

# MAKING THE CASE FOR COMPETENCY-BASED EDUCATION

Webinar 3 of 4

Aligning for Learning:  
Evaluating Connections

# THE “MAKING THE CASE” WEBINAR SERIES

This is the third of four webinars in a series about *Making the Case for Competency-Based Education*, designed to help institutions use data to demonstrate the value of CBE programs for their students and continuously improve program quality.

Produced by American Institutes for Research and its partners Public Agenda, the Competency-Based Education Network, and the National Institute for Learning Outcomes Assessment, *Making the Case* is made possible by the generous support of Lumina Foundation and other national philanthropies.

# THE “MAKING THE CASE” WEBINAR SERIES

1

Getting Started with Evaluation

2

Evaluation for Improvement

3

The Role of Learning Assessment in Evaluation

4

Communicating Evaluation Findings

# YOUR HOSTS



**Natasha Jankowski**  
National Institute for  
Learning Outcomes  
Assessment



**Kelle Parsons**  
American Institutes  
for Research



**Matt Soldner**  
American Institutes  
for Research

# HOUSEKEEPING

- We're glad you – and more than 80 of your closest friends – have joined today!
- Have a question? Just type it in the “Question” box. And, any time we ask you to participate in the “Chat,” we mean “Question.”
- A copy of these slides and a recording of the webinar will be available next week at <http://bit.ly/cbe-at-air>

# WHAT YOU'LL BE ABLE TO DO

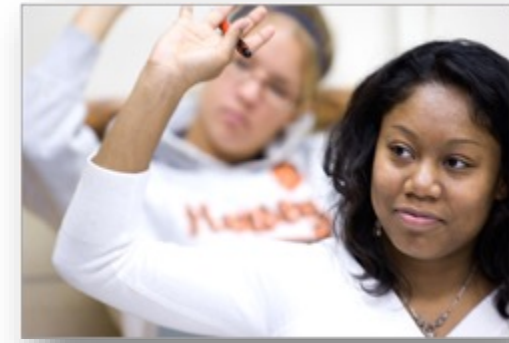
- Describe a framework that can guide your thinking about aligning program competencies, curriculum, learning design, and assessment
- Leverage data to evaluate alignment, strengthening program design and making a stronger case for how CBE benefits learners.



**Let's jump in!**

# 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](http://www.learningoutcomesassessment.org)



# National Institute for Learning Outcomes Assessment

Making Learning Outcomes Usable & Transparent

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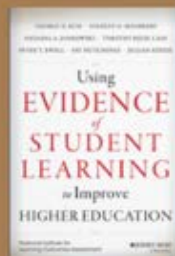


## Welcome to NILOA



We are pleased to announce the release of NILOA's 29th occasional paper on the topic of equity and assessment.

- [Occasional Paper](#)
- [NILOA Newsletter](#)
- [EIA Applications](#)
- [Featured Assignment](#)
- [RFP for Coaches](#)



[Click here to browse NILOA's Assignment Library.](#)

### Point Loma Nazarene University

Point Loma Nazarene University's assessment website is this month's Featured Website in the category of Communication and Centralized Assessment Repository.

[Featured Website Archive](#)



NILOA Calendar						
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6	7	8	9	10	11	12
13	14	15	16	17	18	19
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27	28	29	30	31		

In the News | [Archive](#)

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#### **'Regaining Public Trust'**

Mon, Jan 30, 2017 - 08:00 am  
Colleen Flaherty, Inside Higher Ed

During the Association of American Colleges and Universities (AACU)'s 2017 Annual Meeting, participants, including NILOA's Director Natasha Jankowski, discussed the need to increase transparency and communication of student learning in order to build public trust.

#### **Report on Professors' Role in Student Success**

Mon, Jan 30, 2017 - 08:00 am  
Emily Tate, Inside Higher Ed

In a newly released report from the American Council on Education (ACE) written by NILOA's Director, the relationship between faculty instruction and student outcomes is explored through five points of intersection.

#### **ACRL releases Rewired: Research-Writing Partnerships within the Frameworks**

Tue, Jan 24, 2017 - 08:00 am  
Association of College and Research Libraries (ACRL)

Highlighting the importance of partnerships, the Association of College and Research Libraries (ACRL) published an edited book titled "Rewired: Research-Writing Partnerships within the Frameworks" that explains how librarians and faculty can collaborate and develop the field of information literacy.

# COMPETENCY-BASED EDUCATION AND ALIGNMENT

- Competency-Based Education is about the **DOING** of learning
- Assessment of learning takes on significant prominence in the enterprise
- **Without clear alignment, using the information from assessment to make meaningful programmatic changes becomes increasingly difficult**

**CHAT BOX TIME!**

**HOW ARE YOU DEFINING  
OR ADDRESSING ALIGNMENT?**



# ASSESSMENT IN CBE

In CBE programs, assessment is the mechanism by which we validate learning.

- It is not only a design element, but is the basis of design.
- It is realized by alignment.

