

# Beginning with the End in Mind: Designing Learning Outcomes Assessment for Student Success



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**Access &  
Retention**

**Student Learning  
& Success**

**Quality**

**Career Ready**

**Equity**

**Completion**





# Today's Focus on Student Learning Outcomes Assessment





# Purpose


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**Why do we do assessment?**

**What is the value and purpose of engaging in assessing student learning?**





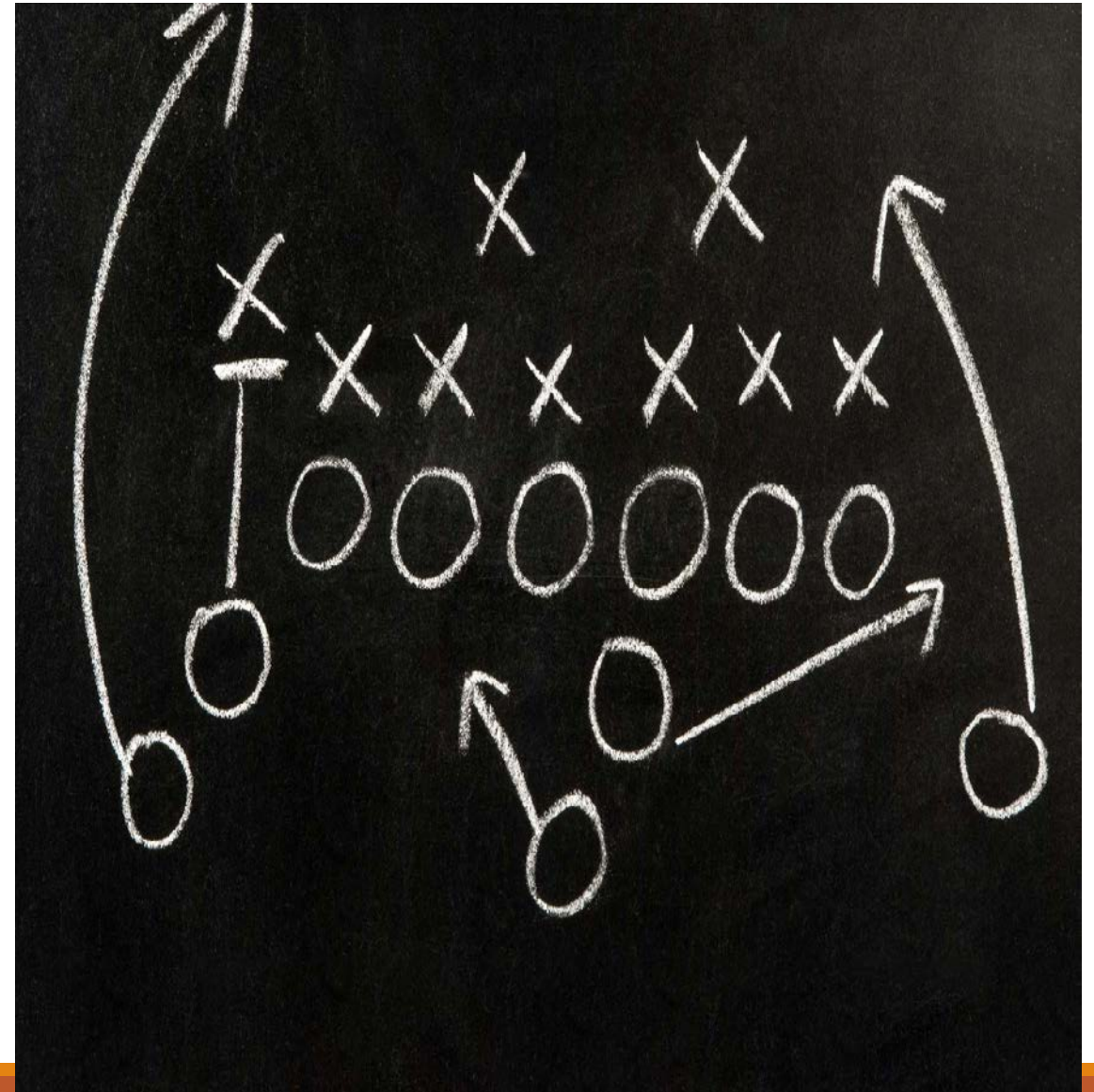
A photograph of three students walking down a set of stairs outside a brick building. The students are smiling and looking towards the camera. The building has a red brick facade and several windows. The stairs have a metal railing. The text is overlaid on the left side of the image.

# Student Learning Outcomes Assessment: To Assure Quality Learning for All Students



# Today's Assessment Agenda

Effective assessment  
is best understood as  
a **strategy** for  
**understanding**,  
**confirming**, and  
**improving** student  
learning.



**Doing assessment well requires asking questions around the learning that faculty genuinely care about students achieving**





# Assessment with an Emphasis on Equity

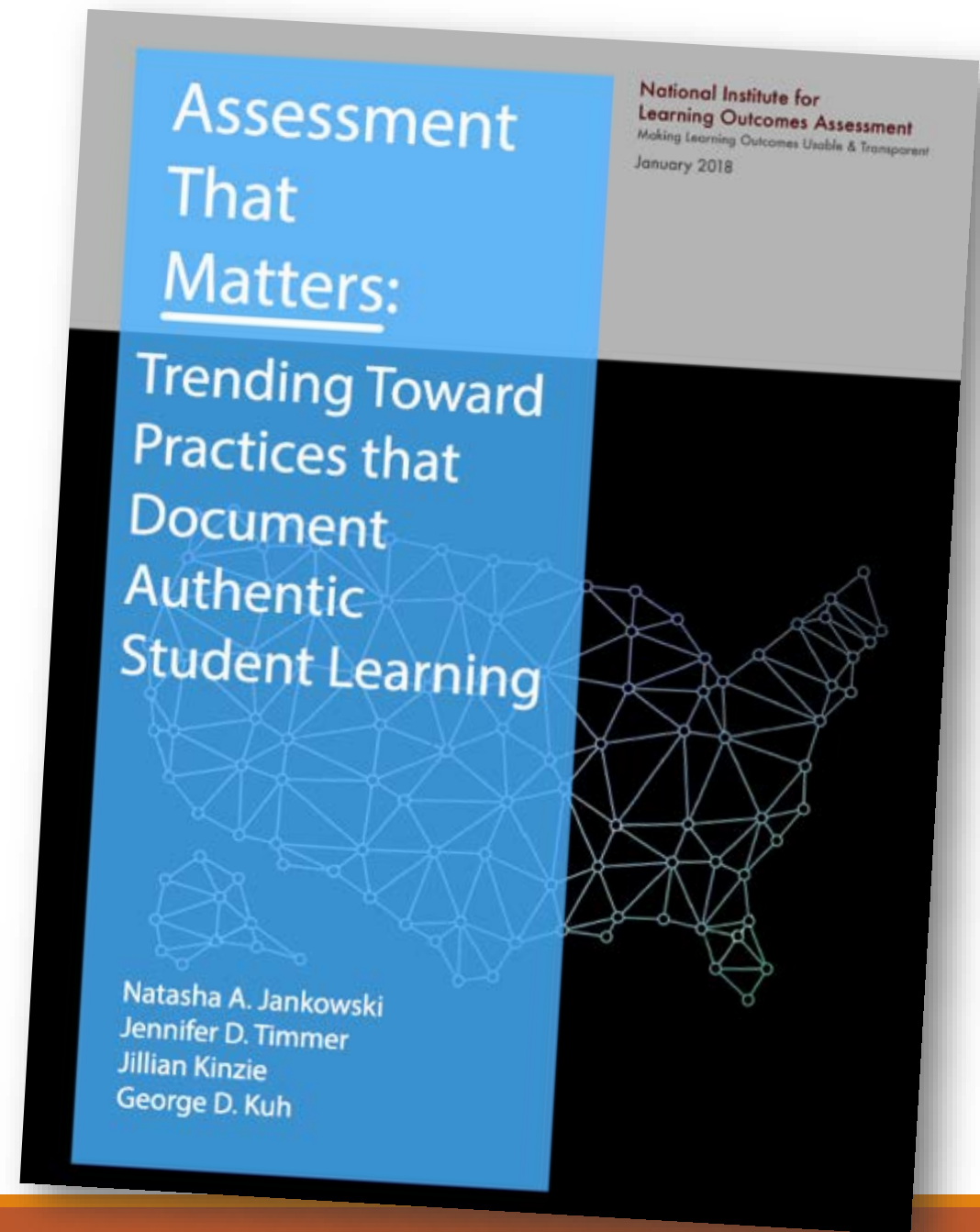
## ...ALL students, with attention to underserved





