

Curriculum Mapping and Assignment Design: Aligning Student Learning for Success

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Welcome and Overview

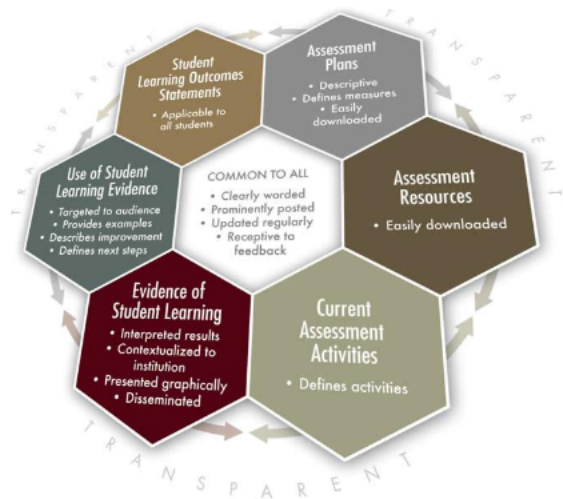
A bit about NILOA

Curriculum Mapping Overview

Example from NLU using the DQP

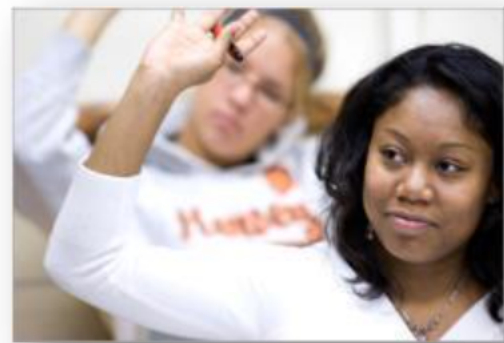
Assignment Design

Discussion



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

National Institute for Learning Outcomes Assessment

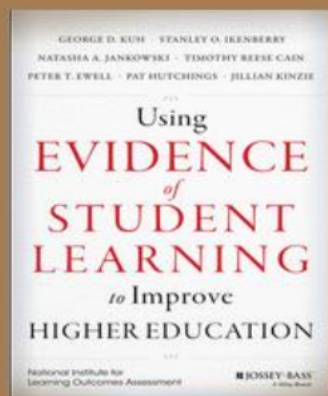
Making Learning Outcomes Usable & Transparent

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Our August newsletter featuring NILOA updates, news, and upcoming conferences and programs is now available.

- [Occasional Paper 24](#)
- [New NILOA Report](#)
- [NILOA Newsletter](#)
- [NILOA Book](#)
- [Occasional Paper 25](#)



University of North Carolina Wilmington

University of North Carolina Wilmington's assessment website is this month's Featured Website in the category of Centralized Assessment Repository.

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Keeping Up with Competency

Tue, Sep 29, 2015 - 08:00 am
Paul Fain in Inside Higher Education

Competency-based education continues to expand in practice and conversations. College officials even plan to get together at a meeting called CBExchange to further discussions about the benefits and usefulness of competency-based education. This is a timely meeting given that the meaning of competency-based education is still evolving.

Produce Thinkers, Not Docile Workers

Tue, Sep 29, 2015 - 08:00 am
David Gooblar in Vitae

David Gooblar made a passionate case for faculty members to embrace student-centered learning rather than credential-centered learning, reflecting on the insights of professor Cathy Davidson from the Graduate Center at the University of New York.

