

# Level-Up Your Assessments to Go Beyond Bloom's Taxonomy Using a New Assessment Framework

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Oregon Health & Science University

# Acknowledgement of the Original People of the Land

Oregon Health & Science University is located in Portland, Oregon in Multnomah County. We acknowledge that these grounds rest on traditional and ancestral homelands of the Multnomah, Kathlamet, Clackamas, bands of Chinook, Tualatin, Kalapuya, Mollala and many other Indigenous nations of the Columbia River.

We also acknowledge that the colonization of this land is an ongoing process, as we occupy this land through deceptive and broken treaties. Let us remember these histories, work to heal, and strengthen relationships with the Indigenous communities who continue to live in this region.

# Who are we?

Sarah (she, her)  
*Presenter*



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Constance (she, her)  
*Moderator*



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# Objectives

- Articulate why using an assessment outcomes framework is important.
- Describe OHSU's process by which they improved their assessment outcomes framework.
- Differentiate among the different categories within the Evidence for Learning and Impact Framework.
- Brainstorm an assessment method relevant to your work and appropriately assign it to the framework.
- Reflect on how this framework could apply to the work you do.

# Housekeeping

- Use the **chat** – we intended this to be more conversational than the platform allows. It will be monitored by an expert.
- We will not monitor the Q&A panel
- Poll everywhere and Padlet – so be ready

