning outcomes as well as in the activities that lead to those outcomes, and the technology involved must support the activities effectively. "We can build a demonstrably reliable network infrastructure and provide excellent technical support, but absent an understanding of the activities that such technology supports and the relationship of those activities to the desired learning outcomes, it is difficult to bring about transformation," he said.

Gary Brown, director of the Center for Teaching, Learning and Technology at Washington State University, noted that the problem with existing assessment systems is that the data collected—such as grades ("Bring us better students!"), student evaluations ("He's so entertaining!"), and administrative accountability ("Student enrollments in our online learning space have almost doubled in the past year.")—are not used to inform change. He reviewed the WSU Goals, Activities and Processes Survey (GAPS) research project (see http://www.ctlt.wsu.edu/GAPS_Research_Links.asp), which was developed by WSU faculty and the Center for Teaching, Learning and Technology (CTLT) in response to WSU's rapid adoption of online tools. The survey was meant to provide faculty with a tool for classroom research—such as helping faculty gather feedback on their students' learning experiences in a formative manner and providing solutions attentive to that feedback during the term—to help the CTLT improve the Web-based course management tools it supports and to inform the course development process.

Several project findings emerged.

Faculty motivation predicts perceptions of efficacy of online learning.

- Faculty who are motivated by interest in technology report significantly less efficacy in the online experience than faculty motivated by an interest in pedagogy.
- Faculty motivated by money are rarely satisfied with their online experience.

Students' perception of the efficacy of grading—of all kinds—diminishes as students mature. Perception of the value of peer critiques increases as students mature. However, Brown acknowledged that against the gold standard of transformative assessment—use of the assessment data to inform change—the numbers were not yet encouraging.

A rubric—a set of well-defined criteria that includes a range of mastery for each—can also help evaluate the extent to which assessment is being applied in a variety of ways to guide and support significant institutional improvement in teaching and learning and in using technology and whether there is purposeful application of assessment and dissemination of assessment results to support deep change, all of which are characteristics of transformative assessment. To that end, Brown worked with the TAP team to develop a transformative assessment rubric. (See below for a summary, and <http://www.educause.edu/ir/library/pdf/EDU0251.pdf>) for the latest full version of the transformative assessment rubric)

Joan K. Lippincott, associate executive director of the Coalition for Networked Information, summarized insights about institutional issues associated with transformative assessment and harvested by the TAP team to date. “Successful transformative assessment is a tall order,” she said. “First of all, institutions need to have a top-level commitment to the improvement of teaching and learning that is situated in the institution’s mission—which is even better if it’s also driven by external demands for accountability. Both a systemic focus and a specific campus focus on change need to be present.” According to Lippincott, successful institutions use technology appropriately and make major investments in it, they integrate assessment into their planning for the transformation of teaching and learning, they allocate sufficient resources for assessment, and they make a commitment to act on the knowledge gained through the assessment. Hindrances to success are suspicion of assessment, lack of resources, and an interest in only narrow or incremental improvements.

In describing a transformative assessment planning process developed by the TAP team and tested during the TAP-ONLINE workshop, Lippincott underscored the importance of

developing a framework for assessment and the need to focus on articulating transformative goals related to teaching and learning that are rooted in what's important to the institution. (See the READY system, <http://www.educause.edu/ready>) particularly the branch on alignment of planning and the branch on transformative assessment.) “The most-successful transformative assessment plans”, she said, “are realistic, resourced, and resilient, or flexible.”

Summer Focus Session: Building a Culture For Transformative Assessment

This focus session, held in June, 2003 in conjunction with the AAHE Assessment Conference in Seattle, was jointly sponsored by the National Learning Infrastructure Initiative (NLII); the Flashlight Program of the TLT Group (<http://www.tltgroup.org/>); the Coalition for Networked Information (CNI) (<http://www.cni.org/>); the Center for Teaching, Learning and Technology at Washington State University (<http://www.ctlt.wsu.edu/>); and the American Association for Higher Education (AAHE) (<http://www.aahe.org/>); members from those organizations are part of the Transformative Assessment Project (TAP) team, (<http://www.educause.edu/nlii/meetings/nlii014/tap.asp>)

While open to individuals, the focus session was designed to help institutional teams in particular that have been charged with planning and/or implementing a major change for their program or institution so as to transform teaching and learning by using technology. The invitation was extended to teams from institutions that

- Are involved in significant institutional improvement of teaching and learning by using technology.
- Use assessment in a variety of ways to guide and support that effort.
- Share a commitment to the purposeful application of assessment and dissemination of assessment results to support deep change.