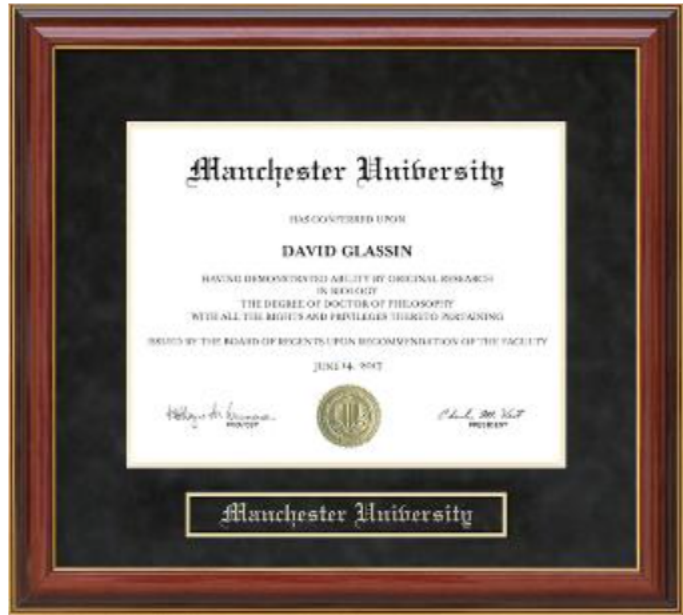
The New College Scorecard

Tue, Sep 29, 2015 - 08:00 am
Michael Stratford in Inside Higher Education

Have you seen the new college information website called the College Scorecard? Visitors to the website can see information about how much federal loans former students at college and universities have been able to pay back in addition to achievement data and students average incomes after graduation.

NILOA Calendar						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

WHAT DOES A A DEGREE REPRESENT?



seat time?

Carnegie credit hours?

grade point averages?

required courses?

clinical hours?

*All of these suggest what degrees represent in terms of **numbers**.*

*What do degrees represent in terms of **learning**?*

But...

Do our assessments help answer these questions or prepare students for experiences in the “real world” or in the field of employment?

How can we offer various approaches to authentically assess student learning – not just in our course, but how our courses connect and add up to an integrated degree or credential?

Course  Program  College  General Education

Curriculum Mapping and Assignments



Curriculum Mapping: The Process

Focused on curriculum and 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?

Examples

**Metro State College of Denver
Curriculum Mapping Template
2008-09**

Each required course should be linked with at least one Learning Objective and one level* by entering the appropriate letter(s) in the relevant cell. Programs are free to include other courses as appropriate.

	Learning Objective 1	Learning Objective 2	Learning Objective 3	Learning Objective 4
XXX1234				
XXX2345				
XXX3456				
XXX4567				
XXX5678				
XXX6789				
XXX7890				

Levels - These are stated from the student's perspective and tied to Bloom's Taxonomy as much as possible.
 V = discover (gain knowledge, comprehend information)
 P = practice (apply knowledge gained to real situations, analyze issues and questions)
 D = demonstrate (prepare a work product - exam, paper, presentation, etc. - that represents knowledge gained, application of said knowledge and synthesis or evaluation of knowledge and ideas)

* a course might be identified as offering students the opportunity to do more than one level

	Introductory Course	Research Methods	Advanced Content Course A	Laboratory / Practicum Course	Advanced Content Course B	Advanced Content Course C	Advanced Content Course D	Capstone Course
Content								
SLO 1: Disciplinary knowledge base (models and theories)	Introduced		Reinforced		Reinforced	Reinforced	Reinforced	Mastery / Assessed
SLO 2: Disciplinary methods		Introduced		Reinforced		Reinforced		Mastery / Assessed
SLO 3: Disciplinary applications	Introduced		Reinforced		Reinforced		Reinforced	Mastery / Assessed
Critical Thinking								
SLO 4: Analysis and use of evidence		Introduced		Reinforced	Reinforced		Reinforced	Mastery / Assessed
SLO 5: Evaluation, selection, and use of sources of information	Introduced	Reinforced		Reinforced		Reinforced		Mastery / Assessed
Communication								
SLO 6: Written communication skills	Introduced	Reinforced		Reinforced		Reinforced		Mastery / Assessed
SLO 7: Oral communication skills		Introduced	Reinforced		Reinforced	Mastery / Assessed		
Integrity / Values								
SLO 8: Disciplinary ethical standards		Introduced		Reinforced	Reinforced			Mastery / Assessed
SLO 9: Academic integrity	Introduced	Reinforced	Reinforced	Reinforced		Reinforced		Mastery / Assessed
Project Management								
SLO 10: Interpersonal and team skills			Introduced		Reinforced		Reinforced	Mastery / Assessed
SLO 11: Self-regulation and metacognitive skills	Introduced			Reinforced	Reinforced	Reinforced		Mastery / Assessed

Time to Share

Have you done curriculum mapping?

What was the process?

What have you done with the map since?