POWERED BY THE **COMPETENCY-BASED EDUCATION NETWORK**



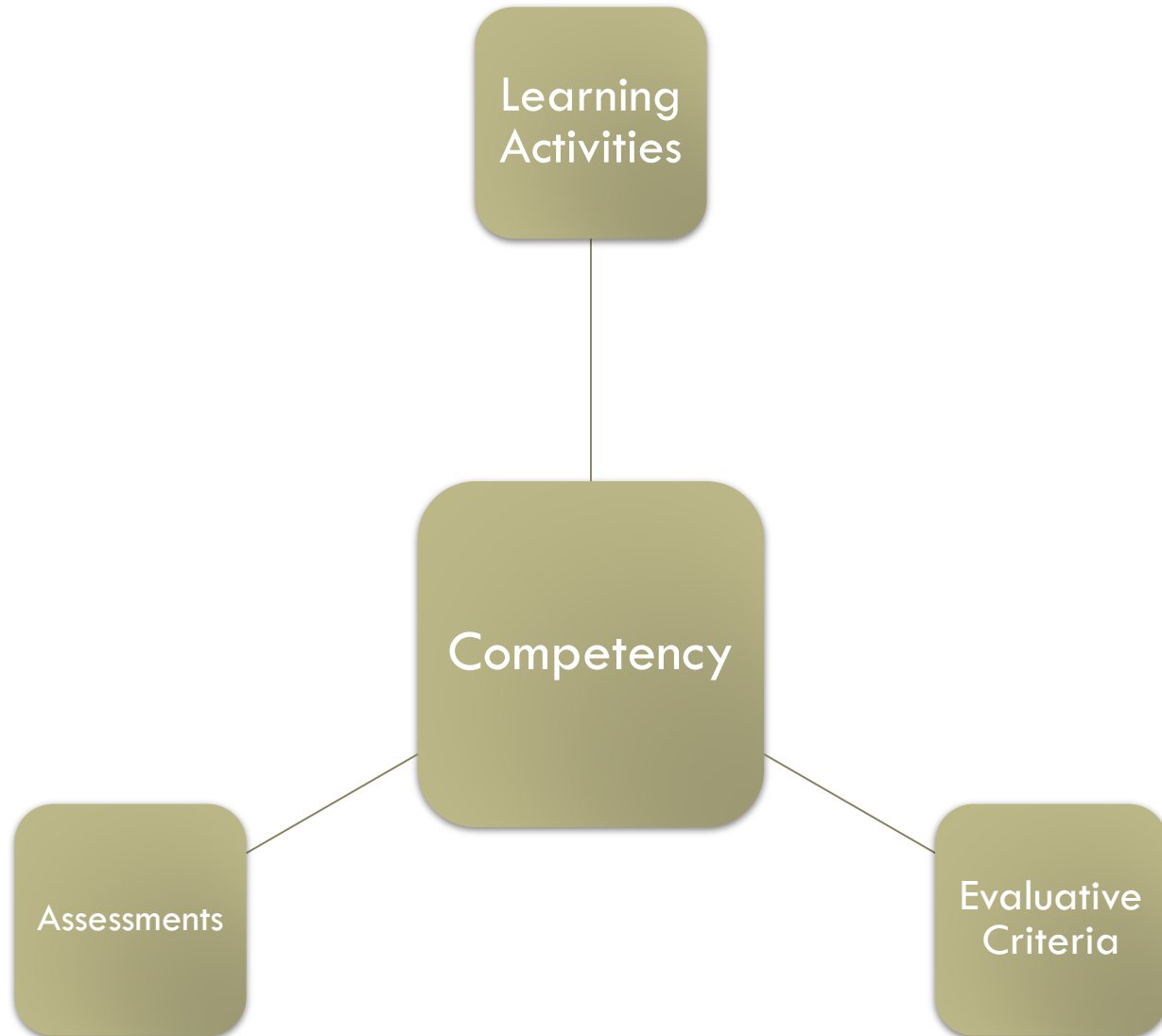
# Welcome to the Competency-Based Education Network (C-BEN) Design Planner

where C-BEN institutions are helping other institutions innovate responsibly by creating high-quality competency-based education programs, capable of serving many more students of all backgrounds.

[Access Program Design Resources](#)

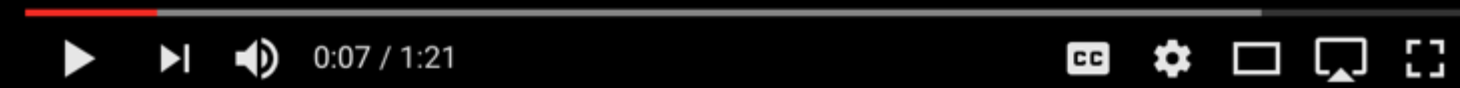
# CBE DESIGN PLANNER

- Indicator 1: Assessments measure learning and application of learning into multiple and novel contexts.
- Indicator 2: Assessments are frequent, informal and formal, formative and summative.
- Indicator 3: Assessments are rigorous with clear and valid measures.
- Indicator 4: Assessment provide real-time feedback for reflection and refinement.



# SELECTIVE ATTENTION TEST

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



The video player interface includes a progress bar at the top of the control area, a play button, a next button, a volume icon, a timestamp of 0:07 / 1:21, a closed captions icon, a settings gear icon, a full screen icon, a comment icon, and a share icon.



# IT'S ABOUT THE DOING

- Unique position of validation of learning for CBE.
- When our focus is on learning and not seat time, what happens to how we assess?
- Not about measures or types of assessment used, but about alignment to the competencies in question.

