Transformation and Assessment. A Conceptual Framework
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1. “Transformation” – Definition (click here to comment on this section)

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

- Emergent from institutional vision, mission, culture and context;
- Focused on learning outcomes, processes and purposes (honors learners and learning);
- Qualitative in nature;
- Based upon 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);
- Enabled 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** - Each institution has a unique history, culture, mission, and set of assets that shape the transformation. For example, an institution of higher education with a mission focused on serving a culturally diverse or global population may have an entirely different orientation from a publicly-funded institution focused on serving an economic region.

**Local Conceptual framework** - How transformation is specifically defined and expressed varies according to the wide range of potential conceptual frameworks for explaining relationships among learning, teaching, curriculum development and assessment. Conceptual frameworks can be based on theoretical sources - for example, Chickering and Gamson’s “Seven Principles of Good Practice in Undergraduate Education,” or the “deeper learning principles” identified on the NLI’s “Mapping the Learning Space” site (see [http://www.educause.edu/nlii/keythemes/lcp/](http://www.educause.edu/nlii/keythemes/lcp/)); or they can be based on models of learning (e.g., ability-based models); but in any case the conceptual framework should be rooted in faculty educational values informed by the science of learning.

**Scale and complexity** – Scale varies from institution to institution, but the transformation involves a change not only in the number of people and resources, but in the way their interactions are organized. For institutions participating in the NLI Transformative Assessment Program, changes worth focusing on should be occurring, or planned, at the departmental level or higher, and should be sustainable and replicable throughout the organization (as appropriate). (For more thoughts on large-scale changes that transcend single institutions, see [http://www.tltgroup.org/resources/or%20quality.htm](http://www.tltgroup.org/resources/or%20quality.htm))

**Use of technology** – The role and relative importance of technology in an institutional transformation also varies, but education, if it is responsive to a mission that strives to shape and reflect society, is, like transformation, now inconceivable without technology. Because of the
NLII’s mission (the use of technology to create higher education that is active and learner-centered, dynamic and lifelong, collaborative, accessible, cost-effective and high quality) we are particularly interested in how transformation is enabled by technology.

II. How Transformation Comes About (Click here to comment)

One key element of an effective change process is alignment in planning and in decision-making. The proof of alignment is most likely to be found in plans and policies that are consistent with one another (e.g. a planning document that says assessment is important aligned with a budget that provides money for it), and that express the institution’s mission and vision in increasingly specific operational terms tailored to each level of planning (the institution, technology planning, service planning, the department, the program, the course, the individual student). Such alignment is not accomplished through rigid, formal, static planning projects carried out in five year cycles, but through an ongoing process of environmental scanning, review, community dialog, and adaptation. Think of it as an ongoing conversation that engages the entire community in a structured way.

Thus, it’s very important to assure that any change process is “collaborative.” There are unavoidable conflicts of beliefs, needs, values, resources within higher education institutions (indeed, within any complex organization). There are differences in perception and language. The TLT Group typically looks to organizational processes for evidence of collaboration – are people from different units meeting with one another? Is their work together making decision-making more participatory and reasoned?

However, collaboration is not enough. The last piece is organizational motivation\(^3\), and this is influenced by institutional culture and the demands of the environment in which the institution is situated. Change is hard and uncomfortable, just like learning. As Margaret Haughey argues (NLII 2003 Annual Meeting presentation), it arises from a state of dis-equilibrium, some disjuncture between prior experience and new needs, and involves searching for new resolutions, new meanings, new connections. Finally, like learning, it requires a balance between challenge and comfort – too much of either, and both people and organizations can become immobilized. Fundamentally, transformation is about individual and organizational learning.

III. Assessment and Transformation (Click here to comment on this section)

Because transformation is about learning, assessment has an essential role in institutional transformation. In particular, an institution’s assessment efforts ought to:

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

Working with Gary Brown of Washington State University, the TAP team has developed a transformative assessment rubric. A rubric is a set of well-defined criteria that includes a range

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of mastery for each; the transformative assessment rubric can help evaluate the extent to which assessment is being applied to guide and support transformation of teaching and learning, and using technology. The rubric has a range of mastery from administrative through progressive to transformative, along the following four dimensions: purpose of the assessment, data and data acquisition, application to transformation, and dissemination.

**Purpose** – How well does the assessment plan align with other institutional plans, and how well does it promote a collaboration of administration, faculty, students, and community committed to an ongoing process of data-driven decision making?

