PLOs and Curriculum Mapping

A CLAS Workshop

LOYOLA
UNIVERSITY CHICAGO

AGENDA

Introduction: Welcome and Context

Program Learning Outcomes: why are they important? and other Q's

Activity: Applying the PLO framework and reflection

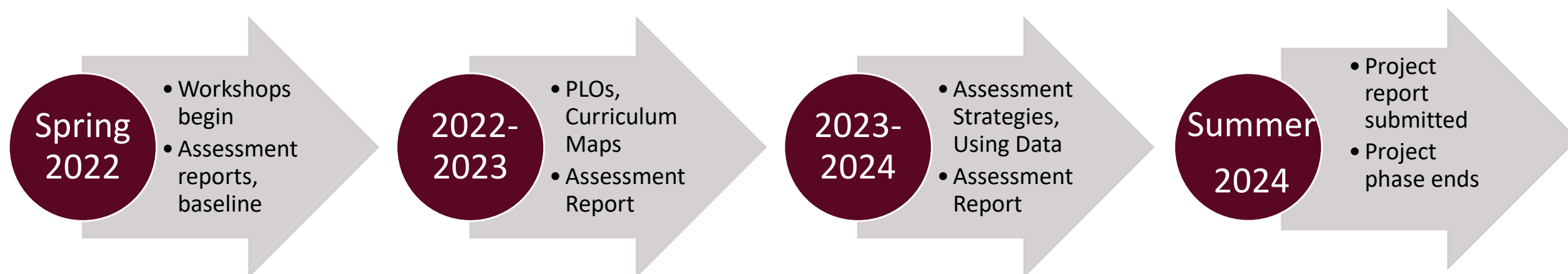Mapping: exploring PLOs' relationship to curriculum

Conclusion and next steps

Project evolution

FROM PROJECT TO INSTITUTIONALIZED PROCESS

Spring 2022
- Workshops begin
- Assessment reports, baseline

2022-2023
- PLOs, Curriculum Maps
- Assessment Report

2023-2024
- Assessment Strategies, Using Data
- Assessment Report

Summer 2024
- Project report submitted
- Project phase ends

Project evolution

FROM PROJECT TO INSTITUTIONALIZED PROCESS

What was the project impact?

- Collaborative development of <u>assessment expectations</u>

- Over 4 semesters, 89 unique faculty and staff attended.

- Some units had as many as four representatives active in CLAS

- Greater compliance and higher quality regarding AAAR

What has changed this year?

- Moving away from tiered roles (Advisor, UAL) to "participants"

- Faculty participation in leadership roles
    - Faculty fellows
    - Peer Report Reviewers
    - Assessment Awards

Module	Total units which had at least one representative atten ding at least one session of the module
1 PLOs	32
2 Map	23
3 Assess	30
4 Use	28

Project evolution

Student Artifacts (% complete)

- o 69% collected
- o 51% corresponded to target PLO
- o 35% provided # of students the data represents

Methods

- o direct/embedded 63%
- o 40% evaluated with rubric/tool (>21% absent)

Results reporting

- o 55% provided context (who/when assessed)
- o 45% provided quant info *(>24% absent)*

Collaboration

- o 68% collective input from multiple faculty
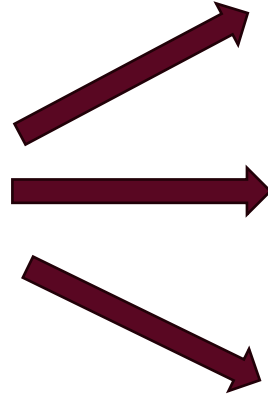- o 61% data is shared among faculty

Use of data

- o 50% Intentions for specific use of data
- o 44% actions tied to results of assessment
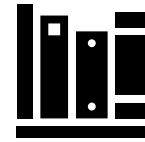
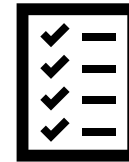# PLOS ARE FOUNDATIONAL

PLOs are the starting point for everything

Program
Learning
Outcomes

teaching

curriculum

assessment

Where are your PLOs?