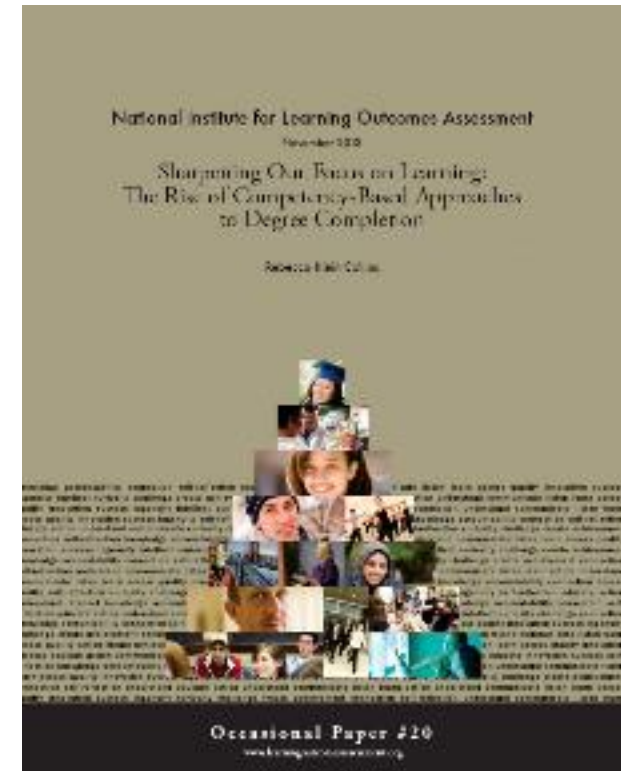
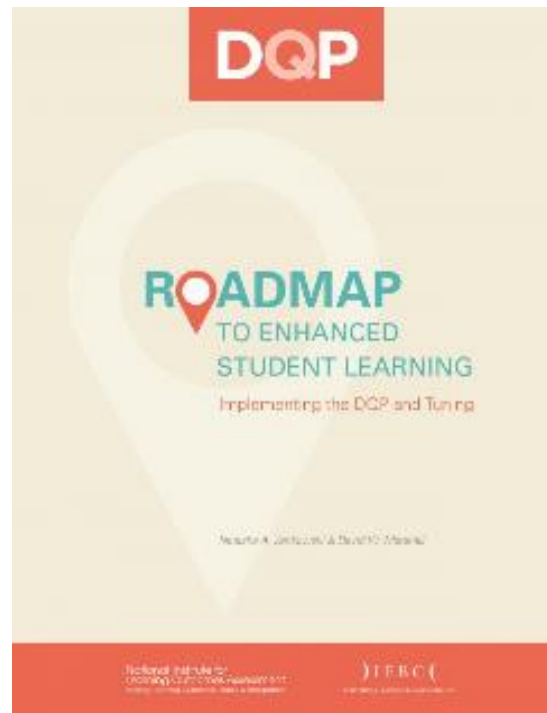
# ALIGNMENT IN CBE

- Consensus on competencies – not just what they are, but what they mean
- Consensus on what counts as demonstration of competency attainment
- Consensus on integrated demonstration of multiple competencies

**But what are the audiences we need to involve to reach consensus?**

# HOW DO WE GET THERE?

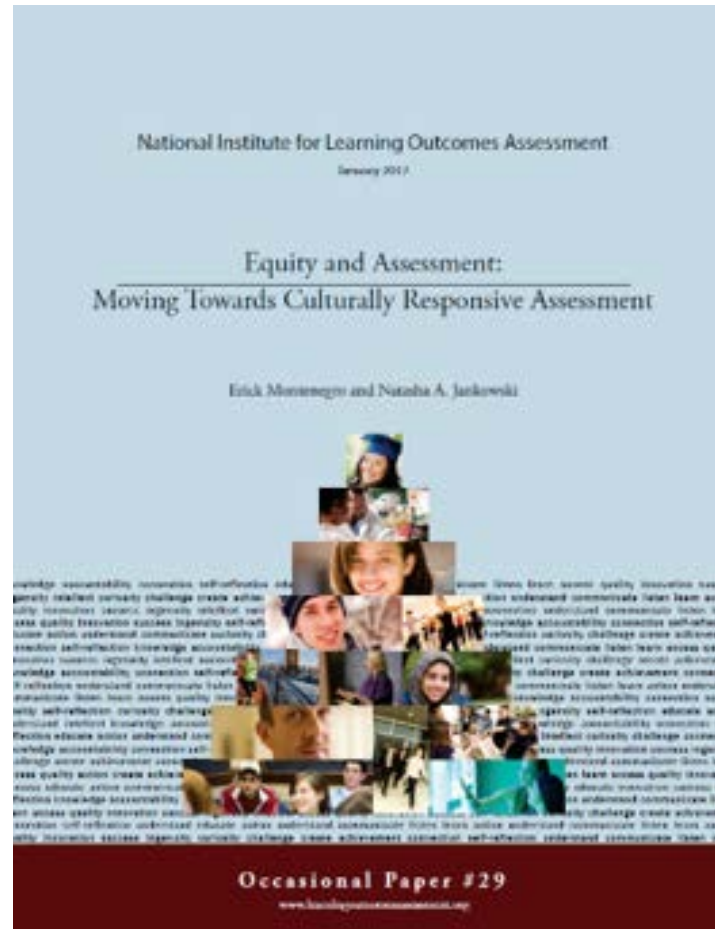
- Mapping
- Scaffolding
- Feedback
- Backwards-design



# WHERE DOES IT POSITION US TO GO?

- Prior-learning assessments
- Alternative transcripts
- Links to external measures
- Communication with employers
- Selection of assessments
- Communication with students

# EQUITY



# ALIGNMENT

- How do we ensure alignment between our assignments and a given competency for a learning experience?
- How do we create assignments and activities that will elicit student demonstration of specific competencies?
- How do we know that we have mapped our assignment to evaluative criteria?