# Assessment that Matters for Student Learning and Success

Relevant Findings from  
NILOA's Survey of  
Provosts 2018





# Assessment Activities that Foster Equitable Student Learning and Success

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1. Explicit learning outcomes
2. Aligned outcomes and practices
3. Backward design
4. Transparent alignment of outcomes to assignments using authentic measures of student learning (rubrics, classroom-based performance assessments, capstones, co-curricular learning)



# Explicit learning outcomes statements

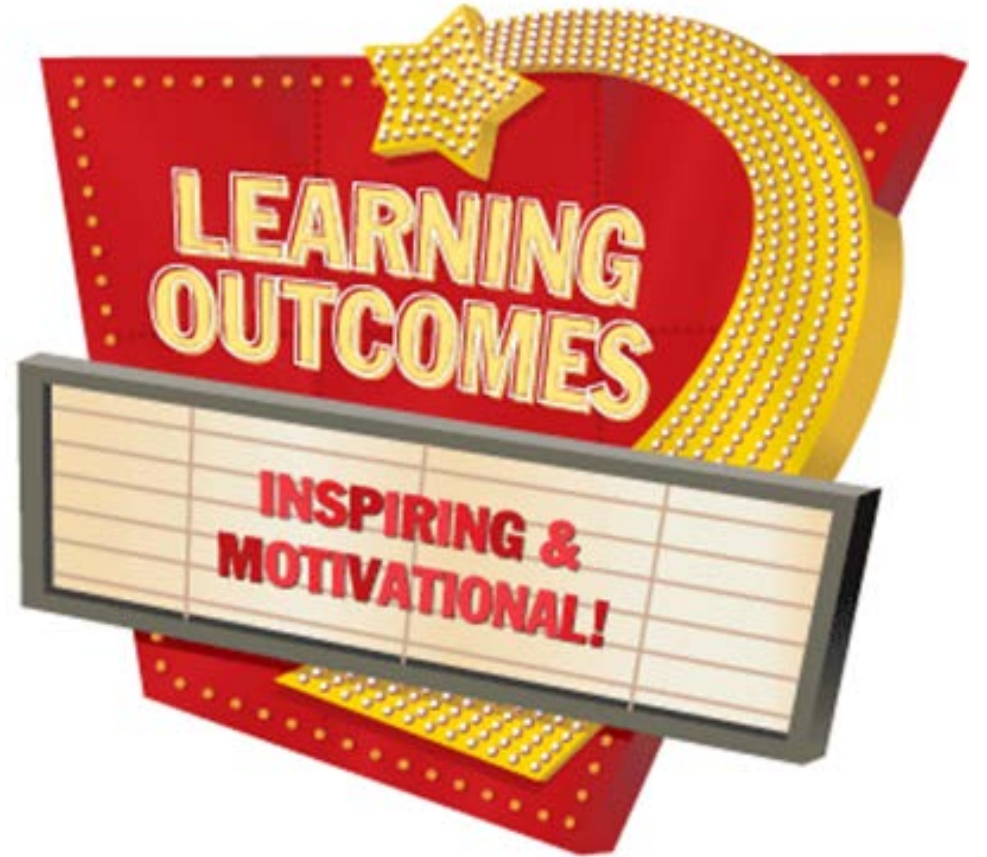




**What percentage of institutions have specific, actionable learning outcomes statements for undergraduate education?**

**82%**

**of campuses have  
SLO statements**



**BE CLEAR about what  
students are to  
experience and achieve**

**Greater  
transparency,  
more  
accountability**



Integration and Application of Knowledge

Critical Thinking

Intellectual Depth, Breadth, and Adaptiveness

Principles

In the stairwells...

IUPUI

INDIANA UNIVERSITY-PURDUE UNIVERSITY INDIANAPOLIS

# DENISON

ADMISS

STUDENT OUTCOMES

DENISON A-Z

Alumni

# THE DENISON DIFFERENCE

[DENISON.EDU](https://www.denison.edu)



Baccalaureate Colleges—Arts & Sciences, thus comparing  
from all 983 institutions participating in the National Survey

represents the data

Denison students are highly engaged in the co-curriculum, and 75% of Denison seniors report having held a formal leadership role in a student organization, which is significantly higher than students at similar institutions.

WRITING

MASTER SCHOLARS

DIALOGUE

OPPORTUNITY

THE WHOLE PERSON



# **Learning Goals of the Odyssey Program**

By completing the graduation requirement of at least three Odyssey credits in three different categories... Hendrix students achieve four outcomes

## **Capacities**

## **Majors and Minors**

## **Classics Program Learning Goals**

# Dream Exercise

*At the end of this program,  
we want and hope  
that our students will...*

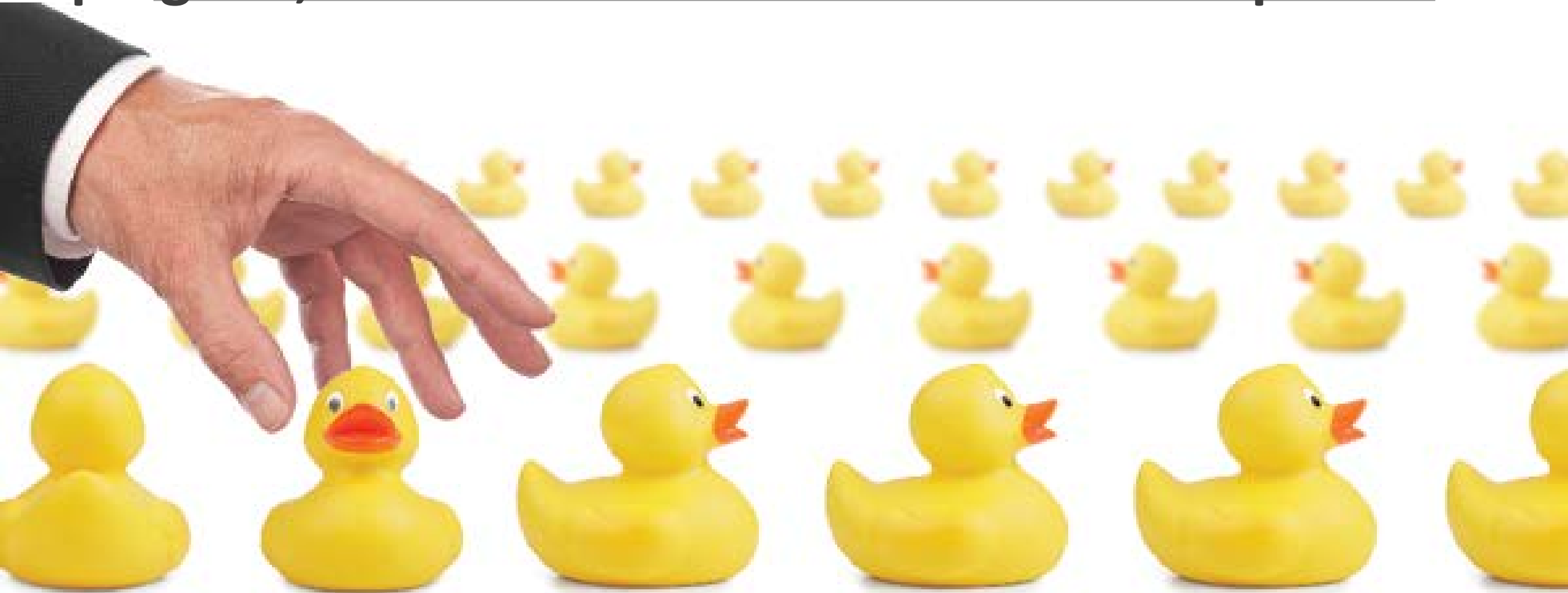
**Specific, actionable  
learning outcomes  
statements**