NEW!!

All PLOs are in the course catalog!

https://catalog.luc.edu/

Program Learning Outcomes (PLOs)

- Why?
- What?
- When?
- How?

Program Learning Outcomes (PLOs)

➤ **Why?**

- Why are these necessary/advisable?

    - Can clarify to internal/external audiences what your program is all about …

    - Can help new faculty get a sense

    - Can help adjuncts get a sense

    - Can help distinguish similar programs

    - Can be a jumping off point for assessing/reflecting on whether the program is preparing students as intended

    - Accreditation

➤ **What?**
➤ **When?**
➤ **How?**

Program Learning Outcomes (PLOs)

➤ Why?

➤ What?

– A statement about what your students will know and be able to do as a result of successfully engaging in your program

– Career? No – career outcomes are different – these are learning outcomes

– Only at the end? Probably not

– Public-facing

➤ When?

➤ How?

Program Learning Outcomes (PLOs)

➤ Why?

➤ What?

➤ When?

– Backwards? Forwards?

– Elements of "Backward Design"

– Ideal vs Reality

➤ How?

outcomes
Stage 1:
Identify Desired Results

assessments
Stage 2:
Determine Acceptable Evidence
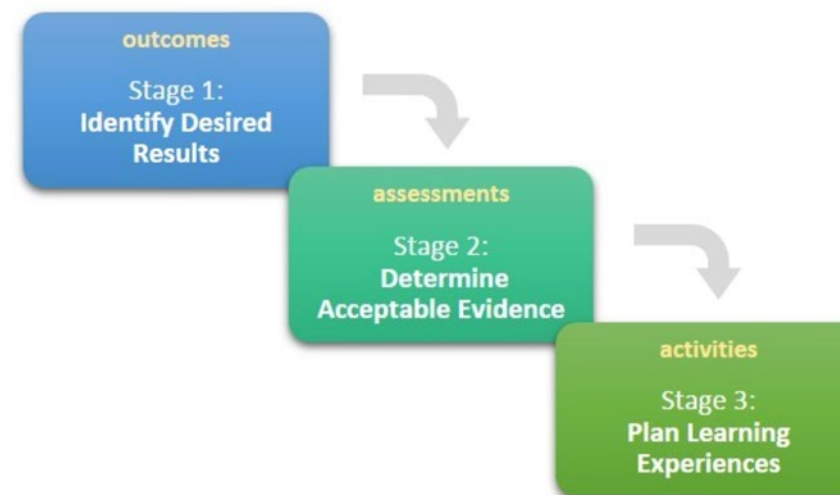
activities
Stage 3:
Plan Learning Experiences

Image retrieved from Center for Education Innovation

Program Learning Outcomes (PLOs)

➢ Why?

➢ What?

➢ When?

➢ How?