# ALIGNMENT

Curriculum  Co-Curriculum

Program Competencies  Curriculum Design

Learning Design  Assignments

# ALIGNMENT

Curriculum  Co-Curriculum

Program Competencies  Curriculum Design

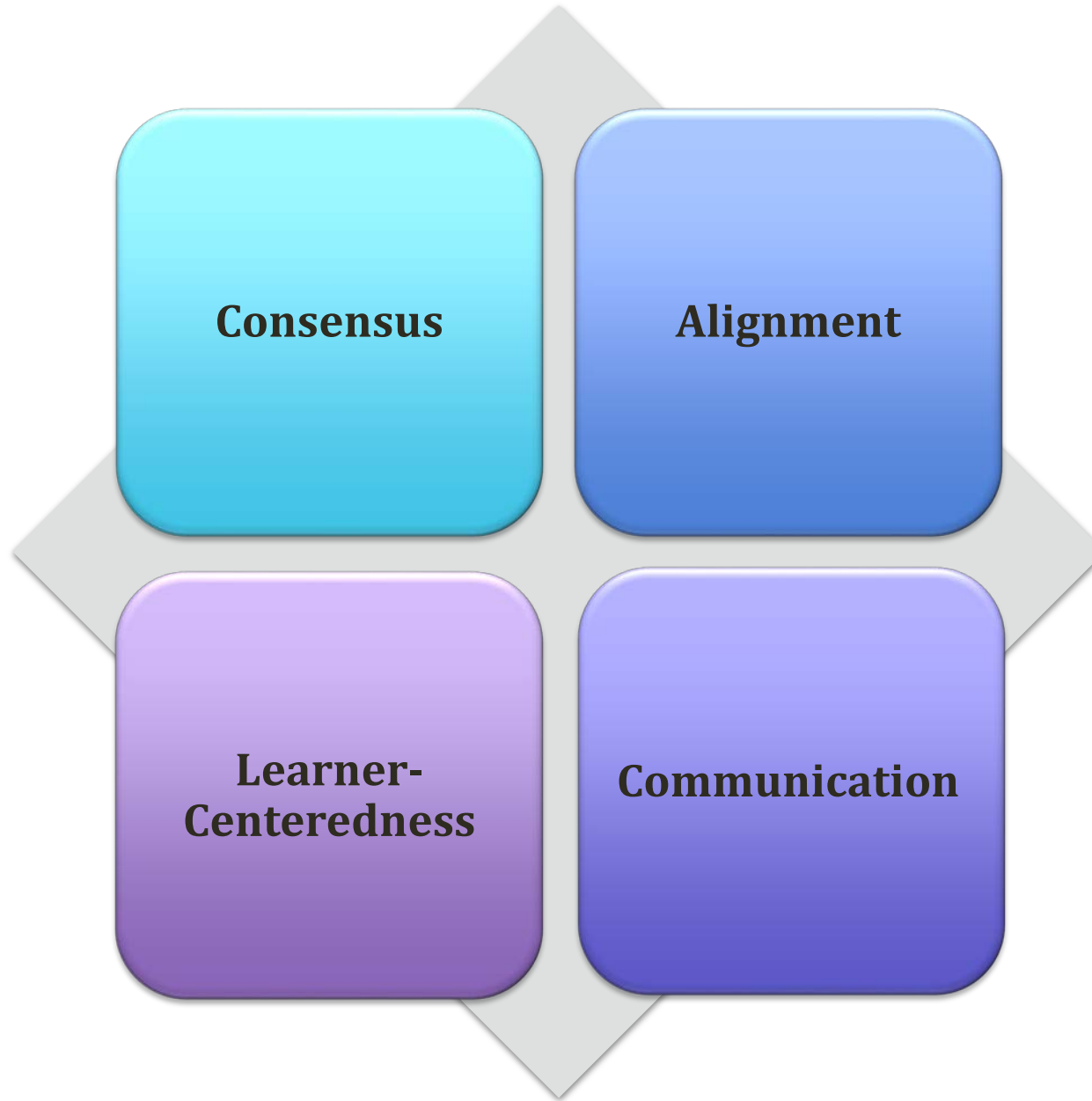
Learning Design  Assignments

**ON WHAT BASIS CAN WE SAY THESE ARE ALIGNED?**



# ALIGNMENT

- How do learning experiences build towards mastery through repetition and increasing expectations for particular competency?
- How do assignments and activities elicit learner demonstrations of a specific competency?



We can also use our skills in research and evaluation to be systematic in answering questions about alignment, both to improve our programs and to make the case for CBE.

# EVALUATION FOR IMPROVEMENT AND CASE-MAKING

Program Improvement  
*Formative Evaluation*

- How can I understand alignment, not just within a single learning sequence, but across my entire program?

Case-making  
*Summative Evaluation*

- How can I demonstrate my program is externally aligned and yields benefits for learners and employers?

# FOUR STEPS TO USING EVALUATION TO UNDERSTAND INTERNAL ALIGNMENT

1. FOCUS on a core competency.
2. TRACE competency forward through program.
3. MEASURE student performance.
4. EVALUATE alignment between assessment results within program, acting on gaps and mismatches.