**Concrete, clear  
proficiencies students  
are to achieve --  
*reference points for  
student performance***



# Aligned Learning Outcomes

so students see connection between institutional,  
program, course outcomes & co-curricular experiences



# Learning Outcomes Aligned

**Course**  
**to**  
**Program**  
**to**  
**Institutional**





# Outcome Alignment by Curriculum Mapping

Visual representation of the structure of program curriculum.

The map charts program courses, syllabi, classroom activities, & assessments as they relate to the intended program learning outcomes.

***“The intellectual linkage, that makes forty courses a story of learning”*** (Plater, 1998, p.11)



	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
<b>Content</b>								
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
<b>Critical Thinking</b>								
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
<b>Communication</b>								
SLO 6: Written communication skills	Introduced	Reinforced		Reinforced		Reinforced		Mastery / Assessed
SLO 7: Oral communication skills		Introduced	Reinforced		Reinforced	Mastery / Assessed		
<b>Integrity / Values</b>								
SLO 8: Disciplinary ethical standards		Introduced		Reinforced	Reinforced			Mastery / Assessed
SLO 9: Academic integrity	Introduced	Reinforced	Reinforced	Reinforced		Reinforced		Mastery / Assessed
<b>Project Management</b>								
SLO 10: Interpersonal and team skills			Introduced		Reinforced		Reinforced	Mastery / Assessed
SLO 11: Self-regulation and metacognitive skills	Introduced			Reinforced	Reinforced	Reinforced		Mastery / Assessed



# Art History Major Curriculum Map

I = Introducing  
D = Developing  
M = Mastering  
A = Assessment Occurs

If 2 faculty individually mapped the curriculum would they end up with the same map?

Institutional Learning Outcome #	Program Learning Outcomes	AH 100	AH 200	AH 201	AH 202	AH 306 [or AH 345]	AH 345 [or AH 306]	AH 395 [RECOMMENDED]	AH 203 to 399	AH 400 to 498	AH 300 to 498	AH 499
1, 3, 4, 10	Students will develop critical thinking skills	I	D	D	D	D	D	D	D	M	D,M	M
1, 5, 8	Students will develop an historical, cultural, and visual understanding of art	I	D	D	D	D	D	D	D	M	D,M	M
1, 4, 5, 7, 8, 10	Students will develop an understanding of critical theory and methodologies in art history	I	D	D	D	D	D	D	D	D	D	M
1, 3, 4, 5, 7, 8, 9, 10	Students will be able to communicate effectively in written form	I	D	D	D	D	D	D	D	D	D	M
1, 3, 4, 5, 7, 8, 9, 10	Students will be able to communicate effectively in oral form	I				D	D	D				M
1, 2, 3, 4, 5, 6, 7, 8, 9, 10	Students will develop professional skills and ethics	I				D	D	M				
		Art Matters	Renaissance through 1855	Modernism and After	Ancient through Gothic	Introduction to Art Criticism	Art History and Its Methods	Archive/Gallery/Museum Practice	AH 200 to 300-level elective	AH 400-level elective	World Arts elective	AH Senior Thesis

# Program and Course Outcome Alignment



*Syllabus*

*That thing that  
guides you through  
the course*



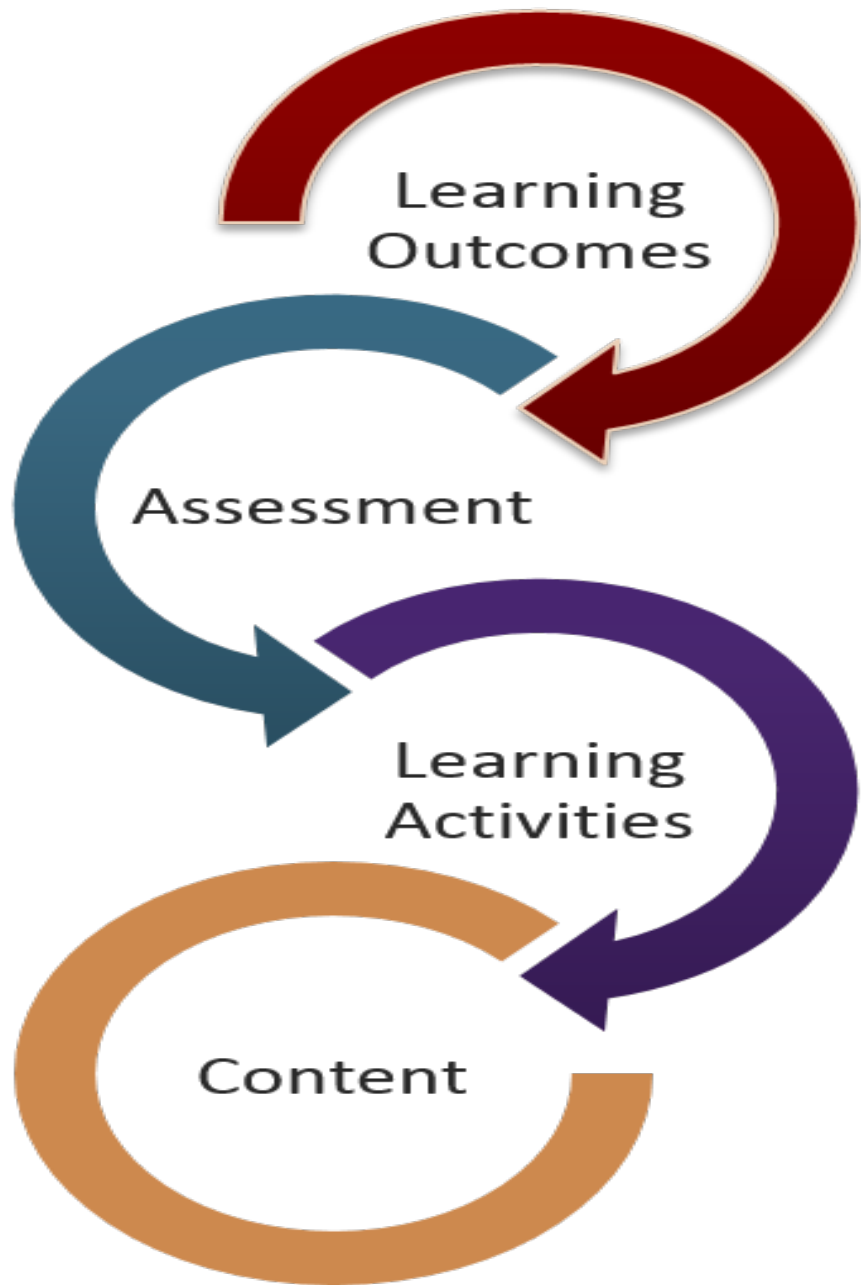
# Curriculum Mapping Process: Syllabi

Review your Syllabi and identify:

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**Explicit** -- *program* outcome that is fully and directly expressed or referenced in a *course* syllabus. [X]

**Implicit** -- *program* outcome that is indirectly expressed or referenced in a *course* syllabus. [M]



Alignment of **desired learning outcomes**, **assessments**, and **teaching & learning activities** provides consistency for students & supports more accurate construction of **course concepts**



# What are the Benefits of Explicit Outcomes & Alignment?

1. Learning is enhanced when experiences are intentionally designed
2. Promotes **equity by helping all students** see how pieces fit together along the way to help get them there
3. Reinforces to students what needs to be mastered and communicated to employers
4. Site for curricular & co-curricular links or, Academic-Student Affairs collaboration

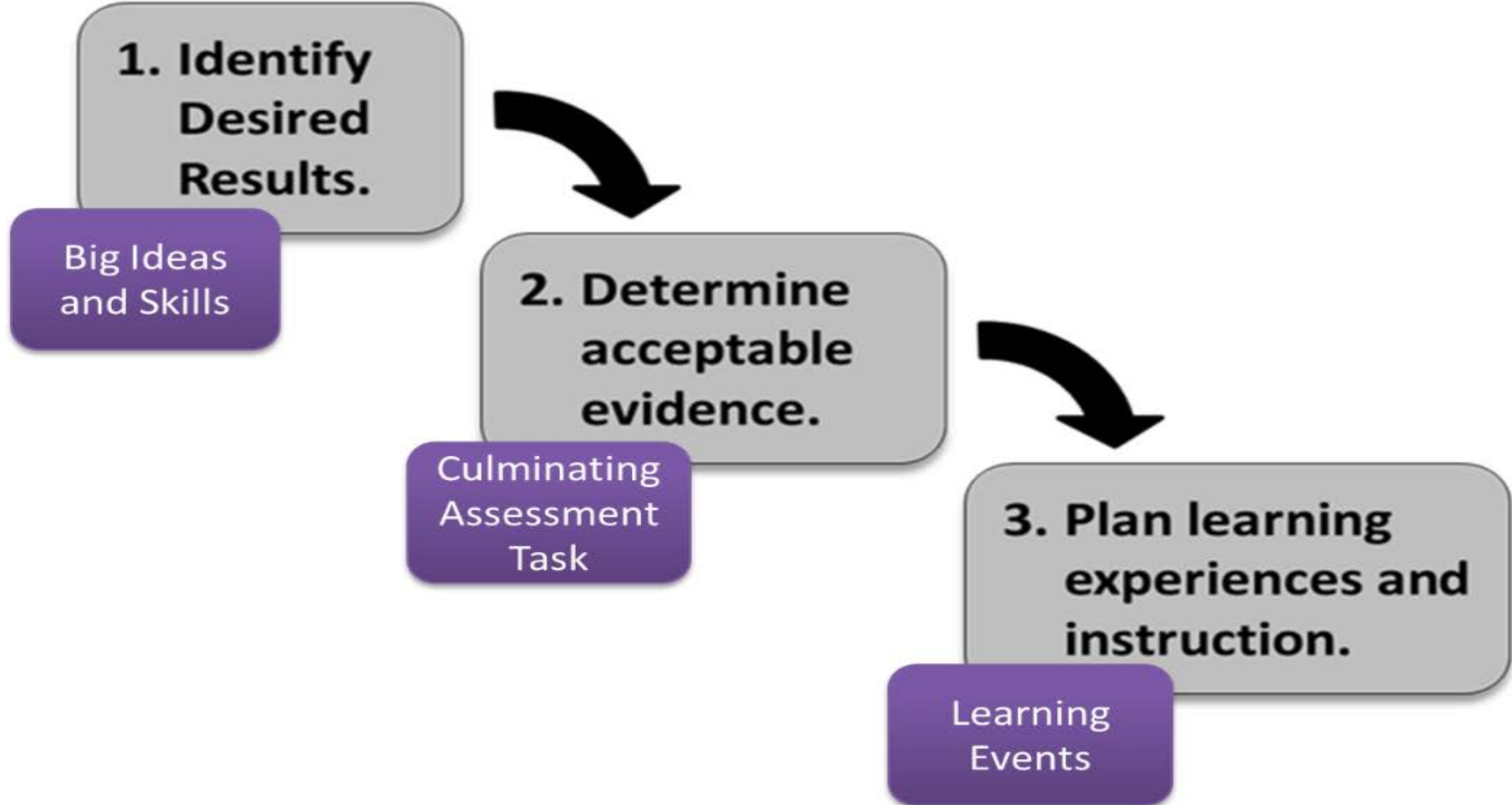




**Begin with the end  
in mind**



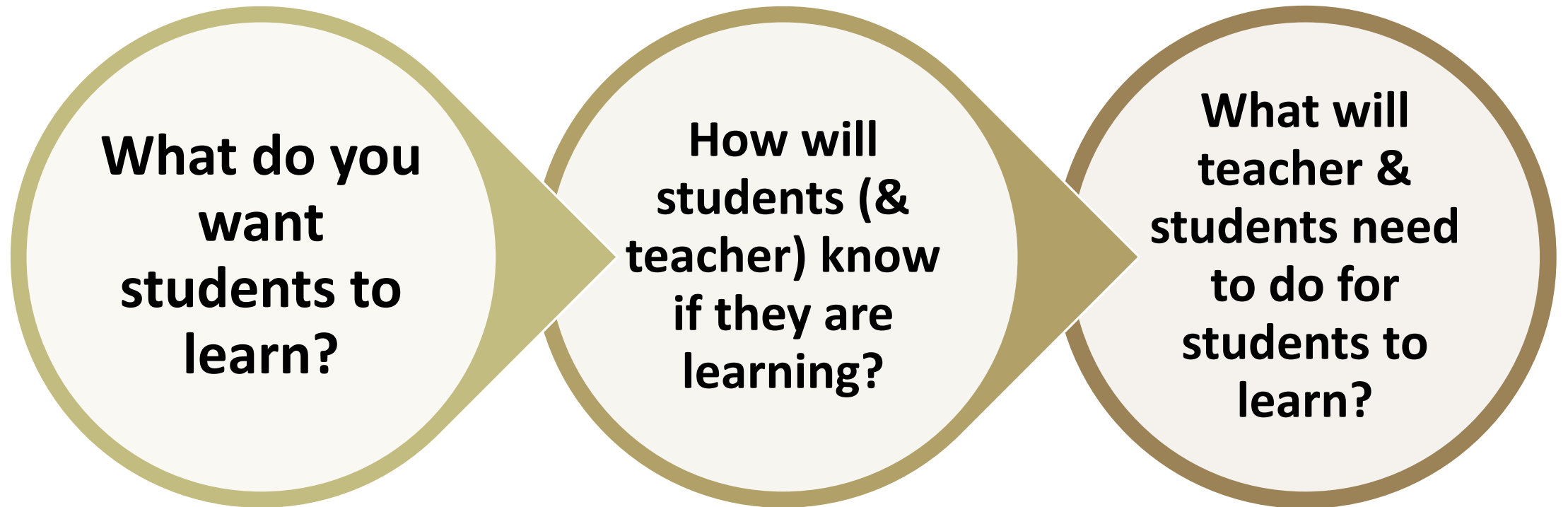
# Backward Design



# Backward Design

## 3 Decision Steps (Dee Fink, 2013)

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# Course Mapping to Create Transparent Syllabi