Implications

While seemingly a very straightforward process – identify learning outcomes and where addressed – there are many assumptions behind this potentially “simplistic task”

Do our assumptions about alignment actually hold between the levels?

If map to broad outcomes, is consistency an issue or agreement on what the outcomes mean?

What is standard of alignment – is one paper in one class enough within a program to say the outcome is addressed and met? How much is enough? What does it mean to introduce, reinforce, or master?

Why do curriculum mapping?

What are we hoping to achieve through mapping the curriculum?

- Alignment (within a program, between general education and institutional goals, etc.)
- Identifying where and how particular outcomes are expected, explicitly taught for, and assessed (Ewell, 2013)
- Backwards design the curriculum
- Understand the nature and role of course pre-requisites
- **Mapping as a lens – it is a way of seeing organizational structure**



1886

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Harrison Professional Pathways Program and the Degree Qualifications Profile

Stephanie Poczos and Natasha Jankowski

AALHE
June 7, 2016

PIONEERING PROFESSIONAL EDUCATION



Pathway to Success

1. Why use Degree Qualifications Profile?
2. Curriculum and Instruction framework
3. Buy-in and alignment with current programs
4. Design and Build

Why DQP for NLU's Pathways Program?

There was a need to develop a high-quality, consistent experience for Undergraduate Education at National Louis University. By providing access through a \$10,000-a-year Bachelor's degree, many students have the chance to go to college.

It's our job to keep them there and graduate them with workplace-relevant skills.

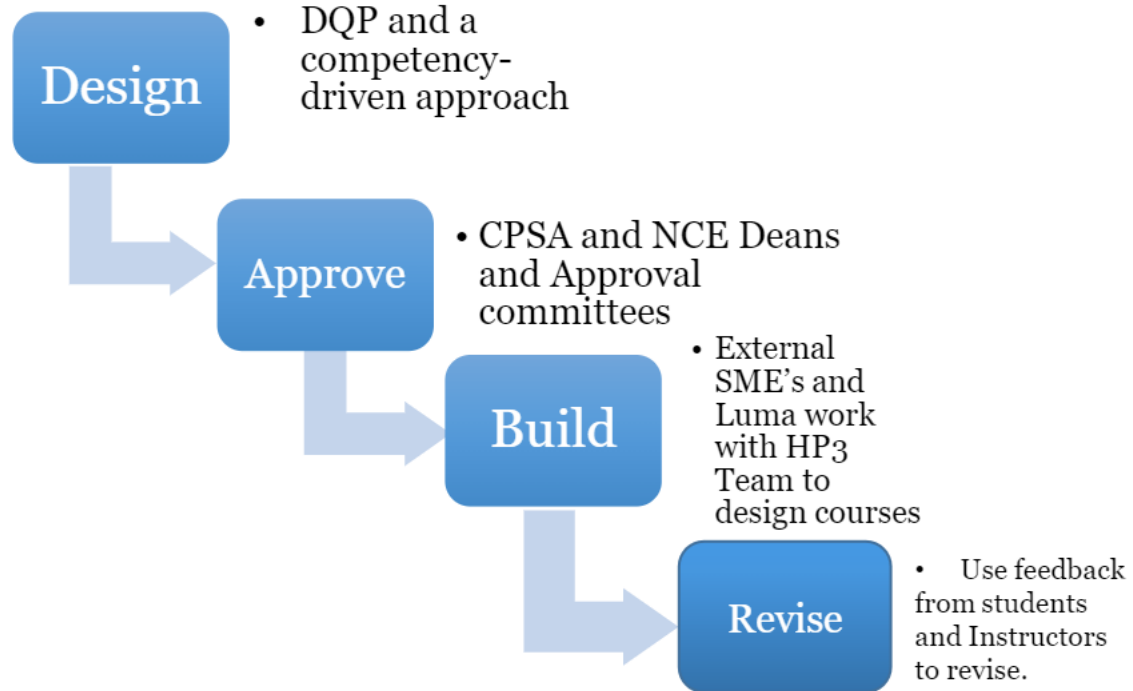
DQP provided a research-based approach to curriculum framework that allowed for flexibility, an iterative model, customization and multiple approaches to assessment.