    – Writing Program Learning Outcomes

    – Excellent guidance… Perfection and enemies and good…

Condition		Audience		Behavior		Achievement
By the end of this program,	+	Loyola graduates	+	will be able to use evidence and facts to interpret past events	+	in argumentative narratives in their own disciplinary writing projects
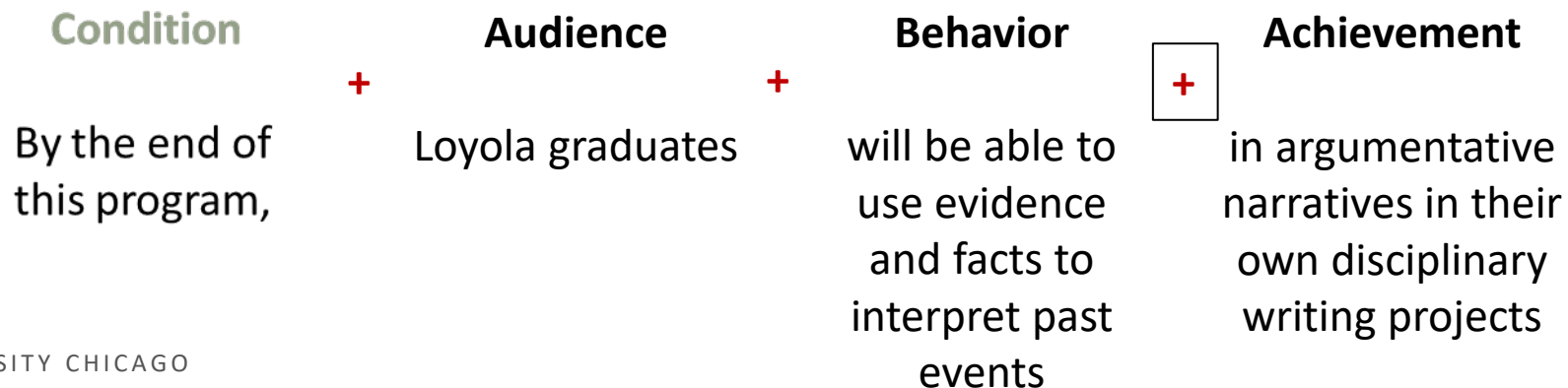
More things to think about

Program Learning Outcomes should be

SMART — specific, measurable, achievable, relevant, timely

✓ **Single-barreled**

Bloom's Taxonomy: Cognitive Domain

Cognitive domain: intellectual skills and abilities required for learning, thinking critically and problem solving

Create
Compile information to generate new solutions

arrange
calculate
compose
construct
design
develop
devise
formulate
generate
hypothesize
plan
prepare
produce
propose
revise
summarize
synthesize

Evaluate
Make judgments based on evidence found

attribute
argue
assess
check
compare
conclude
contrast
criticize
critique
defend
examine
justify
measure
recommend
support
reflect

Analyze
Break down information to look at relationships

categorize
contrast
compare
criticize
debate
differentiate
experiment
inspect
infer
investigate
organize
outline
question
separate
test

Apply
Apply knowledge to different situations

calculate
complete
demonstrate
execute
illustrate
implement
modify
organize
practice
prepare
solve
show
use
write

Understand
Translate and interpret knowledge

compare
classify
describe
discuss
explain
give examples
interpret
paraphrase
predict
present
report
rewrite
summarize

Remember
Retain, recall and recognize knowledge

arrange
define
identify
indicate
label
list
match
memorize
recall
recite
recognize

LOYOLA UNIVERS

Let your verbs do the work of Assessing!

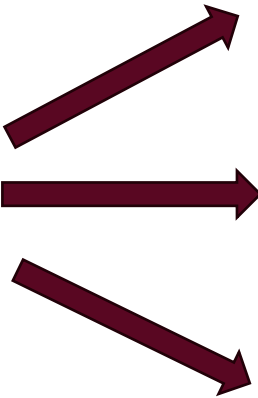|	Remember	Understand	Apply	Analyze	Evaluate	Create
Learning Activities	• Flashcards • Highlight key words • List • Memory activities • Reading materials • Watching presentations and videos	• Case studies • Concept map • Demonstrations • Diagrams • Flowcharts • Group discussions • Mind map • Matrix activity • Play/sketches • Summarize • Think-pair-share	• Calculate • Case studies • Concept map • Creating examples • Demonstrations • Flipped classroom • Gallery walk • Gamification • Group work • Lab experiments • Map • Problem-solving tasks • Short answers • Role play	• Case studies • Compare and contrast (with charts, tables, Venn diagrams) • Concept map • Debates • Discussions • Flowchart • Graph • Group investigation • Mind map • Questionnaires • Report/survey • Think-pair-share	• Debates • Compare and contrast (with charts, tables, Venn diagrams) • Concept map • Journal • Pros and cons list • Mind map • Review paper	• Brainstorm • Decision-making tasks • Develop and describe new solutions or plans • Design project • Performances • Presentations • Research projects • Written assignment
	• Clicker questions • Fill in the blanks • Label • Match • Multiple choice • Quizzes • True and false questions	• Concept map • Create a summary • Essay • Diagrams • Infographics • Matrix activity • One-minute paper • Presentation • Provide examples • Quizzes • Short answers	• Discussion board post • E-portfolio • Lab reports • One-minute paper • Presentation • Problem-solving tasks • Short answers	• Analysis paper • Case study • Evaluation criteria • Critique hypothesis, procedures etc. • Muddiest point • One-minute paper • Research paper • Review paper	• Argumentative or persuasive essay • Debates • Discussions • Presentation • Provide alternative solutions • Report	• Develop criteria to evaluate product or solution • Grant proposal • Outline alternative solutions • Research proposal