This is what you'll <u>learn</u> to do	<i>This will help you learn it [ILOs, PLOs]</i>	This is what you'll <u>do</u> to learn it	This is how you'll <u>show</u> me that you've learned it
<i>Do this 1st</i>		<i>Do this 3rd</i>	<i>Do this 2nd</i>



# Writing Learning Outcomes Checklist

- ✓ Describes what students should represent, demonstrate, or produce?
- ✓ Relies on active verbs?
- ✓ Aligns with collective intentions translated into curriculum & co-curriculum?
- ✓ Maps to curriculum, co-curriculum, educational practices?
- ✓ Is collaboratively authored & collectively accepted?
- ✓ Can be assessed quantitatively and/or qualitatively?



Level	Type of activity or question	Verbs used for objectives
Lowest level	Knowledge	Define, memorize, repeat record, list, recall, name, relate, collect, label, specify, cite, enumerate, tell, recount
	Comprehension	Restate, summarize, discuss, describe, recognize, explain, express, identify, locate, report, retell, review, translate
	Application	Solve, simulate, apply, employ, use, demonstrate, dramatize, practice, illustrate, operate, calculate, show
Higher levels	Analysis	Interpret, classify, analyze, arrange, differentiate, group, compare, organize, contrast, examine, investigate
	Synthesis	Compose, plan, produce, prepare, propose, hypothesize, invent, incorporate, develop, formulate
	Evaluation	judge, assess, decide, measure, appraise, deduce, predict, recommend, select, choose, infer

# Formulas for Writing Student Learning Outcomes

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As a result of participating in \_\_\_\_\_  
students will \_\_\_\_\_.

SWiBAT (Student Will Be Able To) + Active verb  
(Bloom's taxonomy: analyze, create, synthesize) +  
Condition (as a result of) + Measurement (as measured  
by or as demonstrated by ...) + When (at what timeline)





**Transparency**

# **Transparency**

in Alignment, Assignments, Outcomes

- **Transparent purpose**
- **Transparent task**
- **Transparent criteria for evaluation**
- **Transparent outcomes**

# Align learning outcomes with actual student assignment and work

**Faculty improve their assignments to more accurately and transparently align with intended proficiencies**

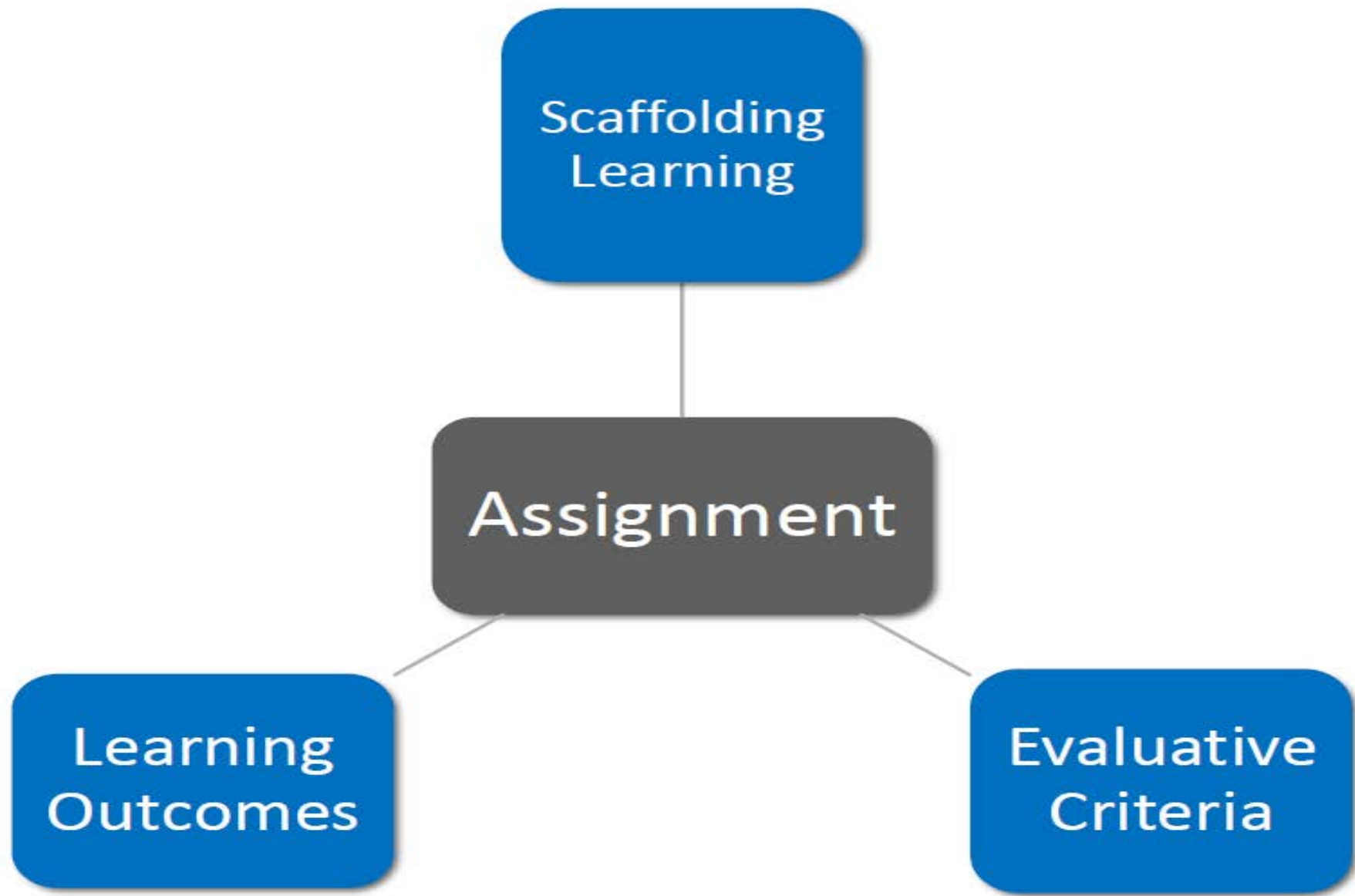
- **Assignment Charrettes (NILOA)**
- **Transparency in Learning & Teaching (TILT)**
- **Signature Assignments (AAC&U)**

# Why Focus On Assignments?

- Well-designed assignments elicit learning outcomes
- Faculty spend a lot of time crafting and grading assignments
- Course-based work generates actionable evidence for assessment
- Assignments can help promote equity goals for student success







# Transparency in Assignments

Transparency in Learning and Teaching (TILT): <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?)