# ALIGNMENT AND ASSESSMENT FOR PROGRAM IMPROVEMENT

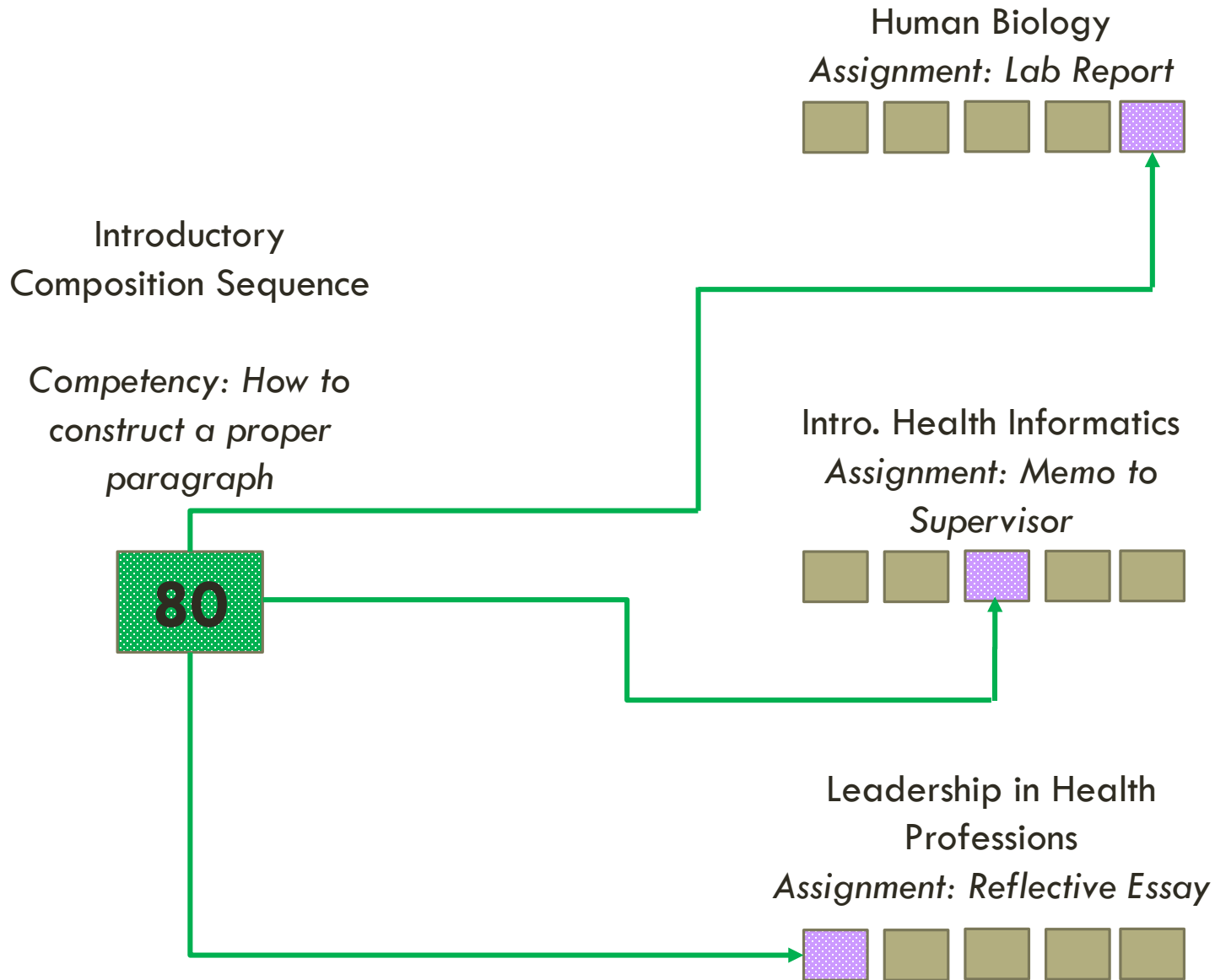
Introductory  
Composition Sequence

*Competency: How to  
construct a proper  
paragraph*

80

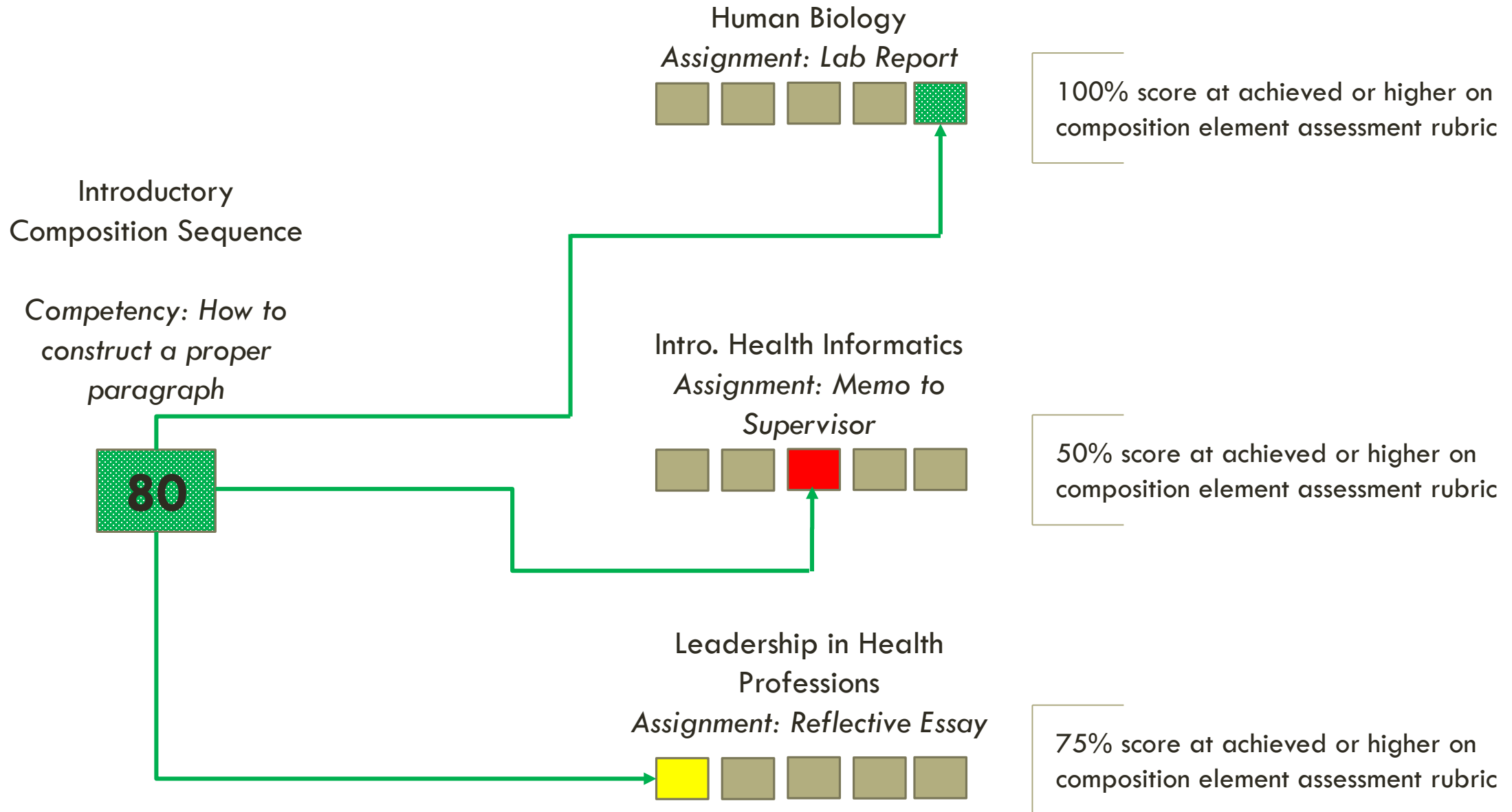
- Program design team following cohort of students in Health Informatics AA program.
- How can we *verify* the alignment of competencies and assessments within a program?