The focus session concentrated on the use of data and systematic assessment to advance such efforts. Ten institutional teams ranging in size from 2 to 11 members were in attendance, as were 9 individuals from various organizations. A diverse audience of 56 was in attendance: more than 30 percent were faculty, 25 percent were from university administration, 17 percent were instructional technology staff, 17 percent were assessment specialists, and the rest were divided between faculty development, other information technology staff, learning/instructional designers, librarians, and students.

During the daylong focus session, participants alternated between attendance at general session presentations followed by small-group discussions, and then institutional team meetings that were carefully facilitated. As an initial step in planning and carrying out a transformative assessment project at their institution, participants explored the processes and practices associated with transformative assessment. That format, using institutional teams, appeared to be extremely successful: one of the participants mentioned the focus session to an AAHE staff member at the AAHE Assessment Conference that followed,

saying, “I have just attended the perfect meeting.” In addition, a half dozen mentioned the format in particular in their evaluations, giving some version of the statement, “We plan on generating a local focus session based on this model and creating a planning group to address moving forward with buy-in and participation across all the key stakeholders at our institution.” More than any other focus session the NLII has held, there seemed to be a strong feeling that more than one day was needed, and this format will be considered when institutional teams are to be involved in future focus sessions. For more information on the focus session, including meeting proceedings, see <http://www.educause.edu/nlii/meetings/nlii033/>.

TAP Conceptual Framework

In preparation for the Summer Focus Session, three members of the TAP team—Gary Brown, Steve Ehrmann, and Vicki Suter—developed a conceptual framework for transformative assessment. As noted in the article on conceptual frameworks, the NLII sees these as constructs that are useful for creating productive and meaningful dialogue when participants are from different backgrounds and have diverse understandings about teaching and learning. They’re based on theory but are put in terms of a specific purpose and context to frame particular work—in this case, the use of assessment to transform teaching and learning. For the full TAP conceptual framework, see <http://www.educause.edu/ir/library/pdf/NLI0348.pdf>. A summary in question-and-answer form follows.

What does transformation mean in the TAP context?

From the Latin root, *to change*, connoted by *trans-*, meaning *across*, and *forma*, meaning *shape* or *that which shapes*, or *that which has been shaped*. From our perspective, it’s meaningful that the term shares roots with *reform* and *inform*. We’re interested in institutional change that is:

- Emergent from institutional vision, mission, culture, and context.
- Focused on learning outcomes, processes, and purposes (in a way that honors learners and learning).
- Qualitative in nature.
- Based on iterative, collaborative generation and refinement of a conceptual framework that articulates shared institutional understandings of how learning occurs best and that explains relationships among learning, teaching, course and program development, application of technology, and institutional and community organization.

- Large-scale, systemic, and contagious (has the potential to move through an institution or system).
- Facilitated by the intelligent and appropriate use of technology.
- Informed by assessment and a commitment to data-driven decision making.

Transformation can proceed in different directions, according to differences in mission and context, local conceptual framework, scale and complexity, and use of technology.

How does such transformation come about?

Three key elements of an effective change process are:

- *Ongoing alignment of planning and decision making*: ongoing environmental scanning, review, community dialogue, and adaptation that are built into an institution's strategic planning and budgeting infrastructure at all levels
- *Inclusion and collaboration among all stakeholders*: so that all who need to make the transformation happen or are affected by it understand the nature of the transformation as it relates to how they do their work
- *Organizational motivation*: an institutional environment in which challenge and comfort are balanced on the edge of a state of disequilibrium, whether the pressure for change comes from external forces or internal circumstances (not unlike that described by Margaret Haughey as the motivation for learning in the article on Learner-Centered Design and Practices, "Principle-Based Technology and Learning Environment Design").

Fundamentally, transformation is about individual and organizational learning.

What role does assessment play in transformation?

Because transformation is about learning, assessment has an essential role in institutional transformation. In particular, in order to help serve the engine of transformation, an institution's assessment efforts ought to:

- Focus in a significant way on debugging, monitoring, testing, guiding, accelerating, and, if appropriate, modifying the transformational process.