# Transparent Criteria: Rubrics

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

- ✓ **Clarifies what students need to do in advance**
- ✓ **Provides student targeted feedback to improve**
- ✓ **Foster ability in students to evaluate their own learning**
- ✓ **Help students transfer knowledge – realizing something they learned before can be applied in another context**



# Benefits of Transparency in Learning & Teaching

**Transparent Assignment design is a replicable teaching intervention that boosts students' success, with greater gains for underserved students.**

**Winkelmes, et al., *Peer Review*, Winter 2016**

# Winkelmas, et.al., 2016 Report Transparent Assignment Design Template



2014 MA Winkelmes

Faculty/Instructors agreed (in national study, 7 MSIs)  
to discuss with students in advance:

## Purpose

- Skills practiced      long-term relevance to students' lives
- Knowledge gained      connection to learning outcomes

## Task

- What students will do
- How to do it (steps to follow, avoid)

## Criteria for success

- Checklist or rubric in advance so students can self-evaluate
- What excellence looks like (annotated examples where students/faculty apply those criteria)



# Transparency and Problem-Centered Learning

## Findings

- Boosted students' learning in 3 important ways (medium-large effect for underserved students):
  - Academic confidence
  - Sense of belonging
  - Awareness of skill development



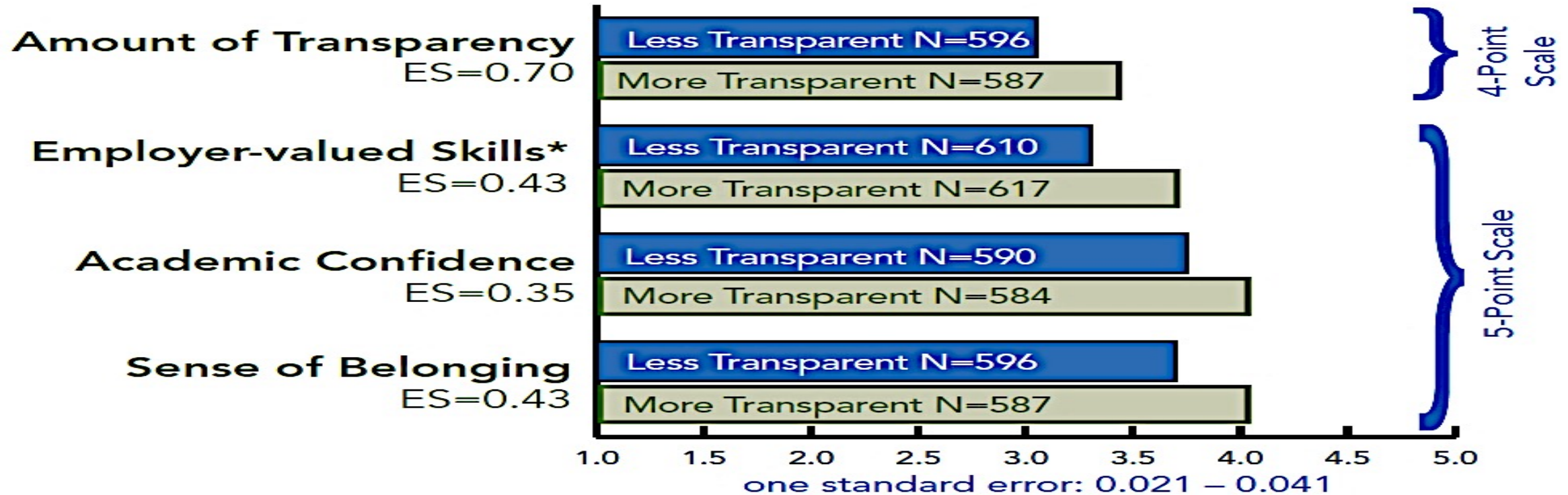
**SUCCESS PREDICTORS for  
Increased persistence, grades**





# Impact: Boosted Predictors of success

All Disciplines/All Students, End of Term



KEY: N: number of students responding

ES: effect size (Hedges' G). Effect sizes of 0.25 standard deviations or larger are "substantively important" (US Dept of Education WWC, 2014, p. 23).

Less Transparent: mean perceived transparency <3.3/4

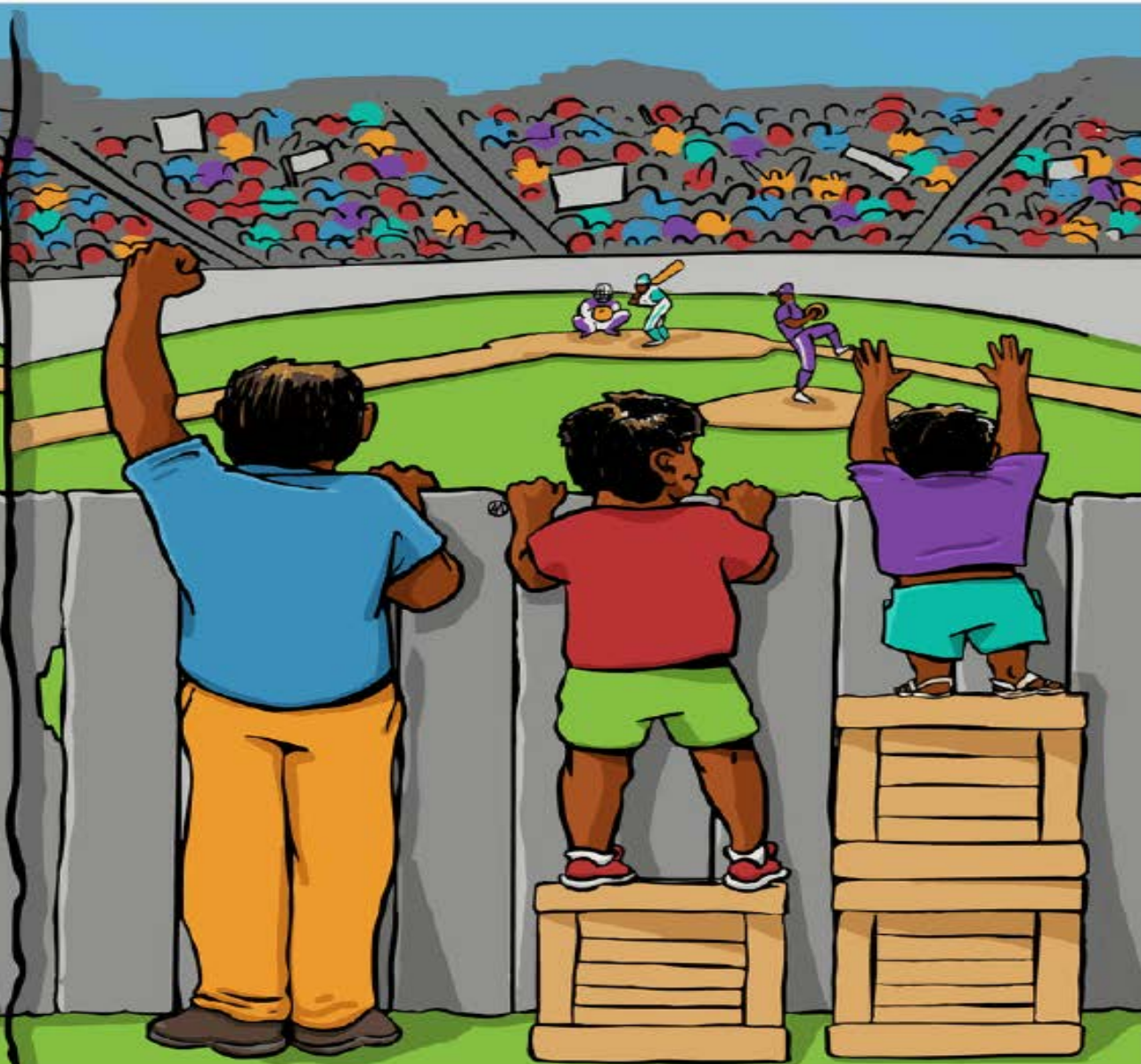
More Transparent: mean perceived transparency ≥3.3/4