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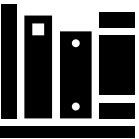
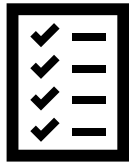# PLOs are the starting point for everything

Program Learning Outcomes

teaching

curriculum

assessment

HOW MANY PLOS?

Recommend 4-7 PLOs/program

Why?

- Need enough to collectively describe what students should know and be able to do, but not so many that assessment is unmanageable.

Let's look at some "sets" of PLOs...

Interactive Gallery walk

Why?

Apply framework to existing outcomes and use it to enhance as needed;

Not necessarily arriving at the "perfect" outcome

Here we are only looking at <u>one</u> outcome in a set

P.S.

This is an opportunity to learn…if you see one of the outcomes from your program you are not being critiqued…we are simply crowdsourcing and working together to enhance our understanding…gentle, discerning, specific feedback will get us to this goal

Interactive Gallery Walk

PROCEDURE

How it will work:

- On the walls, we have program learning outcomes that are posted on program websites

- Your group will spend 5 minutes at each outcome answering questions about how well it aligns with the four characteristics of well-written program outcomes:
    - *condition, audience, behavior, and achievement*

- After 5 minutes, you'll move to the next outcome, until you have worked with each one

- Finally, teams will synthesize and report out the feedback for each outcome

Gallery walk, cont'd

To start!

- Take the post-it notes, markers, and outcomes cheat sheets from your table to answer these questions for each outcome:

  - **What is going well?** Where possible, target your feedback to the four characteristics
  - **What suggestions do you have for rewriting this?**

- Answer each question on a post-it, then place it in the designated space at each outcome

- Try not to look at what other teams have written before you!

- When asked, remove your outcome from the wall and take it back to your table.

- Take the next 7-10 minutes and synthesize all the feedback given for both questions.

- Finally, each group will report out their synthesis to the whole group

Synthesis

THANK YOU FOR PARTICIPATING IN THIS PEER FEEDBACK PROCESS!

Did we observe any trends?

What about…
- Professional programs vs not
- Undergraduate programs vs not

Other questions?

Next steps

What if I want to change my PLOs?

- The Rainbow Chart describes our process
  - little changes (different verb, clarifying the language)
    - Sign-off only (RS and RM)
  - big changes (impacts the program, changes to admission process, new courses or course requirements, etc.)
    - Goes through full modification process (BUS or GSCB)

- Our Curriculum Inventory Management (CIM) system makes it happen – all of it!
  - Very easy to make changes in PLOs; they are pre-populated
  - Curriculum Map template is also pre-loaded, will require in 2026-27, you are welcome to give it a try!

PLOS ARE USED TO REFLECT ON CURRICULUM

PLOs are the starting point for everything

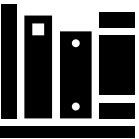Program Learning Outcomes

teaching

curriculum

assessment

BACK TO "WHY?"
PLOS AND THE CURRICULUM

Loyola University Chicago

CLAS
Coordinated Learning and Assessment Supports

Program level student outcomes

Why are courses 9 & 13 required?