Curriculum and Instruction Framework using DQP

- Utilize formative and summative assessments with adaptive and signature work
- Students earn proficiency in 34 competencies throughout the program
- Create consistent delivery of curriculum
- Define and outline the role of assessment through student progress
- Provide continual feedback for recommended curriculum modifications as needed to meet expected outcomes
- Develop a shared vocabulary and set of expectations for teaching and learning
- Utilize research-based best practices that allow every student to succeed

Process Overview





What will our students learn and how will they demonstrate it?

- We used Bloom's Taxonomy, AACU's LEAP Essentials and DQP to write our competencies
- Formative and summative assessments with adaptive and signature work
- Integration and Application are the end results and demonstrations of learning
- Vertical and horizontal competencies

Competencies from DQP

Domain	Competency	Revised Description
Broad, Integrative Knowledge	Synthesis of Knowledge	Synthesis of knowledge from multiple fields of study and to application of previous knowledge to new problems and contexts.
	Questioning	Use of knowledge and course material to develop questions that go beyond the classroom.
	Creativity	Use of information from across multiple subjects to address problems in unique ways.
	Applications of Concepts to Society at Large	Recall and application of content to new situations to promote broad knowledge across fields.
	Evaluation from Multiple Viewpoints	Evaluation of multiple viewpoints from numerous fields of study to address societal problems.
	Formulation of Evidence-based Arguments	Development of strong arguments based in facts, research, and/or data.
Intellectual Skills	Integration and Application of Knowledge	Formulation of questions and examination of problems through application of knowledge from the field of study.
	Use of Information Resources	Identification and evaluation of information for use to strengthen communication.
	Engaging Diverse Perspectives	Identification of diverse perspectives, evaluation of one's own perspective and description of how perceptions can influence society.
	Ethical Reasoning	Description of ethical issues and identification of how ethical principles inform decision-making and problem-solving.
	Quantitative Fluency	Accurate presentation and interpretation of quantitative information.
	Communicative Fluency	Clear, effective communication in both speech and writing, as well as listening and responding actively and constructively.
Civic and Global Learning	Civic and Cultural Sensitivity	Description and analysis of one's own assumptions and their origins.
	Explain Diverse Perspectives	Consideration of multiple perspectives and acceptance of diverse or opposing viewpoints through reflection.
	Develop and Justify Positions	Identification of diverse political positions and presentation of one's own substantiated position on an issue.
	Collaboration on Civic Issues	Oral and written collaboration with other to identify civic issues and share relevant personal insights.
	Empathy	Demonstrate empathy with a different culture or perspective and expression this empathy through non-judgmental speech and body language.

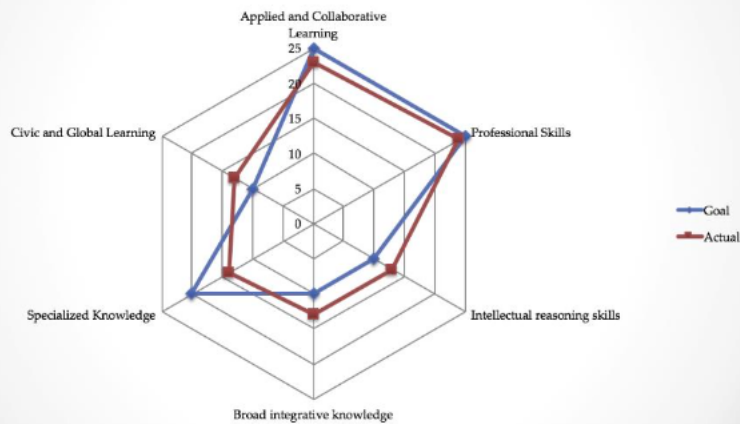
Competencies from DQP (continued)

