Working Within a Learning System: Supporting Transformation through Actionable Processes

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

NILOA
NILOA’s mission is to discover and disseminate effective use of assessment data to strengthen undergraduate education and support institutions in their assessment efforts.

- Surveys - Web Scans - Case Studies - Focus Groups
- Occasional Papers - Website - Resources - Newsletter
- Presentations - Transparency Framework - Featured Websites
- Accreditation Resources - Assessment Event Calendar - Assessment News - Measuring Quality Inventory
- Policy Analysis - Environmental Scan - Degree Qualifications Profile - Tuning

www.learningoutcomesassessment.org
Assignments as Assessments

Faculty are working to create a curriculum that intentionally builds in integrated learning opportunities over time for students to apply and practice as well as transfer their knowledge and skills through assignments, in and out of courses.

The NILOA Initiative

An online library of high-quality peer-endorsed assignments linked to specific learning outcomes.

Designed by faculty, part of the intellectual work they already do, course embedded.

Building on campus efforts already underway

Reflecting a conception of assessment as integral to teaching and learning vs “exoskeleton” (Ewell 2013).
What’s a “charrette”? 

"Charrette" (Fr.) means a small cart. Because architecture students once deposited their assignments in it as the cart was rolled through the studio, architects now use the word to refer to an intense creative effort in a limited time period.

Aussi . . .

(a) In the tradition of the “atelier,” architecture students progress through the curriculum in the company of their mentors and peers. This approach offers an interesting model for an integrated education.

(b) The tradition rests on the assumption that much of your learning will come from one another.
Small Group Process

- 25 minute segments per person/assignment
  - Present assignment briefly—which outcomes, what course, which students, how does it work....
  - Discussion with group (focus on questions on feedback form)
  - Save 5 minutes for written feedback
  - Breath
  - Start again...
  - Debrief at end

Resources: Toolkit

http://www.learningoutcomeassessment.org/assignmenttoolkit.html
Assignments as Assessment

How assignments connect
Program View

Transparency in Assignments

Transparency in Teaching and Learning: https://www.unlv.edu/provost/teachingandlearning

**Purpose**
- Skills you’ll practice by doing this assignment
- Content knowledge you’ll gain from doing this assignment
- How you can use these in your life beyond the context of this course, in and beyond college

**Task**
- What to do
- How to do it (Are there recommended steps? What roadblocks/mistakes should you avoid?)

**Criteria**
- (Are you on the right track? How to know you’re doing what’s expected?)

**Annotated examples of successful work**
- (What’s good about these examples? Use the checklist to identify the successful parts.)
Fitness of Method or Approach

Part of alignment is fitness of method or approach – if asking students to explain something, multiple choice test might not be the best approach, but if asking students to identify – it might be very appropriate...

Verbs (and I don’t mean Bloom’s)

Alignment and fitness of method occur in relation to the verbs identified in the learning outcome statement.

In your own assignment – what are you asking students to actually do or demonstrate?
Rubrics

Do we share our rubrics or criteria with students and actively engage them in the review process?

<table>
<thead>
<tr>
<th>Rubric Criteria</th>
<th>Student Evaluation</th>
<th>Faculty Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rubric Content</td>
<td>Stipulate why gave score did</td>
<td>Faculty stipulate why gave score did</td>
</tr>
<tr>
<td></td>
<td>Stipulate what they need to do to advance</td>
<td>Targeted feedback to improve</td>
</tr>
</tbody>
</table>

Possibilities

Ideas on assignment modification
- Shifting audience (in writing assignment)
- Modify genre (blog, pamphlet, drama, graphic novel, poster, oral presentation, debate)
- Practice throughout courses
Timing and Placement of Assignments

Do we consider student movement through curriculum in terms of the placement of signature assignments? Do we also consider transfer points and convergence between general education and the major?

Transference of Knowledge and Skills

We know that students have the hardest time with transferring knowledge - realizing something they learned before can be applied in another context.