- **Step 1:** Identify a focal competency.

# Alignment and Assessment for Program Improvement: Tracing and Measurement Steps



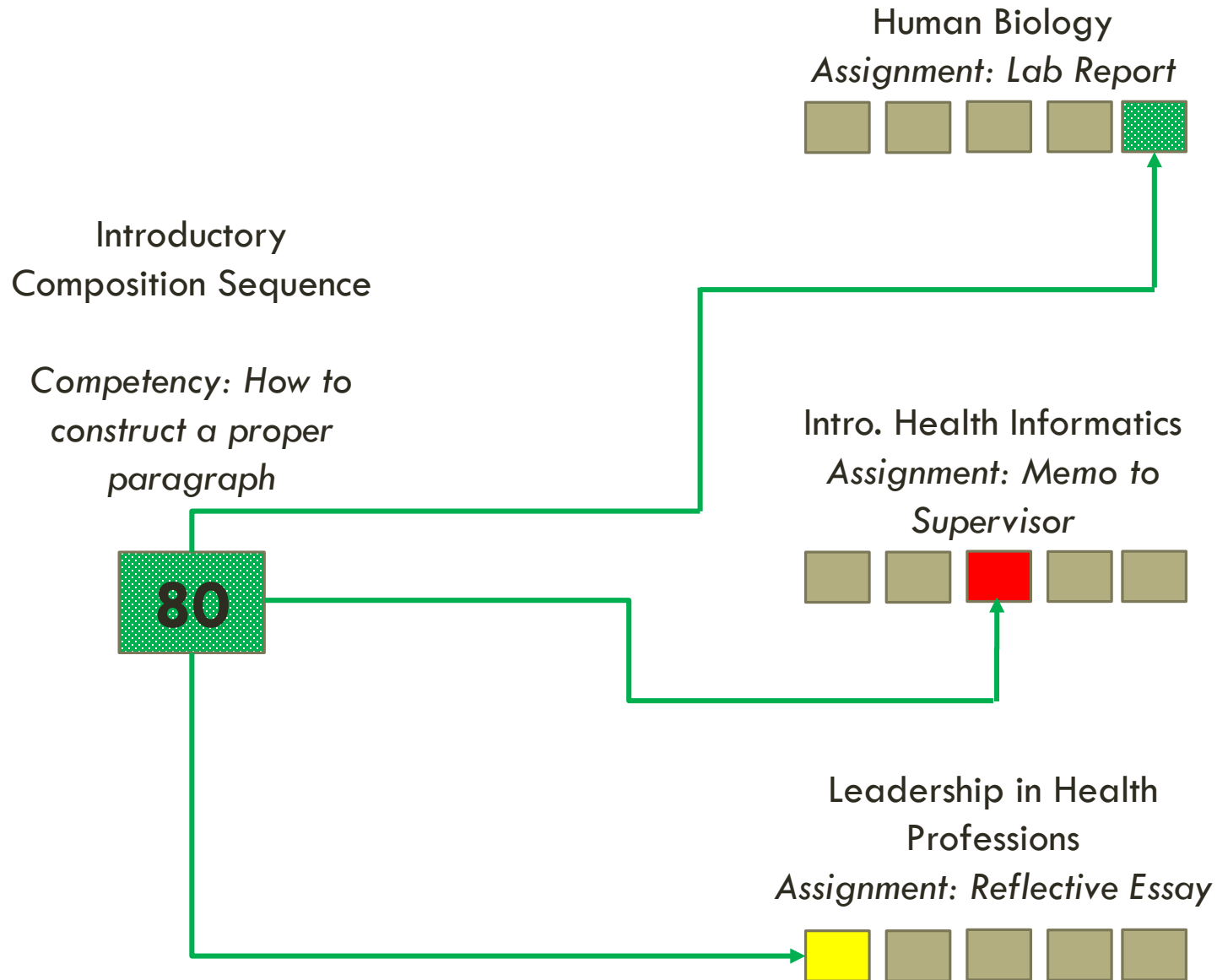
- **Step 2:** Trace where the competency appears later in substantively similar form.
- **Step 3:** Make plan for capturing data from subsequent, relevant assessments.