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PLO 1	I			I	I		I			I	I			I	I		I	
PLO 2	I	D		P														
PLO 3			I		I		I			D	D			D		D	P	
PLO 4	I			I				D		D		D			D		P	
PLO 5		I															P	
PLO 6	I			I			D			D						P		P
PLO 7	P		P			I		D			D						P	P

I = Introductory
D = Developing
P = Proficient

Annotating the map – different ways

For each learning outcome, identify the courses that are intended to contribute to students' achievement of the learning. (use an X)

You may also describe the developmental level at which students will be engaging with the PLOs in a given course. There are several ways that you could do this:

A= Attained; R= Reinforced; M= Mastered
I= Introduced, R=Reinforced; E= Emphasized
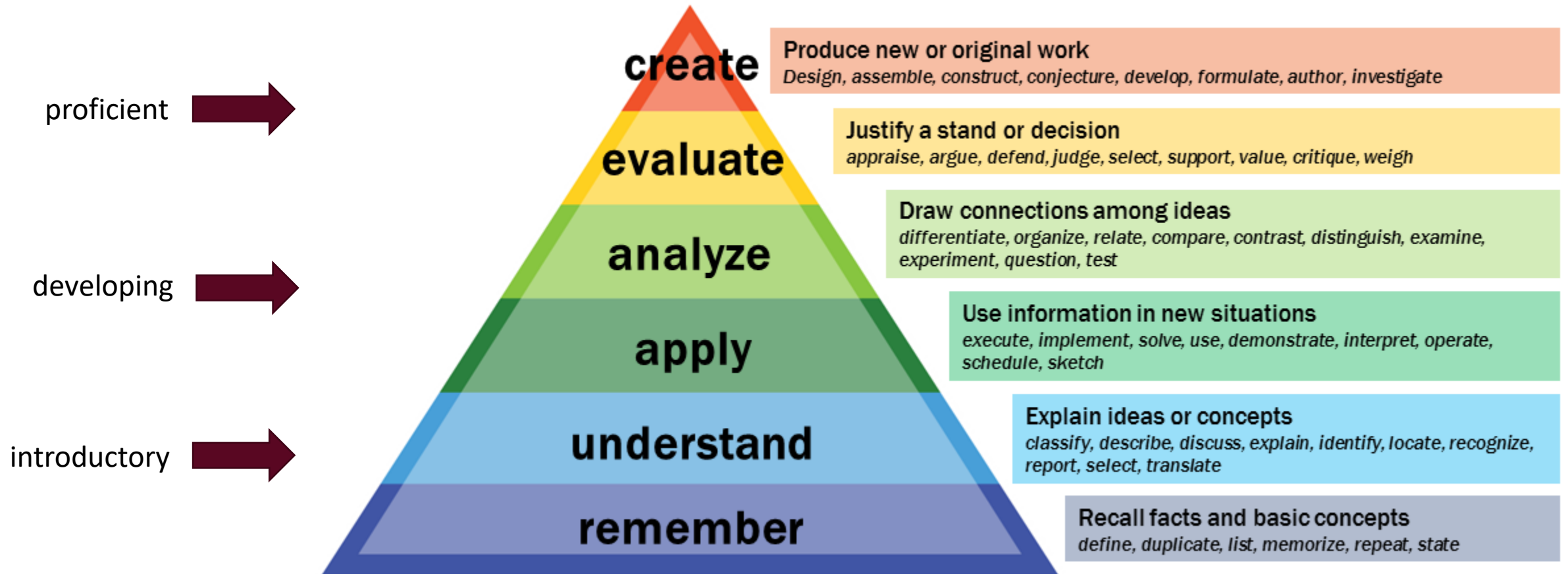I= Introduced, D=Developing; M= Mastered

I= Introduced, D=Developing; P= Proficient
I= Introduced; P=Practiced; D=Demonstrated
(F) = Formal Feedback w Graded work and rubric

Blooms Taxonomy and levels of engagement with PLOs

Bloom's Taxonomy

proficient →

developing →

introductory →

create — Produce new or original work
Design, assemble, construct, conjecture, develop, formulate, author, investigate

evaluate — Justify a stand or decision
appraise, argue, defend, judge, select, support, value, critique, weigh

analyze — Draw connections among ideas
differentiate, organize, relate, compare, contrast, distinguish, examine, experiment, question, test

apply — Use information in new situations
execute, implement, solve, use, demonstrate, interpret, operate, schedule, sketch

understand — Explain ideas or concepts
classify, describe, discuss, explain, identify, locate, recognize, report, select, translate

remember — Recall facts and basic concepts
define, duplicate, list, memorize, repeat, state

PLOS AND THE CURRICULUM

Program level student outcomes

Is this the appropriate depth of understanding for a capstone course?