**Data and data acquisition** – Do data from multiple and diverse sources illuminate students’ learning, learning processes, and learning purposes, particularly learning as it extends beyond course-specific outcomes?

**Application to transformation** – Are the assessment findings 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”? A culture of evidence is characterized by institutional practice that promotes competence in the skilled, intentional gathering and use of information and that reflects the value of using evidence for making decisions and for formulating and solving problems, in a spirit of ongoing reflection and continuous improvement based on data. In addition, the institution develops mechanisms for sharing and leveraging the evidence gathered by various units and provides incentives for them to work together to add value to the assessment process at the institution.

**Dissemination** – Are the results of the assessment structured so as to be useful for organizational learning, and are they reported both internally and externally to all the institutional stakeholders, with plans for expanding the collaboration for transformation?

(See the “Transformative Assessment Resources” folder in the resources section of the New Academy for the latest draft version of the transformative assessment rubric. The full public version is at http://www.educause.edu/ir/library/pdf/EDU0251.pdf).

This essay does not need to repeat the kinds of good practice that ought to characterize all assessment (if you are interested in this topic, check the Transformative Assessment Resources folder for some readings). We did think readers would find it useful if we were to describe elements of assessment that are especially important when assessment is used to support transformation. These elements include but are not limited to:

a) An institution’s program for transformative assessment ought to help advance its “culture of evidence.” Questions to ask to evaluate how far along your institution is in developing such a culture include: How often is administrative decision-making preceded by the skilled, intentional gathering of information, which then influences the decisions? Is assessment an integral part of the learning process, addressed to the intellectual curiosity of individuals (students, faculty, and staff) as well as organizational learning? How does the institution help its different communities of practice attain competence in the purposeful design and application of assessment to support decision-making throughout the institution? Is there an institutional infrastructure to organize data from findings in ways that make it easy for investigators to actively share findings, build on one another’s work, relate the findings of each study to other studies, and disseminate facts about how findings are being used to guide action, in order both to publicize the transformation itself and increase the possibility of using data to critique and accelerate the transformation?
b) Studies in a transformative assessment program should span at least two important dimensions of a transformation:

- **Stage of transformation**: Studies with open design that create productive dialog, shape goals (e.g., needs assessment), debug the strategy, make sure the strategy is implemented, monitor whether institutional practices are beginning to transform in desired ways, examine the costs of the strategy, and question the heart of the strategy (e.g., is the basic theory about the value of the goals, and how to achieve them, working well enough? To what extent is the conceptual framework that is shaping the transformation being confirmed, and how should it be modified?)

- **Macro/Micro**: Any transformation needs to be studied at the institutional level (e.g., is learning becoming more active or collaborative across all departments?) and at the micro level (feedback about a specific course to a specific faculty person about opportunities for active and collaborative learning and the effects on student learning these opportunities had). Again, the conceptual framework the institution uses to explain the relationships among learning, teaching, course and program development, application of technology to support activities and programs, and institutional and community organization, provides a common framework of inquiry.

With the first three sections of this essay, we’ve attempted to address the questions:

- What do we mean by “transformation?”
- How does transformation come about?
- What role does assessment have in institutional transformation?

Now we turn our attention to strategies for developing a transformative assessment program at your institution, and suggestions for a process that might help you design and implement such a program.

**IV. Strategies for developing a transformative assessment program**

The following strategies are not sequential. For any one institution, some of the following elements may already be in place.

- Because probably no institution has an “Office of Transformative Assessment,” almost all institutions will need a coalition of interests to fund and operate such a program. Some form of steering committee is likely to be necessary to guide this effort and help assure that findings are translated into action. The committee and the program must be chartered by the institution’s leadership, should be representative and accountable, and should have its credibility reinforced through the selection of the participants.

- In order to start small (as most institutions must) and build to an assessment program large enough to influence transformation, it is helpful to remember that success breeds success. Early assessment efforts should have a win-win design. In other words, the assessment should be designed to reduce some important uncertainty. Even more importantly, the design of the inquiry and its organizational support should assure that, almost no matter what the inquiry uncovers, those involved will be able to do something valuable. Even before the study is done, stakeholders should be confident that, no matter what will be found by the study, it is worth doing. The finding, “We can’t do anything, or
suggest anything, until we do another study,” is an outcome to be avoided, especially early in building a program.

- The people (whether students, faculty or staff) whom the study is supposed to help ought to provide support, guidance, and effort to carry it out. Involve them in design, in data gathering and in data analysis. If you do this successfully, it’s much more likely that the findings will be understood by those stakeholders, will persuade them, and will become guides to action.