# Intro to the landscape of Oregon Health & Science University

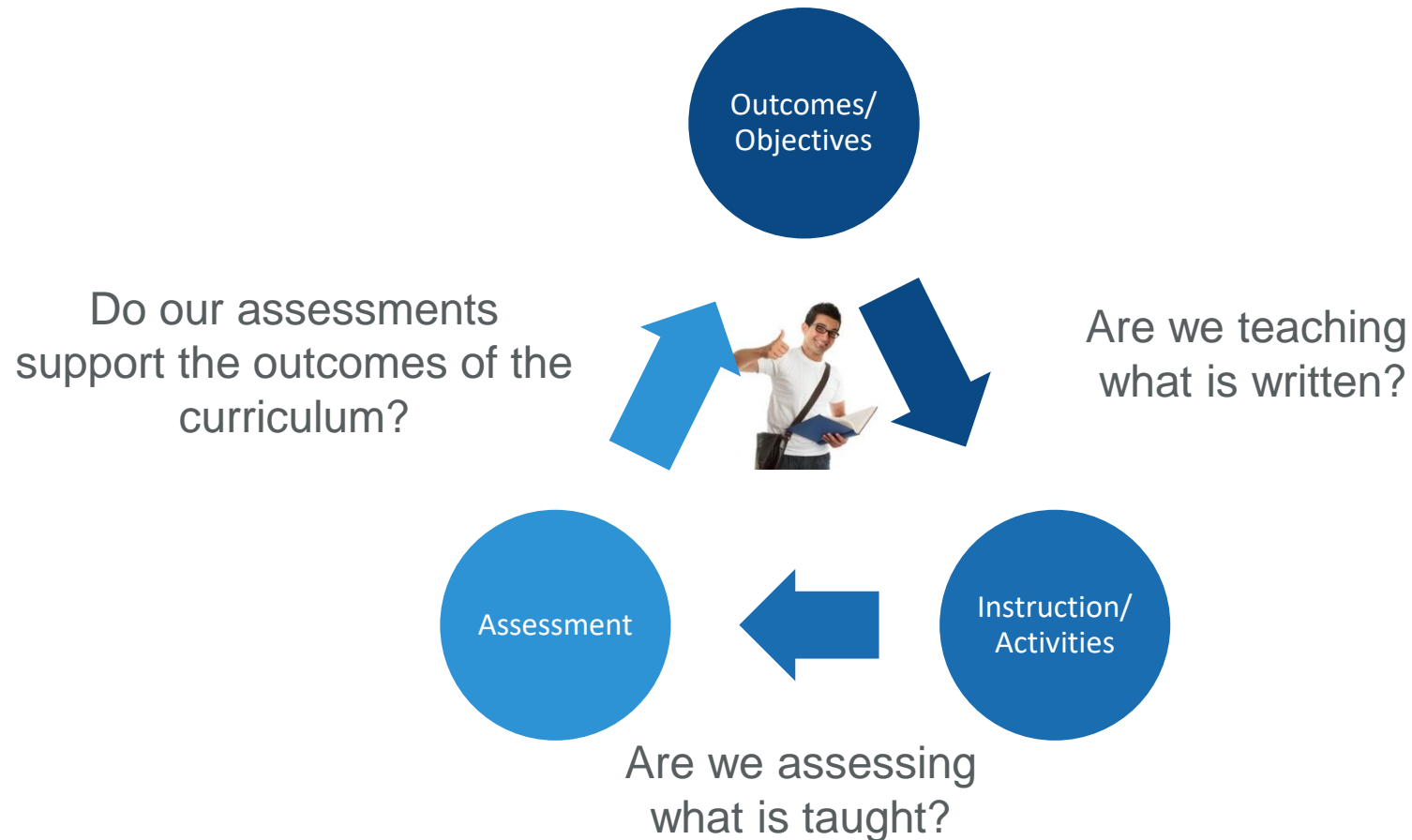


# What Assessment Planning and Reporting looks like at OHSU

Planning Elements
Communication of SLOs
Progression / Differentiation Among Programs (if applicable)
Measurable SLOs
Alignment of Core Competencies to SLOs
Assessments, Targets, and Levels of Evaluation Outcomes

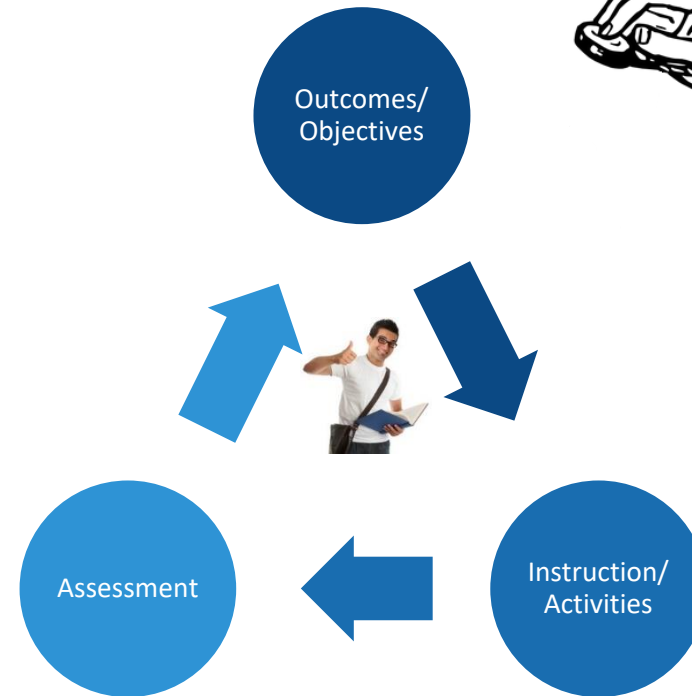
Reporting Elements
Interpretation of Targets Not Met
Engagement of Stakeholders in Program Assessment Planning & Review
Closing the Loop: Course and Program improvement; Incorporation of Course Evaluation Feedback; Use of Equity Lenses/disaggregation when looking at Data
Closing the Loop: Address Assessment Council Feedback

# What is an assessment outcomes framework? Moving beyond just closing the loop

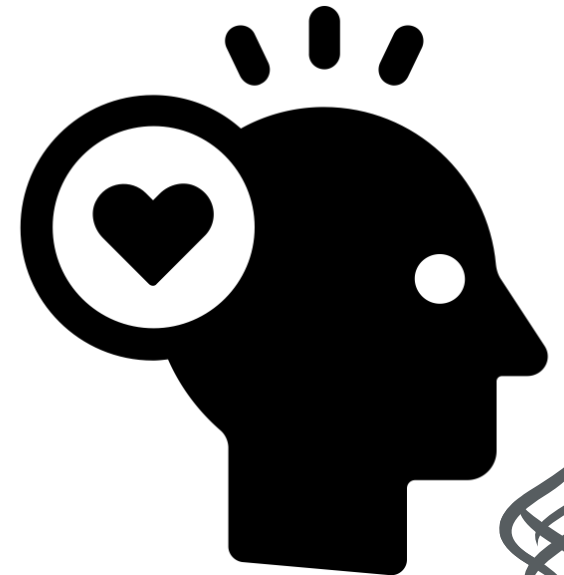




# What is an assessment outcomes framework? Moving beyond just closing the loop



# Why use an assessment outcomes framework?



Inform curriculum and assessment decisions  
Helps measure change, analyze gaps  
Identify gaps in ways of knowing