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PLO 1	I			I	I		I			I	I			I	I		I	
PLO 2	I	D		P														
PLO 3			I		I		I			D	D			D		D	P	
PLO 4	I			I			D	D		D		D			D		P	
PLO 5		I															P	
PLO 6	I			I			D			D						P		P
PLO 7	P		P			I		D			D						P	P

I = Introductory
D = Developing
P = Proficient

PLOS AND THE CURRICULUM

Loyola University Chicago

CLAS

Coordinated Learning and Assessment Supports

Program level student outcomes

When/how is PLO 6 addressed?
Does anything strike you about PLO 1?

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PLO 1	I			I	I		I			I	I			I	I		I	
PLO 2	I	D		P														
PLO 3			I		I		I			D	D			D		D	P	
PLO 4	I			I			D	D		D		D			D		P	
PLO 5		I															P	
PLO 6																		
PLO 7	P		P			I		D			D						P	P

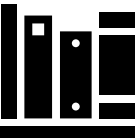I = Introductory
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PLOs are the starting point for everything

Program Learning Outcomes
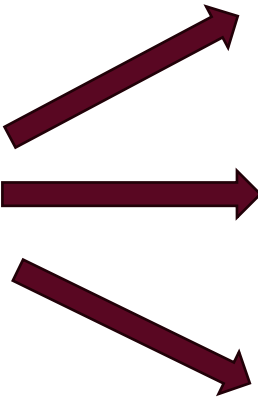
teaching

curriculum

assessment

New resource!

Bloom's Taxonomy_2023.pdf

Creating Actionable Learning Objectives

Reminder: Ask yourself these two questions when building your learning objectives.	1. What do I want my students to be able to do after this class? PRO-TIP: When thinking through your goals, stick to actionable and measurable verbs—see some examples when you download the template.	2. How do I know that my students have achieved it? PRO-TIP: Think about how you will be assessing students once they have performed the task. Be as specific as you can!
Example: Course Topic 1 – Homeostasis Learning Objectives 1.1:	Course Topic 2: Learning Objective 1.1:	Course Topic 3: Learning Objective 1.1:

Mapping PLOs to your curriculum

- Why?
- What?
- When?
- How?

Mapping PLOs to your curriculum

WHY?

Past participants say:

- "It's *important* for the departments to understand that curriculum-mapping is not an end in itself but a tool to help ground conversations about what they really want their majors and minors to program as student-experiences"

- "This can help you improve your teaching"

- Help faculty understand how courses are situated in the curriculum and how each course contributes to advancing PLOs

- Informs decisions about course offerings, sequencing and scheduling

- Helps programs plan assessment

Mapping PLOs to your curriculum

WHAT?

- A 2D matrix that relates your program PLOs to the courses in the curriculum

- Can express developmental progress over time in the program

- Can flag for you which courses might provide appropriate opportunities to assess your program

- Start with thinking about how the required courses in your program address your PLOs and when you might assess the PLOs.

How to get started with your curriculum map?

WHEN AND HOW

- Any time is good!

- There are plenty of resources to help you!
  - ○ In Teams site: look at [Teams (UAL Channel)](#)> Creating Curriculum Maps> Mapping PLOs to Curriculum Workshop
  - ○ On the CLAS website: https://www.luc.edu/clas/projectsupports/resources/

- Recommendation: look at the [Getting started](#) document. Try the "suggested steps" for discussion process.