	Integration of Knowledge and Skills at the local, national, and global levels	Identification and integration of knowledge for formulation of a position on a challenge that spans multiple countries or cultures.
Applied and Collaborative	Integration and Application of Knowledge	Use of practical skills and learned course materials to address authentic problems and challenges.
	Problem-solving	Development of multiple solutions to a problem in order to demonstrate deep knowledge of the issue.
	Teamwork	Cooperation with a group to achieve a goal.
	Critical Thinking	Analysis of all components of a problem, leading to the generation of creative solutions.
Specialized Knowledge	Content Mastery	Identification of core theories, practices, and terminology relevant to a field.
	Application of Tools and Technology	Use of the tools, technology and methods common to the field of study.
	Discovery and Investigation	Investigation and analysis leading to discoveries related to the field of study.
	Evaluation	Evaluation of a proposal or project in order to make sound recommendations based on analysis.
	Written Communication	Generation of error-free written communication in a variety styles, while demonstrating clear understanding of the context, audience and purpose.
	Oral Communication	Delivery of effective oral presentations, using purposeful preparation, compelling and appropriate language, and masterful delivery techniques, including posture, gesture, eye contact and vocal expressiveness.
Professional Practice	Data Skills/Interpretation/Management	Evaluation and use of data to make decisions based on evidence in order to increase critical thinking skills.
	Decision Making/Problem-solving	Demonstration of setting goals, defining challenges, organizing tasks related to achievement and identifying actions needed to accomplish those goals.
	Leadership	Guidance of a group as determined by interpersonal qualities that lead to productive action and/or change.
	Persuasive/Negotiation	Facilitation of conversations in order to bring others to a mutual agreement.
	Teamwork/Team-building Skills	Working cooperatively with peers to make effective decisions, develop mutual trust and follow through on commitments to achieve common goals.
	Detail-Oriented	Understanding and completion of the assignment as described, including all necessary components.

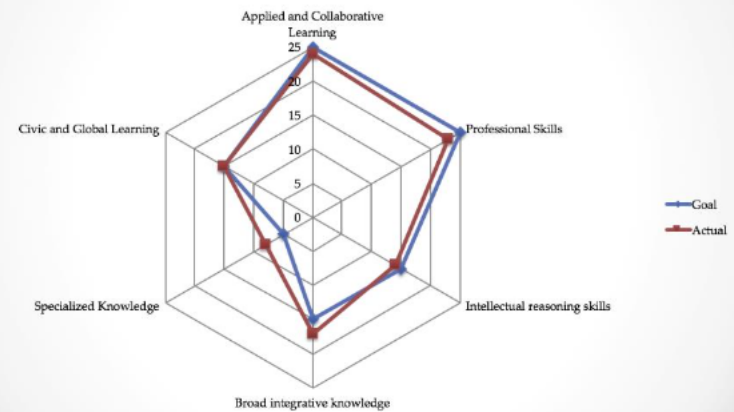
Alignment with Current Curriculum or Programs

Tuning

Business Web



General Studies Web





Design and Build

- Constant revision and evaluation of effectiveness by gathering data
- Formative and summative assessments with adaptive and signature work
- Clear explanations of which competencies students are working towards

Competencies

The following competencies are addressed in this module:

 Intellectual Skills	 Specialized Knowledge
<ul style="list-style-type: none"> Integration and Application of Knowledge <input checked="" type="checkbox"/> Use of Information Resources Engaging Diverse Perspectives Ethical Reasoning Quantitative Fluency <input checked="" type="checkbox"/> Communicative Fluency 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Content Mastery Application of Tools and Technology Discovery and Investigation Evaluation <input checked="" type="checkbox"/> Written Communication Oral Communication

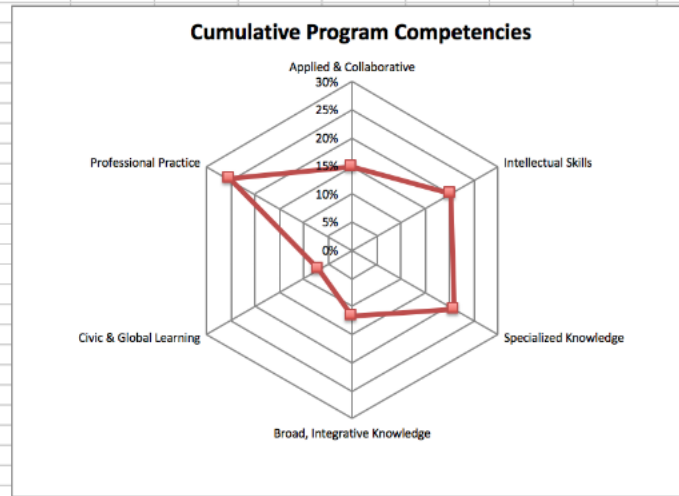
 <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Communicative Fluency <p>Engagement and participation</p>	<p>Student engages in discussion with at least two of their classmates by responding constructively and adding viewpoints that deepen the discussion.</p>	<p>Student engages in discussion with at least one of their classmates by responding constructively and may or may not add viewpoints that deepen the discussion.</p>
 <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Written Communication <p>Understanding and skill</p>	<p>Assignment demonstrates clear understanding and skill in reflection as a genre or style of writing.</p>	<p>Assignment demonstrates some understanding and satisfactory skill in reflection as a genre or style of writing.</p>