# What frameworks have we tried ?

Bloom's taxonomy

Cognitive



Characterization by Value Set



Affective

Psychomotor



Moore's CME outcomes



Does  
(Action)

Shows  
(Performance)

Knows How  
(Competence)

Knows  
(Knowledge)

Miller's Framework for Clinical Assessment

# Why previous frameworks don't work



Interprofessional



Emphasis on Clinical Assessment



Lack of Praxis

# What is missing from previous frameworks?



**The Affective**  
(Feelings)



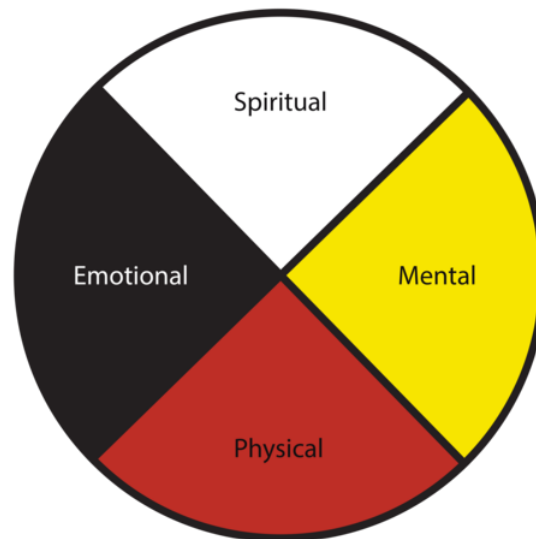
**The Cognitive**  
(Thoughts)



**The Physical**  
(Actions)



**Other Ways of Knowing**  
(Cultural, Spiritual, Natural, etc.)



Indigenous Medicine  
Wheel

# Other influences



# Impact of Making Space for Ways of Knowing and Affective

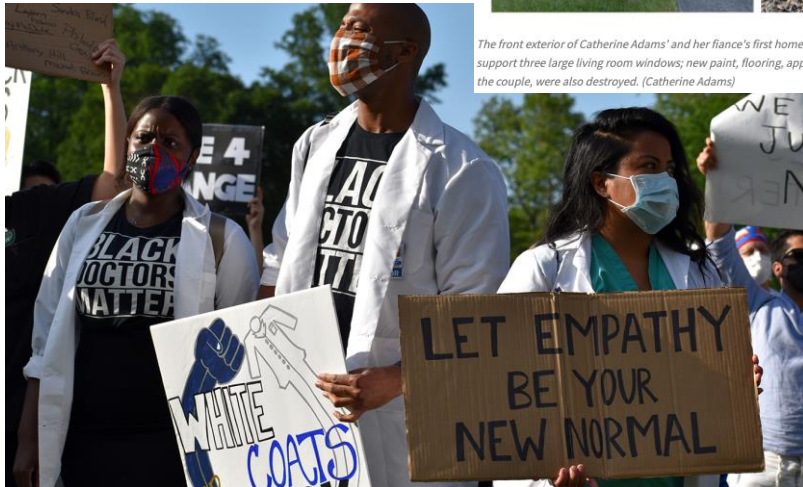
Rebuilding amid wildfire devastation

OHSU supports School of Nursing students who lost their homes

By Christi Richardson-Zboralski | September 28, 2020 | Portland, Oregon



The front exterior of Catherine Adams' and her fiancé's first home together. The standing brickwork used to support three large living room windows; new paint, flooring, appliances, and kitchen counters, all installed by the couple, were also destroyed. (Catherine Adams)



# Core competency revision

## OHSU Graduation Core Competencies

In the summer of 2020, OHSU affirmed its commitment to the health and wellbeing of all Oregonians and asked everyone to work together to shatter structural racism. The new core competency definitions align the Education Mission with OHSU's anti-racism work. The revision was undertaken with the following principles in mind:

- *Power, privilege, and positionality impact how people function as professionals and interact in the world.*
- *Seeking and listening to diverse voices results in better outcomes.*
- *Knowledge and authority are constructed and contextual.*
- *Information has power and existing systems privilege some perspectives and present barriers to others.*
- *Systemic racism causes undue burden and may not impact everyone in the same way.*
- *Open-mindedness and compassion are core OHSU values that enhance our effectiveness.*
- *Our audience should inform how we communicate.*
- *We are a professional community, dedicated to improving the human condition.*

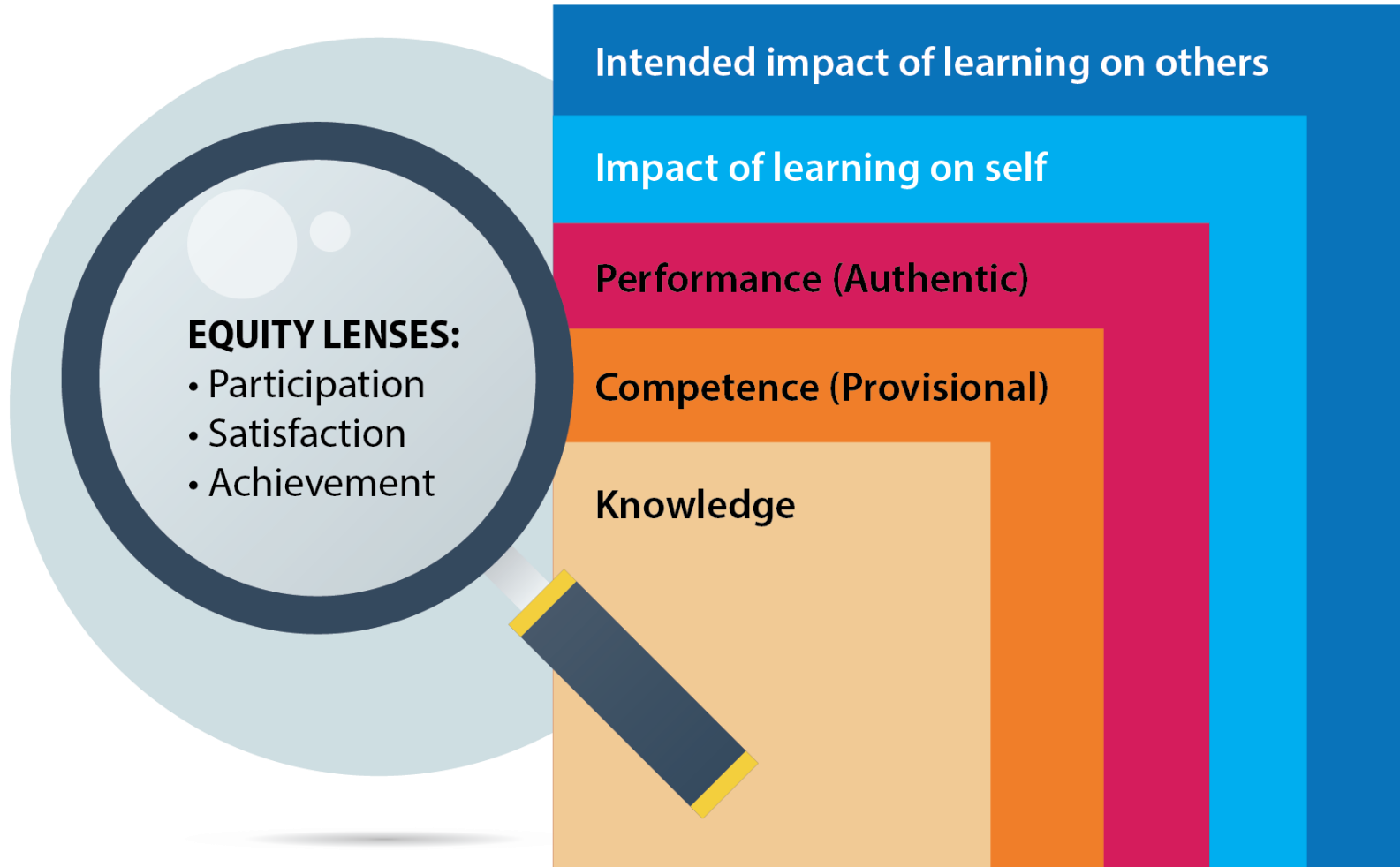


# Questions?

So we made a new model...