Organization Questions

- Where to start with PLO mapping?
    - with required courses?
    - electives?

- Are there clear tracks of classes that all students take?

- If no tracks, are there "themes that can be used for clustering?
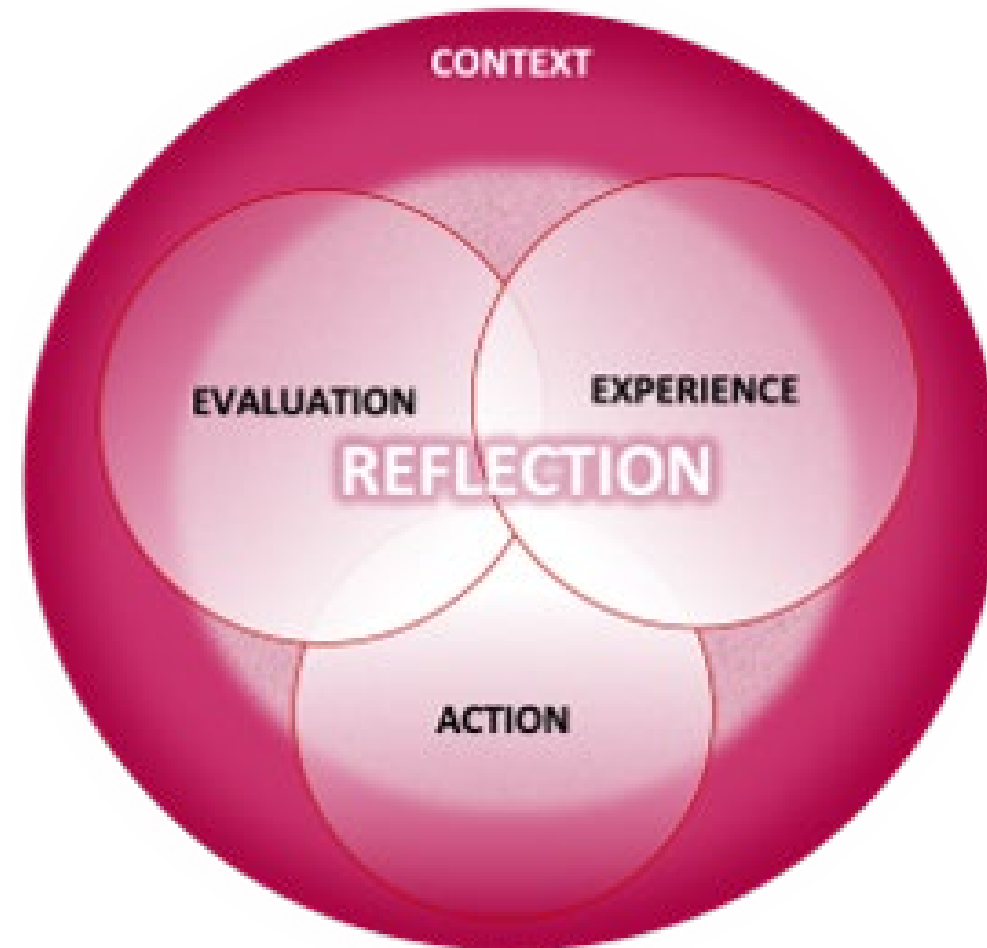
Many of your units have gotten started with mapping

SHARE OUT

- Who are the "helpers" within your program? Who's doing the work?

- How long does this take?

- What pieces take the most time/the least time?

- Other thoughts to share?

A critical throughline

REFLECTION FOR ACTION

What's next?

Next workshop series – Strategies for Assessing Program Learning outcomes

- Tuesday, November 12, 2:30-4:30 PM. Water Tower Campus, location TBD
- Wednesday, November 13, 9:30-11:30 AM. Lake Shore Campus, location TBD

Asynchronous Modules coming soon!

CLAS on-the-go! Assessment Fellows can visit your unit! contact assessment@luc.edu to make a date

Additional questions for us?

Please take the evaluation survey

Thank you!