- Be embedded within institutional processes and activities that the institution engages in to structure its work: activities such as strategic planning, budgeting, faculty development, program development and review, and curriculum development.

For the summer focus session, the TAP team also refined the transformative assessment rubric previously developed (and described earlier in the section on the featured session at the NLII 2003 Annual Meeting, “A Rubric for Transformative Assessment Systems”). The rubric has a range of mastery from administrative through progressive to transformative, along the following four dimensions (for the full version, see <http://www.educause.edu/ir/library/pdf/EDU0251.pdf>):

- *Assessment purpose:* The assessment plan aligns with other institutional plans and promotes the collaboration of administration, faculty, students, and community.
- *Data acquisition and analysis:* Data from multiple and diverse sources illuminate students’ learning, learning processes, and learning purposes, particularly learning as those aspects of learning extend beyond course-specific outcomes.
- *Application to transformation:* The assessment findings are used to systematically inform and reshape teaching and learning practice to improve effectiveness, efficiency, and/or value and specifically to promote an operational culture of evidence—for example, influencing promotion and tenure decisions.
- *Dissemination:* Results are reported internally and externally with plans for expanding the collaboration for transformation.

What are the strategies one might use in developing a transformative assessment program?

- Find a coalition of interests to fund and operate such a program, and make sure that any steering committee is chartered by the institution’s leadership, is representative and accountable, and has its credibility reinforced through the selection of the participants.
- Look for a win-win design in early efforts so that even before the study is undertaken, stakeholders are confident that no matter what the study finds, it is worth doing. Early studies might focus on needs, on establishing baseline data, and/or on debugging early strategies and ought to provide relatively immediate, substantial help.

- Involve the stakeholders—those whom the study is supposed to help or who might be affected by the results—in design, in data gathering, and in data analysis so that they're more likely to be persuaded and guided by the results.

Is there a particular process one might use in developing a transformative assessment program?

For complex human institutions, process is the engine that converts models, strategies, and rubrics into operational reality. Some approaches that can be adapted into structured processes for developing your institutional transformative assessment program are development of institutional portfolios (for an example, see the Urban Universities Portfolio Project, <http://www.imir.iupui.edu/portfolio/>), participation in the Malcolm Baldrige National Quality Program (see <http://baldrige.nist.gov/>), and use of methods, tools, and processes from the Flashlight Program for the Study and Educational Use of Technology (see <http://www.tltgroup.org/programs/flashlight.html>).

In addition, the TAP team, drawing from experiences in a previous TAP activity—the TAP-ONLINE workshop—and also from the writings of Mary E. Huba and Jann E. Freed—especially *Learner-Centered Assessment on College Campuses*—has also designed and tested a process and a template for creating a developmental document called the Transformative Assessment Plan. The document is developmental because the activities that must be carried out to complete it can lead to development of skills, infrastructure, resources, the organization, the community, ongoing processes, and activities characteristic of a culture of evidence. The processes necessary to construct and maintain the document could be integrated into an ongoing, dynamic, institutional strategic-planning process, which is yet another approach that can be adapted for developing a transformative assessment program. The process and planning templates are available at <http://www.educause.edu/ir/library/pdf/NLI0347.pdf>.

NLII Activities and Plans

Summer Focus session participants and other parties interested in transformative assessment will have an opportunity to participate in an online community of practice. The Transformative Assessment Project team will be hosting a series of follow-up discussions on the New Academy Virtual Community of Practice site (<https://worktools.si.umich.edu/workspaces/dcamrid/003.nsf>) during summer 2003. In addition, the Transformative Assessment Conceptual framework (<http://www.educause.edu/ir/library/pdf/NLI0348.pdf>) and the TAP rubric (<http://www.educause.edu/ir/library/pdf/EDU0251.pdf>) will be refined based on feedback received at the focus session and during community discussions.

TAP team members will collect information about the transformative assessment projects that Summer Focus session attendees and other interested parties are undertaking and will conduct a needs assessment. A series of experimental online workshops may be designed to support those projects depending on needs. Finally, the Transformative Assessment key themes page (<http://www.educause.edu/nlii/keythemes/transformative.asp>) will continue being updated to reflect the new resources created and gathered for this topic for the focus session and by the community of practice.