We have to teach them to reflect and have them apply over time.
Alignment

Entry point if needed
Connections

Scaffolding Learning → Assignment → Employers

Learning Outcomes → Evaluative Criteria → Co-curricular

Implications for transcripts, career development, and pathways

Mapping

Here Be Dragons
Curriculum Mapping: The Process

Focused on curriculum and program learning outcomes

Two-dimensional matrix representing courses on one axis and outcomes on the other

Faculty identify which courses address which learning outcomes

Is it an individual process or one of consensus building?

If two faculty members individually mapped the curriculum would they end up with the same map?

What is standard of alignment? Is one paper in one class enough?

<table>
<thead>
<tr>
<th>Learning Outcomes</th>
<th>Course 1</th>
<th>Course 2</th>
<th>Course 3</th>
<th>Course 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Outcome 1</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Learning Outcome 2</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>Learning Outcome 3</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Content</td>
<td>Introductory Course</td>
<td>Research Methods</td>
<td>Advanced Content Course</td>
<td>Laboratory / Practicum</td>
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<td>---------</td>
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</tr>
<tr>
<td>SLO 1:</td>
<td>Disciplinary knowledge base (models and theories)</td>
<td>Exam Questions</td>
<td>Exam Questions</td>
<td>Exam Questions</td>
</tr>
<tr>
<td>SLO 2:</td>
<td>Disciplinary methods</td>
<td>Exam Questions</td>
<td>Exam Questions</td>
<td>Exam Questions</td>
</tr>
<tr>
<td>SLO 3:</td>
<td>Disciplinary applications</td>
<td>Exam Questions</td>
<td>Exam Questions</td>
<td>Class Project</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td></td>
<td>Term Paper</td>
<td>Lab Paper</td>
<td>Data Presentation</td>
</tr>
<tr>
<td>SLO 4:</td>
<td>Analysis and use of evidence</td>
<td>Annotated Bibliography</td>
<td>Term Paper</td>
<td>Lab Paper</td>
</tr>
<tr>
<td>SLO 5:</td>
<td>Evaluation, selection, and use of sources of information</td>
<td>Reflection Essays</td>
<td>Lab Paper</td>
<td>Term Paper</td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td>Class Presentation</td>
<td>Poster Session</td>
<td>Class Presentation</td>
</tr>
<tr>
<td>SLO 6:</td>
<td>Written communication skills</td>
<td>Reflection Essays</td>
<td>Lab Paper</td>
<td>Term Paper</td>
</tr>
<tr>
<td>SLO 7:</td>
<td>Oral communication skills</td>
<td>Reflection Essays</td>
<td>Lab Paper</td>
<td>Term Paper</td>
</tr>
<tr>
<td>Integrity / Values</td>
<td></td>
<td>Reflection Essays</td>
<td>IRB/ACUC Proposal</td>
<td>Reflection Paper</td>
</tr>
<tr>
<td>SLO 8:</td>
<td>Disciplinary ethical standards</td>
<td>Exams &amp; Term Paper</td>
<td>Class Exams</td>
<td>Class Assignments &amp; Exams</td>
</tr>
<tr>
<td>SLO 9:</td>
<td>Academic integrity</td>
<td>Class Assignments &amp; Exams</td>
<td>Class Exams</td>
<td>Class Assignments &amp; Exams</td>
</tr>
<tr>
<td>Project Management</td>
<td></td>
<td>Peer Review of Team Skills</td>
<td>Project Client Feedback</td>
<td>Peer Review of Team Skills</td>
</tr>
<tr>
<td>SLO 10:</td>
<td>Interpersonal and team skills</td>
<td>Class Assignments &amp; Exams</td>
<td>Class Assignments &amp; Exams</td>
<td></td>
</tr>
<tr>
<td>SLO 11:</td>
<td>Self-regulation and metacognitive skills</td>
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</tbody>
</table>

Center for University Teaching, Learning, and Assessment
Sample Curriculum Map (Assignments & Embedded Assessments)
http://uwf.edu/cutla/
Alignment
How do you ensure alignment between our assignments and a given learning outcome for a learning experience?
What elements of the learning environment do we need to align?
How much is “enough” to be placed in a map?
Does it need to be tightly aligned or loosely aligned?