# EVIDENCE<sup>of</sup> LEARNING & IMPACT FRAMEWORK



Old Planning

Moore's Outcomes Framework

- Level 7 - Community Health
- Level 6 - Patient Health
- Level 5 - Performance
- Level 4 - Competence
- Level 3B - Learning: Procedural Knowledge
- Level 3A - Learning: Declarative Knowledge
- Level 2 - Satisfaction
- Level 1 - Participation



EVIDENCE<sup>of</sup> LEARNING  
& IMPACT FRAMEWORK

Intended impact of learning on others

Impact of learning on self ←



Performance (Authentic)

Competence (Provisional)

Knowledge

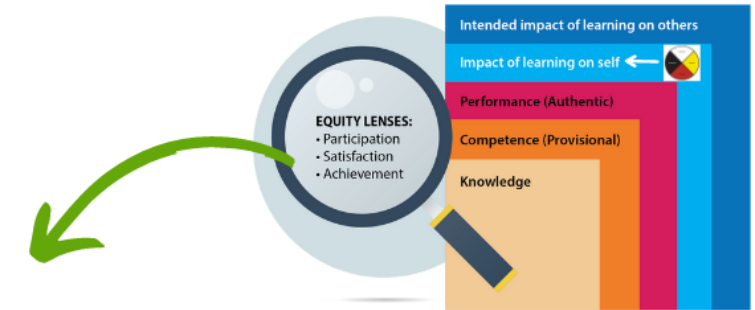
New Planning

**EQUITY LENSES:**

- Participation
- Satisfaction
- Achievement

Reporting





## Reporting

Tell us about **one assessment activity** the program is **analyzing with an equity lens**. This example should:

- Identify an assessment activity that is **ripe for improvement** using an equity lens,
- Describe an approach/data source used to analyze equity to improve learning (e.g., **disaggregation** of who participates and/or how satisfied they are, achievement, etc.), and
- Describe how the program is using the data to **inform decision making**.

### Equity Lenses:

- **Participation:** What demographic patterns in data exist? (I.e., attendance, race/ethnicity, age, etc.)
- **Satisfaction:** How are learners experiencing the learning environment? How are learning outcomes affected by the learning environment?
- **Achievement:** Who is excelling and who is not?

# Handout

OHSU Evidence of Learning and Impact Framework (“Evidence Framework”/ELIF)