# Alignment and Assessment for Program Improvement: One Possible Outcome





# Alignment and Assessment for Program Improvement: Taking Action on Alignment Data



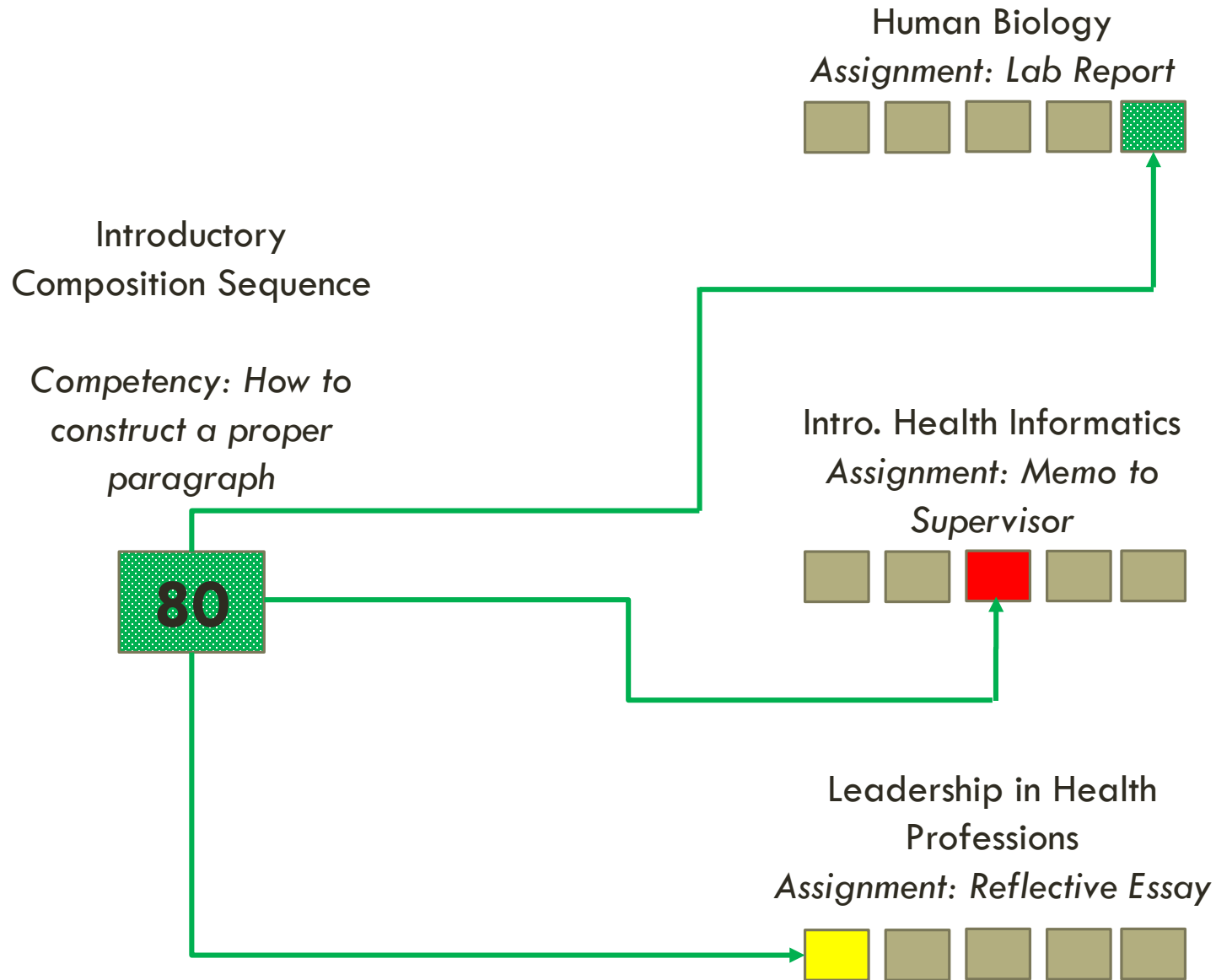
- **Step 4:** Take appropriate action on emerging alignment data.