- It’s never too early to begin the process of assessment in the service of transformation. Early studies might focus on needs, on establishing baseline data, and/or on debugging early strategies. At least some such studies ought to provide relatively immediate, substantial help. For example, if the transformation involves creation of online learning communities, the assessment program might provide diagnostic tools to help faculty and support staff diagnose and lower barriers preventing some students from participating effectively (e.g., which students have ISP problems; which students are skeptical of the value of a learning community; which students lack the skills to deal with peers who talk too much, or too little, or who don’t do their part of the work; etc.)

- Transformational change is, by definition, relatively large-scale and relatively rapid. It therefore poses unusual dangers for busting budgets and burning out staff. Therefore “cost” studies (which, in higher education, often focus on how staff members use their time) are important to help reduce the danger that, as the effort grows in scale, it creates unexpected cost over-runs or alienates staff by forcing them to attempt too much with too little.

- If the definition of your transformation involves extending beyond previous boundaries (as writing across the curriculum extended boundaries beyond composition courses, and as the web has extended boundaries beyond the physical library), then baseline data gathering ought to focus on the newer, larger scale of operation, not on the older organizational limits. For example, if the institution is engaged in an e-portfolio initiative, data gathering should include various forms of traditional assessment (in order to see the portfolio effort in relation to the changing flow of other forms of assessment data).

V. Process for developing a transformative assessment program

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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: a) development of institutional portfolios (for an example, see the Urban Universities Portfolio Project, http://www.imir.iupui.edu/portfolio/); b) participation in the Malcolm Baldridge National Quality Program (see http://baldrige.nist.gov/); and c) use of methods, tools and processes from the Flashlight Program for the Study and Educational Use of Technology (http://www.tltgroup.org/programs/flashlight.html).

Drawing from experiences in a previous TAP activity, the TAPONLINE workshop, and also from the writings of Mary Huba and Jann E. Freed (especially “Learner-Centered Assessment on College Campuses”), the TAP team has also designed and tested a process and a template for creating a developmental document, 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, organization, 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 template will be distributed and used at the upcoming focus session.

Regardless of which approach you choose to adapt into a structured process for developing your transformative assessment program, to be effective it must be able to support the following activities in a scaleable, sustainable way across the institution:

- Inventory institutional planning and assessment activities, products, resources and capacity
- Authenticate the institutional mission and vision
- Evaluate alignment
- Identify stakeholders and constituencies necessary to the transformation

- Initially, create new communities and collaborative/learning environments (or adapt existing ones) for stakeholders to explore teaching and learning issues, begin to discover the questions they care about and become informed about the science of learning and the practice of assessment; help communities evolve so as to develop and change practice to encompass transformative assessment

- Initially, develop/articulate/document the conceptual framework the institution will use to explain the relationships among learning, teaching, course and program development, application of technology to support activities and programs, and institutional and community organization; in long term, involve stakeholders, operating in their relevant communities of practice, in selecting, refining, adopting, applying and embedding the conceptual framework (including role of assessment) in an ongoing way.

- Describe the desired developmental and learning outcomes, in the context of the conceptual framework and the institutional mission, and the teaching and learning activities/experiences and programs that will lead to those outcomes

- Identify the role of technology in supporting the teaching and learning activities/experiences and programs (in the context of the conceptual framework)

- Frame, order, and prioritize the key questions to study in relation to those outcomes/goals statements and the use of technology (and clarify whose questions these are, and how the answers will be used for decision-making and planning)

- Identify key indicators and measures that will be used to answer the key questions (baseline, short-term, intermediate, long-term) – including rubrics and both indirect and direct measures – and look for “hosts” for those questions (e.g., what are natural homes in existing institutional processes for acquiring the data with the lowest overhead)

- Create what-if scenarios about how different assessment results would be translated into different decisions and actions, and strategize about different responses

- Plan and manage the assessment activities initially as projects of collaborative teams, but develop embedding strategies for ongoing activities

- Evaluate the assessment activities against the rubric and their contribution to an evolving culture of evidence.

While this text list appears sequential, it represents a process that is not linear or sequential. Steps are inter- and intra-cyclical, there are internal feedback and verification loops (between stakeholder identification and authentication of the institutional mission and vision for example), overlapping steps and there is a web of relationships among the activities. For that reason alone, the form the document should ultimately take is as an online, hypertext web site.