	OHSU Evidence Framework Levels	Definition/Framing Questions	Example in practice/Exemplar	Potential aligned assessment approaches (not exhaustive) (see new list of categories on pg 2)
1	Knowledge	How do learners demonstrate knowledge gained from educational activities in a didactic or simulated educational setting?	<p><b>Clinical:</b> Student demonstrates medical knowledge on a multiple-choice exam.</p> <p><b>Public Health:</b> Students describe, in a paper, the elements of a good structured health policy memo.</p> <p><b>Grad Studies:</b> Students describe foundational concepts of human computer interaction including user interfaces, usability, and user requirements.</p>	Assessment of knowledge
2	Competence (Provisional)	How do learners demonstrate application of knowledge to a task, practiced in a didactic or simulated educational setting?	<p><b>Clinical:</b> Students demonstrate medical knowledge in the simulation center doing physical exams, taking a history, and providing patient education.</p> <p><b>Public Health:</b> Students select a health policy issue and develop a structured policy memo to address this issue.</p> <p><b>Grad Studies:</b> Students work as a team to develop a clinical application, assigning appropriate roles (clinical, technical, reviewing, evaluating, etc.) to team members.</p>	<p>Assessment of knowledge</p> <p>Internal performance observation</p> <p>Self-Assessment (written, oral or other)</p> <p>Presumptive</p> <p>External performance observation</p>
3	Performance (Authentic)	How do learners demonstrate, in an authentic educational or training environment, what they should be able to do in their future practice/career?	<p><b>Clinical:</b> Students demonstrate medical knowledge in the clinic diagnosing patients and creating treatment plans under supervision.</p> <p><b>Public Health:</b> Students draft a policy memo relevant to their internship audience, which is then evaluated by their preceptor and/or other internship stakeholders.</p> <p><b>Grad Studies:</b> Students work collaboratively in their internship placements to develop a clinical decision tree which helps the patients and clinicians make decisions about their health and wellness.</p>	<p>Self-Assessment (written, oral or other)</p> <p>Presumptive</p> <p>Learner completes task in future professional setting – e.g. clinicals, performing a procedure, conference presentation, internship, lab work</p>
4	Impact of Learning on Self	How do learners reflect on the impact and value of learning on their wellbeing and identity development?  How do learners demonstrate awareness of their whole selves and their purpose? Whole selves includes an integration of their mental, physical, spiritual and/or emotional self in learning.	<p><b>Clinical:</b> Students self-assess their competence on medical knowledge through program surveys and reflection papers.</p> <p><b>Public Health:</b> Students reflect on how their practice experience contributed to their competency attainment—including development as a public health professional</p> <p><b>Grad Studies:</b> Students reflect on and evaluate their own group projects, examining both the technical and social aspects of working as a team, inherent the multidisciplinary field of informatics.</p>	<p>Self-Assessment (written, oral or other)</p> <p>Reflective discussion, pre/post reflection exercise, self-assessment</p> <p>Holistic/comprehensive review</p>
5	Intended Impact of Learning on Others	How do learners move valued knowledge into practice, by changing systems, procedures, or policies in ways that impact the community, institution, and/or beyond? Implied impact is acceptable.	<p><b>Clinical:</b> Students create community public health talks and measure community members’ learning and motivation to change their behavior through program surveys.</p> <p><b>Public Health:</b> Students prepare a program evaluation with recommendations for a community health organization; recommendations are implemented; resulting changes to health behavior are evaluated; or, more simply, a program evaluation and implementation</p> <p><b>Grad Studies:</b> Students incorporate consideration of patients’ varying levels of technical skill, disabilities, and privacy issues when developing a user interface and gather patient feedback on their experiences using the interface.</p>	<p>Impact on community</p> <p>External review of student work</p> <p>Service-learning project</p>

\*Note: Participation and satisfaction have been removed from this model, and are now lenses by which we can examine equity in the other categories and will be reported on in Closing the Loop.

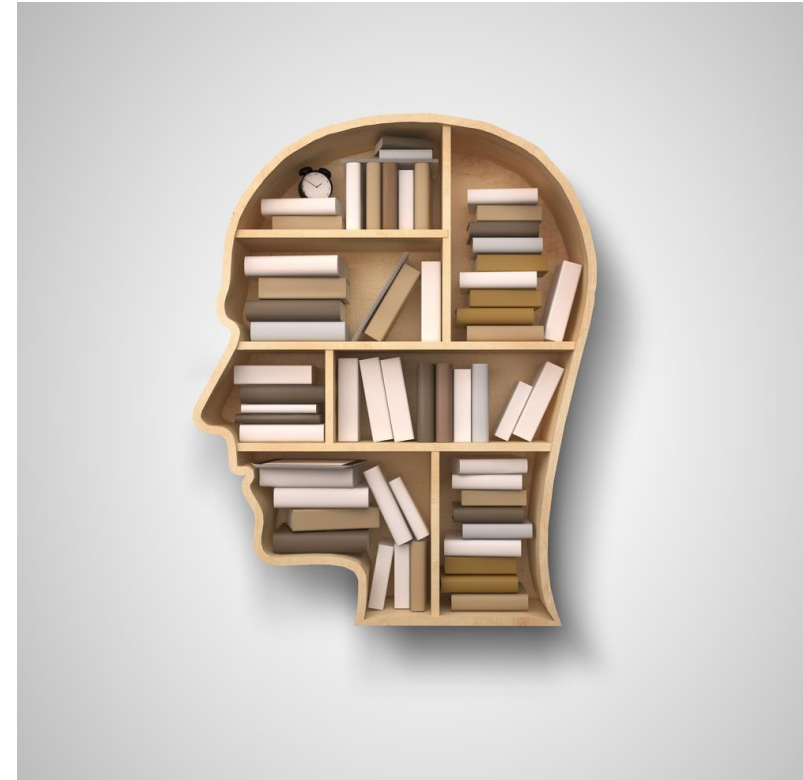
# Knowledge

## Framing Question:

How do learners demonstrate knowledge gained from educational activities in a didactic or simulated educational setting?