\*Hart Associates 2015, 2013





**EQUALITY**



**EQUITY**





# First-Generation College Students, End of Term

**Amount of Transparency**

ES=0.80

Less Transparent N=246

More Transparent N=188

4-Point  
Scale

**Employer-valued Skills\***

ES=0.58

Less Transparent N=245

More Transparent N=188

5-Point Scale

**Academic Confidence**

ES=0.50

Less Transparent N=242

More Transparent N=183

**Sense of Belonging**

ES=0.64

Less Transparent N=246

More Transparent N=188

1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0  
one standard error: 0.038 - 0.071

KEY: N: number of students responding

ES: effect size (Hedges' G). Effect sizes of 0.25 standard deviations or larger are "substantively important" (US Dept of Education WWC, 2014, p. 23).

Less Transparent: mean perceived transparency <3.3/4

More Transparent: mean perceived transparency ≥3.3/4

\*Hart Associates 2015, 2013

# What does Transparent Assignment Design look like?

## Transparent Assignment Design Template

### Purpose

- Skills practiced      long-term relevance to students' lives
- Knowledge gained      connection to learning outcomes

} Problem-centered

### Task

- What students will do
- How to do it (steps to follow, avoid)

### Criteria for success

- Checklist or rubric in advance so students can self-evaluate
- What excellence looks like (annotated examples where students/faculty apply those criteria)



# Review Example A with your Colleague

**TILT** Higher Ed  
Transparency in Learning and Teaching

**Sample A**

Select a professional in your prospective academic discipline and/or career field that is considered an expert in an area in which you are interested.

2. Secure an interview with the professional for a date and time that is convenient for both of you.
3. Prepare 8-10 questions to ask the professional about their knowledge of a particular academic discipline/career field.
4. Conduct a 20 – 30 minute, face-to-face interview to gather knowledge that will help you make an informed decision about the major/career you are considering. You will want to audio/video record the interview with the interviewee's permission.
5. Prepare a typed transcript of the questions and answers using the audio/video recording
6. Write a 400 – 500 word reflection paper in which you address the following items:
  1. Who you selected and why?
  2. What you learned from them that is most interesting?
  3. What this assignment helped you learn about your major/career decision?
  4. What questions you still have?
7. Submit the typed transcript and reflection paper to your instructor.

**EXAMPLES: Less Transparent**

UNLV  
UNIVERSITY OF NEVADA, LAS VEGAS

# Example A

## Purpose

- Skills practiced
  - Knowledge gained
- } long-term (problem-centered) relevance to students' lives  
connection to learning outcomes

**Task:** What to do

How to do it (steps to follow, avoid)

## Criteria

- Checklist or rubric in advance to help students to self-evaluate
- What excellence looks like (multiple annotated examples)

# Review Example C with your Colleague

**University of Nevada, Las Vegas**

**COLA100E, Interview Assignment**  
Used by permission of Katharine Johnson

**Sample C**

**Due dates:**

- Sept 30 - Draft interview questions
- October 15 - Transcript of interviews
- November 17 - Report

**Purpose:** The purpose of this assignment is to help you make an informed decision about the major/career you are considering.

**Skills:** This assignment will help you practice the following skills that are essential to your success in school and professional life:

- Accessing and collecting information from appropriate primary and secondary sources
- Synthesizing information to develop informed views
- Composing a well-organized, clear, concise report to expand your knowledge on a subject in your major.

**Knowledge:** This assignment will also help you to become familiar with the following important content knowledge in this discipline:

- Issues facing professionals in a field
- Scholarly research formats for documenting sources and creating reference pages (i.e., bibliographies).

**Task:** To complete this assignment you should:

1. Select two professionals in your prospective academic discipline and/or career field who are considered experts in an area in which you are interested.
2. Secure an interview with the professionals for a date and time that is convenient for both of you.
3. Prepare 8-10 questions to ask the professionals about their expertise in a particular academic discipline/career field. The questions must be based on a review of the field using 5 credible sources as defined by the librarian in our research module. Sources should be cited using APA formatting.
4. Conduct a 20-30-minute, face-to-face interview with each professional to gather knowledge that will help you make an informed decision about the major/career you are considering. You will want to audio/video record the interview with the interviewee's permission.
5. Prepare a typed transcript of the interviews.
6. Compare and contrast the information provided by both professionals in an 8-page (1.5 spaced, 12 point Times New Roman font, 1 inch margins) report that documents the advantages and disadvantages of a career in the selected field.

**Criteria for success:** Please see the attached rubric.

**EXAMPLES: More Transparent**

**UNLV**  
UNIVERSITY OF NEVADA, LAS VEGAS

**TLT** Higher Ed  
Transparency in Learning and Teaching



# Example C

## Purpose

- Skills practiced
  - Knowledge gained
- } relevance to students  
connection to LOs

*Problem-centered*  
**It's A, revised**

**Task:** What to do; How to do it

## Criteria

- What excellence looks like (annotated)
- Criteria in advance to help students to self-evaluate

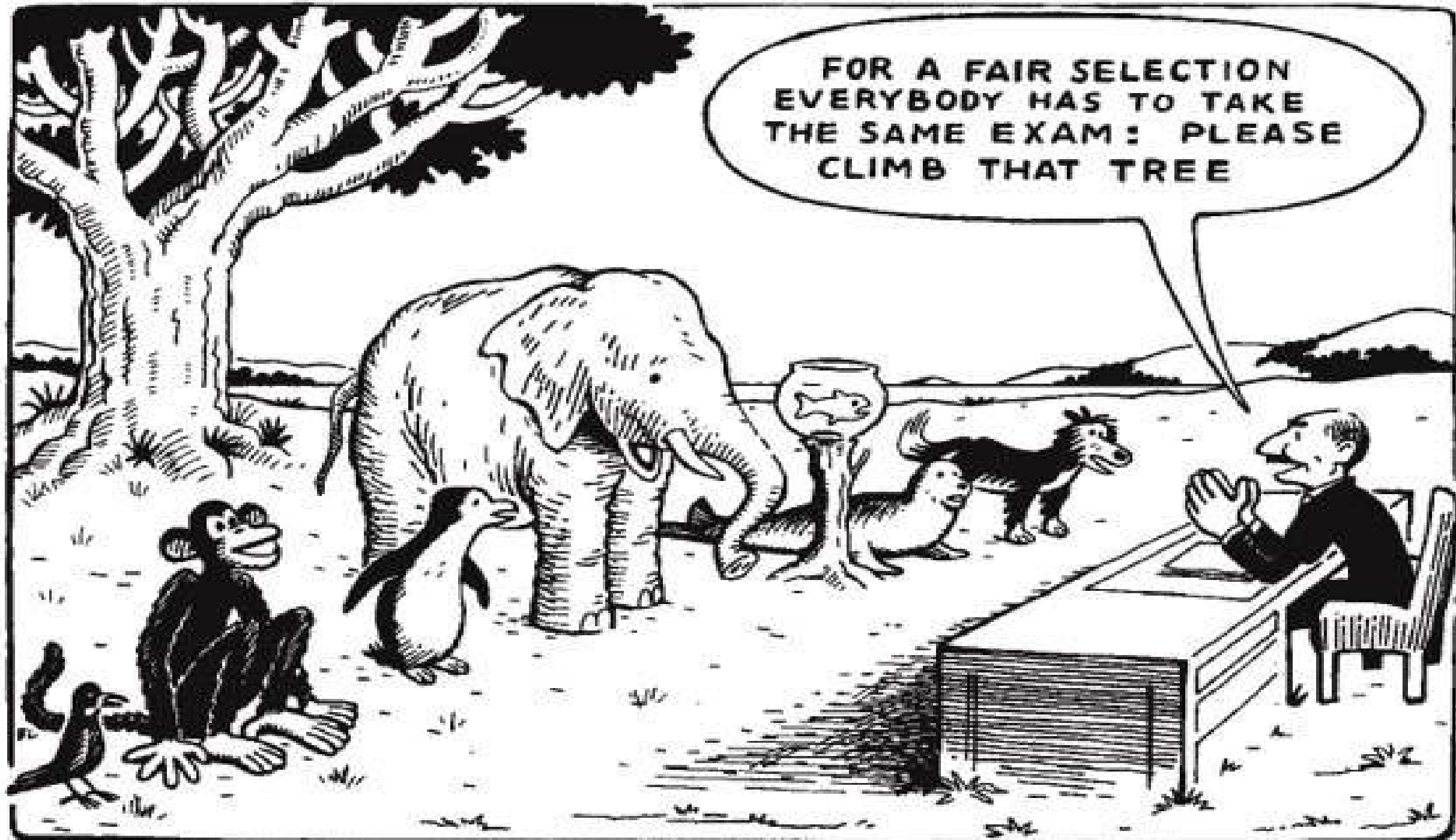
# Another Equity Consideration...