Design and Build

Course	Applied & Collaborative	Intellectual Skills	Specialized Knowledge	Broad, Integrative Knowledge	Civic & Global Learning	Professional Practice
2						
3	2	8	8	8	0	4
4	3	4	5	5	1	4
5	4	4	5	3	0	4
6	5	16	7	0	10	13
7	0	11	5	11	10	6
8	11	5	4	3	0	10
9	6	5	8	5	1	8
10	4	13	23	6	6	31
11	13	12	10	2	0	9
12	12	3	10	4	0	13
13	0	0	0	0	0	0
14	0	0	0	0	0	0
15	0	0	0	0	0	0
16	0	0	0	0	0	0
17	0	0	0	0	0	0
18	0	0	0	0	0	0
19	0	0	0	0	0	0
20	0	0	0	0	0	0
21	0	0	0	0	0	0
22	0	0	0	0	0	0
23	0	0	0	0	0	0
24	0	0	0	0	0	0
25	0	0	0	0	0	0
26	0	0	0	0	0	0
27	0	0	0	0	0	0
28	0	0	0	0	0	0
29	0	0	0	0	0	0
30	0	0	0	0	0	0
31	0	0	0	0	0	0

Select the row of the course that you would like to display the graph for. Put 0 (zero) if you want to view cumulative competencies.

Row 0





Buy-In From Faculty

How can we achieve faculty engagement?

Tuning approach
Assignment conversations



Finally...

Remember to constantly evaluate success!

Questions for Stephanie?

Uses of Curriculum Maps

Provide an overview of the structure of the curriculum and the contribution of individual courses to the goals of the program

Identify program strengths - student learning outcomes that are thoroughly addressed

Help departments identify gaps (learning outcomes that are addressed by only a few courses)

Suggest whether students take courses in an optimal sequence

Advising tools that provide students with an overview of the role of each course in the curriculum and why some courses should be taken in a particular order.

What else can be mapped?

Spatial elements: GIS Communication

Content

Structure

Course-taking patterns

Assignment timing

Where does learning happen? Does a curriculum map inherently assume academic affairs at the expense of student affairs or other institutional elements?

	Introductory Course	Research Methods	Advanced Content Course A	Laboratory / Practicum Course	Advanced Content Course B	Advanced Content Course C	Advanced Content Course D	Capstone Course
Content								
SLO 1: Disciplinary knowledge base (models and theories)	Exam Questions		Exam Questions		Exam Questions	Exam Questions	Exam Questions	Capstone Portfolio
SLO 2: Disciplinary methods		Exam Questions		Exam Questions		Exam Questions		Capstone Portfolio
SLO 3: Disciplinary applications	Exam Questions		Exam Questions		Class Project		Term Paper	Capstone Portfolio
Critical Thinking								
SLO 4: Analysis and use of evidence		Term Paper		Lab Paper	Class Presentation		Term Paper	Capstone Portfolio
SLO 5: Evaluation, selection, and use of sources of information	Annotated Bibliography	Term Paper		Lab Paper		Term Paper		Capstone Portfolio
Communication								
SLO 6: Written communication skills	Reflection Essays			Lab Paper		Term Paper	Term Paper	Capstone Portfolio
SLO 7: Oral communication skills			Class Presentation	Poster Session	Class Presentation	Class Presentation		
Integrity / Values								
SLO 8: Disciplinary ethical standards		Reflective Paper		IRB/ACUC Proposal	Reflective Paper			Capstone Portfolio
SLO 9: Academic integrity	Class Assignments & Exams	Exams & Term Paper	Class Exams	Class Assignments & Exams	Class Assignments & Exams	Exams & Term Paper	Exams & Term Paper	Capstone Portfolio
Project Management								
SLO 10: Interpersonal and team skills			Peer Review of Team Skills		Project Client Feedback		Peer Review of Team Skills	Capstone Portfolio
SLO 11: Self-regulation and metacognitive skills	Class Assignments & Exams			Class Assignments & Exams	Class Assignments & Exams	Exams & Term Paper		Capstone Portfolio

How can this improve student learning?