## Example:

Learner describes steps of scientific method and importance of each step in a short essay quiz.



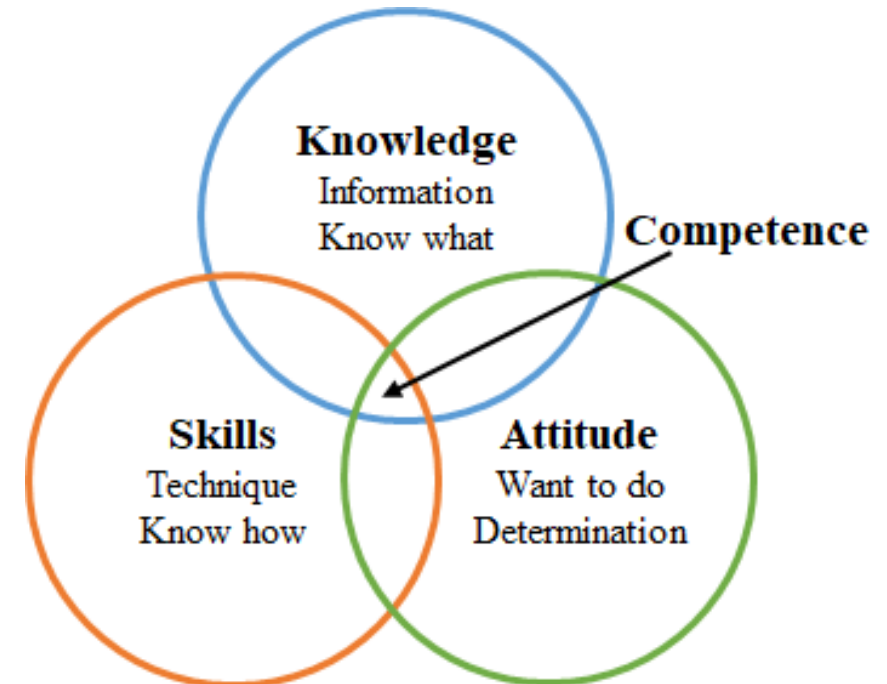
# Competence (Provisional)

## Framing Question:

How do learners demonstrate application of knowledge to a task, practiced in a didactic or simulated educational setting?

## Example:

*Learner fills out lab notebook in intro bio lab, following the prescribed steps of the scientific method during the guided experiment.*





# Performance (Authentic)

## Framing Question:

How do learners demonstrate, in an authentic educational or training environment, what they should be able to do in their future practice/career?

## Example:

*Learner proposes experiment, or revision to existing method, to lab advisor as part of their undergraduate research project, drawing on nuances of the scientific method in their proposal.*



# Impact of Learning on Self

## Framing Question:

How do learners reflect on the impact and value of learning on their wellbeing and identity development?

How do learners demonstrate awareness of their whole selves and their purpose?

## Example:

*Learner completes pre- and post- self-reflection on their development as a scientist over the course of their program, comparing their early assumptions of what a scientist is and does through their externship, where they independently run experiments in a marine biology research center.*

HEALTH • COVID-19

## Meet the Medical Students Becoming Doctors in the Middle of a Pandemic



Dr. Alix Cooper, left, with a fellow early graduate and their residency program director. The new doctors graduated early from Oregon Health and Science University School of Medicine, and will begin their family medicine residency in Klamath Falls, Oregon on April 20. Photo courtesy of Alix Cooper

# Intended Impact of Learning on Others

## Framing Question:

How do learners move valued knowledge into practice, by changing systems, procedures, or policies in ways that impact the community, institution, and/or beyond? Implied impact is acceptable.