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>General Education Courses that Support the Learning Outcomes</th>
<th>Major Courses</th>
<th>Activities and Experience That Provide Support</th>
<th>Possible Careers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Outcome 1</td>
<td>General education courses that support specific outcomes</td>
<td>Courses that address specific outcomes</td>
<td>Cocurricular elements that support specific outcomes</td>
<td>Possible career paths related to the map</td>
</tr>
<tr>
<td>Learning Outcome 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Learning Outcomes

<table>
<thead>
<tr>
<th>Learning Outcomes</th>
<th>Prior Learning</th>
<th>Courses</th>
<th>Other Required Courses, Recommended Electives</th>
<th>Activities and Experience That Provide Support</th>
<th>Work-Based Learning Experiences</th>
<th>Certifications and Licensures</th>
<th>Possible Careers</th>
<th>Learner Identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Outcome 1</td>
<td>Prior learning that is accepted in relation to specific outcomes</td>
<td>Courses that address specific outcomes</td>
<td>Other courses that support and reinforce specific outcomes</td>
<td>Cocurricular elements that support specific outcomes</td>
<td>Employment and other experiences that reinforce specific outcomes</td>
<td>Possible certifications connected to the outcomes</td>
<td>Possible careers related to the map</td>
<td>Elements identified by learners as supporting learning outcomes</td>
</tr>
<tr>
<td>Learning Outcome 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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### Selective Attention Test

**Instructions**
Count how many times the players wearing white pass the basketball.
Learning Systems Paradigm

Mapping in a Learning Systems Paradigm asks us to take a wider lens to think deeply about the various places where learning is happening that aren’t documented in our traditional maps.

Consensus-based reminds us that we each have a role to play in supporting our learners achievement of our shared learning outcomes.

Alignment reminds us that we need to explore the connections points between various learning experiences to support integration and transferability of learning.

Learning-centered asks us to be mindful of our assumptions and implicit design, and work with our learners.

Communicated stresses that all of our work is for naught if we don’t share it with others and tell them why we are doing things the way we are.

Points of Perspective
Assessment Cube of Misunderstandings

Three Schools of Thought

- Measurement
- Compliance (Reporting)
- Teaching and Learning (Improvement)
Measurement

Built upon scientific principles or empirical research, objective, rational, validity, and reliability

*The Multi-State Collaborative: A Preliminary Examination of Convergent Validation Evidence* ~Mark Nicholas, John Hathcoat, & Brittany Brown

- Testing and standardization
- Must be measureable
- Argue narrowing of curriculum
- Goal driven
- Focused on process
- Interventions
- Pre/post
- Comparisons

VALUE report
VALUE report

Compliance

Documenting institutional quality assurance through reporting frameworks

Is assessment destroying the liberal arts? ~Karin Brown

- Bureaucratic
- Laborious
- Time consuming
- Separated from teaching and learning
- Add on
- Accountability and quality assurance
- Reporting and archive
- Lots of data collection, minimal use
Submit Reports

Write Outcomes

ACCREDITATION/ PROGRAM REVIEW

Identify Assessments

Gather Results

Package Results

Using EVIDENCE of STUDENT LEARNING to Improve HIGHER EDUCATION

George D. Kuh, Stanley V. Deliwerry, Natasha A. Janikowski, Timothy Reise Cain, Peter T. Swell, Pat Hutchings, Jillian Kinzie
But where are the students...?

Teaching and Learning

Focus on pedagogy, understanding of student experience, informing program improvement, embedded in curricular design and feedback, builds student agency

Does continuous assessment in higher education support student learning?
~Rosario Hernandez

- Driven by faculty questions regarding their praxis – is what I am doing working for my students?
- Improvement oriented
- Focus on individual students
- Students as active participants – not something done to them
- Formative
- Feedback
- Collaborative
- Assessment for learning
- Adaptive and embedded
Discussion

What barriers or challenges are there to moving to a learning systems approach?

What are you most hopeful for/about regarding the future of higher education?
Questions and discussion

Email: niloa@education.illinois.edu

http://www.learningoutcomesassessment.org
www.assignmentlibrary.org
www.degreeprofile.org