By examining our assumptions:

- How do we think about our students?
- Where do we think learning occurs?
- What is our theory of change?

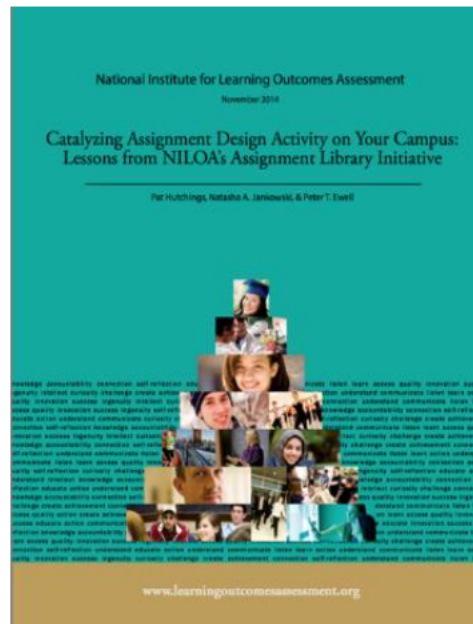
Transparency

Awareness of Learning Outcome Statements



Assignments

Are students aware that their assignments are linked to learning outcomes?



Rubrics

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

Rubric Criteria	Student Evaluation	Faculty Feedback
Rubric Content	Stipulate why gave score did	Faculty stipulate why gave score did
	Stipulate what they need to do to advance	Targeted feedback to improve

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.

- Career services as an example

Assignment Library

www.assignmentlibrary.org

Charrette process

DIY Toolkit

Fitness of Method or Approach

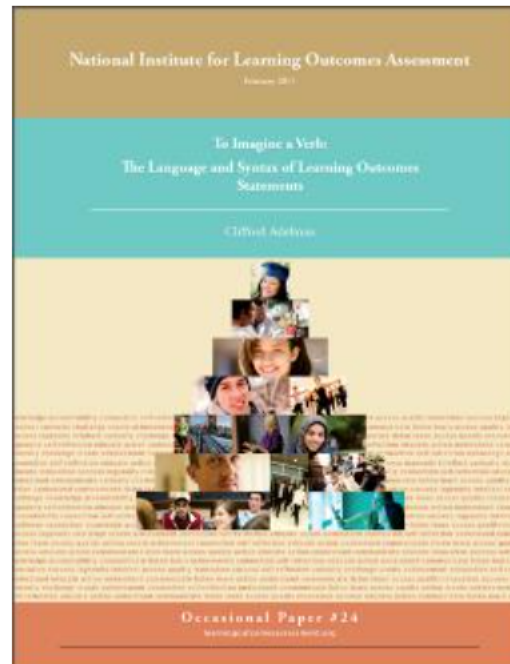
Part of alignment is fitness of method or approach – if asking students to *explain* something, multiple choice test might not be the best approach, but if asking students to *identify* – it might be very appropriate...



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*?



Alignment

How do you ensure alignment between our assignments and a given learning outcome for a learning experience?

How do we create assignments and activities that will elicit student demonstration of a specific learning outcome?

How do we know that we have mapped our assignment to rubric criteria?

Possibilities

Ideas on assignment modification

- Shifting audience (in writing assignment)
- Modify genre (blog, pamphlet, drama, graphic novel, poster, oral presentation, debate)
- Practice throughout courses
- Planning and timing of feedback



Action Steps

What from these conversations is usable in your local context?

How can you get assignment conversations occurring on your campus?

Discussion



Thank you!

www.degreeprofile.org

www.learningoutcomesassessment.org