## Example:

*Learner completes capstone project which is a set of science communications posters for the local science museum, which posts them in an exhibit intended to educate the general population about local examples of the scientific method in practice.*



# Muddiest point



# Activity - Padlet

The screenshot shows a Padlet board with a purple and blue background. At the top left, it says 'padlet' and 'morenok7 • 1m'. The title is 'OHSU's Evidence of Learning and Impact Framework' with the subtitle 'Practice aligning to the Evidence Framework'. The board is organized into six columns, each with a title and an example text box. The first column is 'DIRECTIONS:' and contains a purple text box with instructions. The other five columns are 'Level 1 - Knowledge', 'Level 2 - Competence (Provisional, in-class)', 'Level 3 - Performance (Authentic, but still as a learner)', 'Impact of Learning on Self', and '(Intended) Impact of Learning on Others'. Each of these columns has a light blue text box with an example. At the bottom of each text box is a comment section with a heart icon, a comment icon, and the text 'Add comment'. There are also plus signs below each text box, indicating where to click to add new content. In the top right corner, there are icons for 'REMAKE', 'SHARE', settings, and a plus sign. An 'ADD SECTION' button is located on the right side of the board.

**DIRECTIONS:**  
Examples are in blue. Draw either on documents from your own institution or your own imagination. Submit at least one assessment (be specific) under the "Evidence Framework" column that it best fits. Then you can "like" others' submissions if you think they align well and/or comment on others' submissions.

**Level 1 - Knowledge**  
EXAMPLE: Students describe, in a paper, the elements of a good structured health policy memo.

**Level 2 - Competence (Provisional, in-class)**  
EXAMPLE: Students select a health policy issue and develop a structured policy memo to address this issue.

**Level 3 - Performance (Authentic, but still as a learner)**  
EXAMPLE: Students draft a policy memo relevant to their internship audience, which is then evaluated by their preceptor and/or other internship stakeholders.

**Impact of Learning on Self**  
EXAMPLE: Students reflect on how their practice experience contributed to their competency attainment—including development as a public health professional

**(Intended) Impact of Learning on Others**  
EXAMPLE: Students prepare a program evaluation with recommendations for a community health organization; recommendations are implemented; resulting changes to health behavior are evaluated.

# Recommended Resources and References

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- Vasquez Guzman, CE, Brodt, E., (April 1<sup>st</sup>, 2021). [American Indian and Alaskan Native \(AI/AN\) Medical Students at OHSU: Resources and framework for recruitment and retention](#). Foster Respectful and Equitable Education (F.R.E.E.) Series. (Video password: YveishU3)
- Vasquez Guzman CE, Lewis M, Yancey D, Empey A, Metoxen M, Frutos R, Wescott S, Zeisman-Pereyo S, Valenzuela S, Uh CT, Carney PA, Warne D, Brodt E (2020) The Time is Now: Transforming Recruitment and Retention of American Indian and Alaska Native Medical Students Using the Medicine Wheel Model. *J Health Sci Educ* 4(5): 198.
- Harden, R. M.. (2007). Learning outcomes as a tool to assess progression. *Medical Teacher*, 29(7), 678–682. <https://doi.org/10.1080/0142159070172995>

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\*Note: Participation and satisfaction have been removed from this model, and are now lenses by which we can examine equity in the other categories and will be reported on in Closing the Loop.

You will only be able to choose one of these categories for each entry. Pick the category that is the most characteristic of the assessment.

- Assessment of knowledge (MCQs, essay questions, structured oral exams, pre-enrollment assessment)
- Comprehensive/Holistic review (Program Committee/Panel Review - TAC/DAC reviews, theses, dissertations, capstones, portfolio, proposal defense)
- External Performance Observation (Community stakeholder feedback (engagement) - patient, client, employer, other community observers, experiential, portfolio, capstone)
- External Review of Student Work(s) (Accepted manuscript, external national assessments, peer reviewed blogs and presentations)
- Impact data (Citations, Community health, Patient/Client health metrics, Data on social determinants of health, procedure/policy change)
- Institutional Satisfaction Surveys (e.g., course evaluation, food insecurity, etc.)
- Internal Performance Observation (Simulation, Clinical, Research: lab notebooks, experiential, portfolio, capstone, peer)
- Presumptive Assessment (i.e. Absence of contrary evidence) (e.g. professionalism citation or lack thereof)
- Self-assessment – Oral (interviews, focus group, listening session)
- Self-assessment – Other (artistic expression, portfolio development)
- Self-assessment – Written (surveys, essays, narrative medicine reflections, journals)