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**Is it one assessment for all students or multiple paths to demonstrate learning in ways that focus upon students?**



FOR A FAIR SELECTION  
EVERYBODY HAS TO TAKE  
THE SAME EXAM: PLEASE  
CLIMB THAT TREE



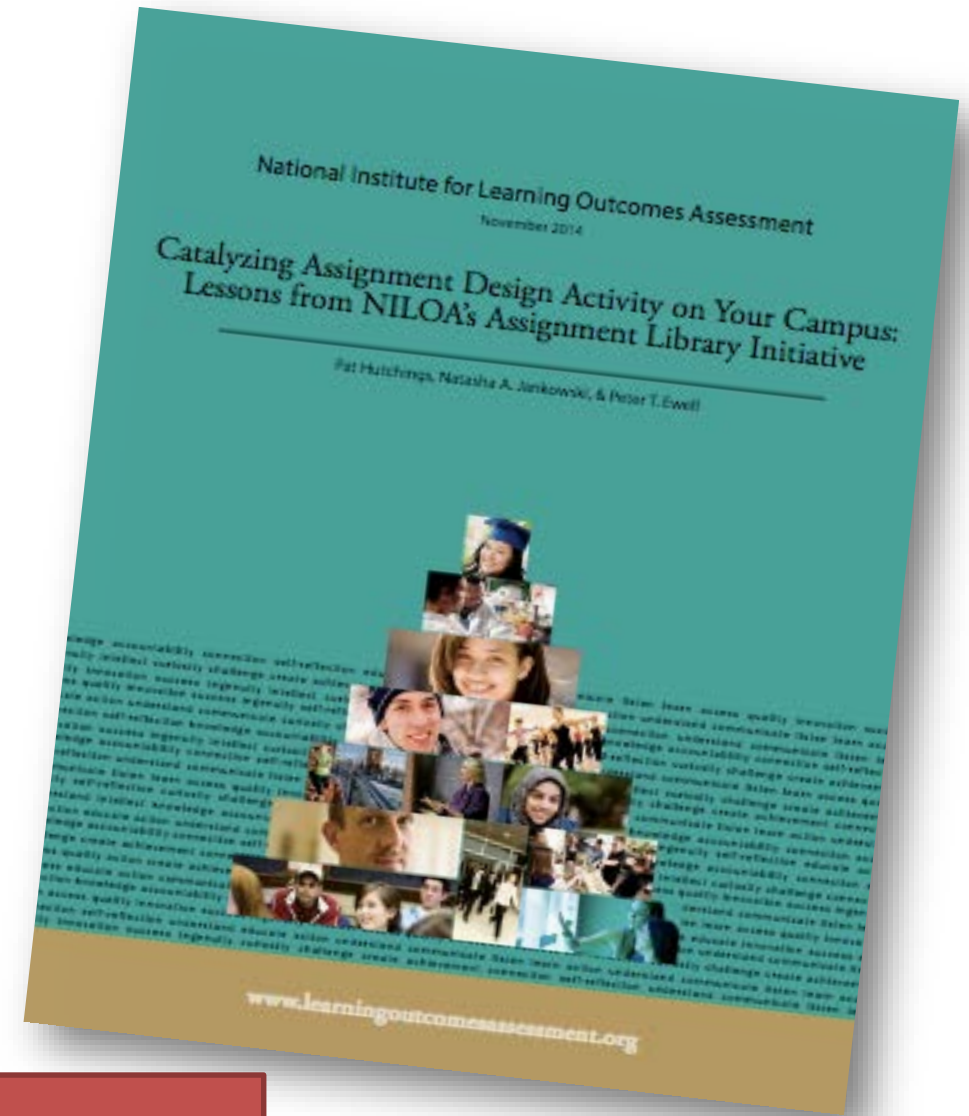


# Using assignment design workshops to improve course-based assignments and projects and promote equity & culturally responsive assessment



# Assignment Charrettes

- Faculty apply with draft assignment
- Bring group together for a day-long meeting
- Work in 5-6 person, facilitated “charrettes” to review one another’s assignments and give feedback.



Stimulating assignment work on campuses



# Host an Assignment Charrette at Hendrix!



**NILOA Toolkit <http://www.degreeprofile.org/assignment-design-work>**

# A Reminder about Assessment Activities that Foster Equitable Student Learning and Success

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1. Explicit learning outcomes
2. Aligned outcomes and practices
3. Backward design
4. Transparent alignment of outcomes to assignments using authentic measures of student learning (rubrics, classroom-based performance assessments, capstones, co-curricular learning)



How are you  
and your  
department  
doing??



**Institutional leaders must advance  
the systematic measurement of  
what students have learned, how  
well they learned it, and whether  
some groups are learning more  
than others**

The Future of Undergraduate Education, American Academy of Arts & Sciences Report, 2017

# Questions and discussion

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# The NILOA Assignment Library

- [www.assignmentlibrary.org](http://www.assignmentlibrary.org)
- 80-some assignments (plus reflective memo) aligned with widely embraced outcomes
- Contributed by faculty from a wide range of fields and institutional types
- Online, indexed, and searchable
- With a scholarly citation and CC license: ie assignments as publications

# TILT Higher Ed Examples & Resources

- [www.unlv.edu/provost/transparency/tilt-higher-ed-examples-and-resources](http://www.unlv.edu/provost/transparency/tilt-higher-ed-examples-and-resources)
- Workshop videos
- Panelist videos
- Interviews
- Handouts and Slides for workshops
- Faculty developer “train the trainer” videos, notes
- IRB documentation
- Publications

Stimulating assignment work on campuses



THE END.