Previous attendees know we have two tools to at our disposal:

**Root cause analysis**, which helps us identify where to take action;

**The Plan-Do-Study-Act cycle**, which gives us a framework for being systematic about our improvement action.

# Alignment and Assessment for Program Improvement: Possible Root Causes



There are several potential root causes:

- Competencies are distinct;
- Assessments are not aligned to competency;
- Mastery has been poorly defined.

How can we use data to better understand which may be at work?

# Alignment and Assessment for Program Improvement:

## “Plan” and “Do” Steps

### PLAN

Explore key dimensions of alignment between introductory composition sequence and three core courses later in the program.

### DO

For each cohort member, gather assessment from each of the four measurement opportunities and explore patterns in the data **using a simple table.**

## Alignment and Assessment for Program Improvement: “Study” Step

<b>Final Paragraph Assessment Score</b>	<b>“Achieved” after Initial Biology Assessment</b>	<b>“Achieved” after Initial Leadership Assessment</b>	<b>“Achieved” after Initial Informatics Assessment</b>
80-84	100%	45%	0%
85-89	100%	80%	35%
90-94	100%	90%	75%
95-100	100%	100%	100%

**Is one (or both) of our assessments presenting too little challenge to learners? (Perhaps.)**

## Alignment and Assessment for Program Improvement: “Study” Step

<b>Final Paragraph Assessment Score</b>	<b>“Achieved” after Initial Biology Assessment</b>	<b>“Achieved” after Initial Leadership Assessment</b>	<b>“Achieved” after Initial Informatics Assessment</b>
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90-94	100%	90%	75%
95-100	100%	100%	100%

**If we are confident in our judgment of “achieved” in the leadership module, is our threshold for mastery in composition too low? (Probably.)**

## Alignment and Assessment for Program Improvement: “Study” Step

Final Paragraph Assessment Score	“Achieved” after Initial Biology Assessment	“Achieved” after Initial Leadership Assessment	“Achieved” after Initial Informatics Assessment
80-84	100%	45%	0%
85-89	100%	80%	35%
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95-100	100%	100%	100%

**Even if we accept our standards for mastery in composition are too low, do these results suggest we have a substantial mismatch between key design elements in this part of the program? (Yes.)**

# Alignment and Assessment for Program Improvement:

## “Act” Step

ACT

Consider redesigning the learning and assessment activities in the Informatics course’s “Memo to Supervisor” assignment.

OR

ACT

Consider whether an incremental increase in the threshold for mastery in the composition sequence is indicated.

# THIS SAME APPROACH EXTENDS TO EXTERNAL ALIGNMENT

1. FOCUS on one or more core competencies required by employers.
2. TRACE backward through program to design create curricular and co-curricular learning opportunities and authentic assessments.
3. MEASURE student performance.
4. EVALUATE alignment between in-school assessment results and data held by the employer.



# Employer Requirement

*“Effective Writer”*



# Program of Study

*Writing Demonstrations*

Introductory Composition



Biology Lab



Health Informatics



Leadership in Healthcare

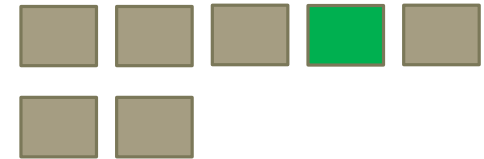


Capstone Course

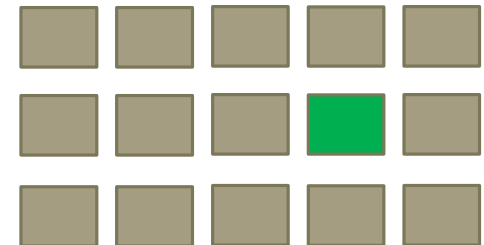


# Post-Completion

*HR Scoring of Cover Letter*



*Mgr's Review of Memo to Hospital Leadership*



*Salary*

# THREE IMPORTANT QUESTIONS ABOUT EXTERNAL ALIGNMENT

## Program Improvement

❶ Do summative measures of student performance (e.g., Capstone Course) have a relationship among my graduates and measures that are meaningful to the employer?

## Case-Making

❷ Do my graduates have substantially different results on measures that are meaningful to the employer than workers prepared in other ways?

❸ Do my graduates have substantially different results on measure that are meaningful to themselves than workers prepared in other ways?

# 7 KEYS TO SUCCESS IN EXTERNAL ALIGNMENT

- Collaborative relationships with relevant employers
- A shared understanding between the institution and the employer about the value of a “talent pipeline” between the parties
- A thorough understanding of core competencies the employer requires
- Backward design of program content to employer needs
- Systematically capturing data from valid assessments aligned to competencies
- Employer identifies and captures relevant workplace assessments of employee performance
- Employer agrees to share data about graduates for program improvement, and comparison group for case-making



Aligning, and evaluating alignment both internally and externally, can be (and has been) done ... just ask us how!

# WHAT YOU CAN DO NOW

- Begin to describe a framework that can guide your thinking about aligning program competencies, curriculum, learning design, and assessment
- Begin to leverage data to evaluate alignment, strengthening program design and making a stronger case for how CBE benefits learners.

# Q&A



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Questions after today?

Email us at [PostSecCBE@air.org](mailto:PostSecCBE@air.org)