Workshop Title: Connecting the Dots
Helping programs document their changes to strengthen and improve student learning

Suggested Citation:
Connecting the Dots

Helping programs document their changes to strengthen and improve student learning
Assessment Expectations

- Identify expected outcomes for student learning
- Measure the extent to which students attain those outcomes
- Use the data for improvement (actions)
Challenge: Connecting the Dots
Part 1 - Last year, faculty found that students were not meeting expectations in the area of [specify student learning outcome]. Students were [describe measure, data, and circumstance that prompted action].

Part 2 - In response the program made the following modifications [list completed action plans or modifications to the program].

Part 3
We will see the impact of these modifications in [timeframe] through the [indicate existing or new measure]. We will monitor the impact of these modifications through [describe new formative measures].

OR
This year, we can see that results are [compare results before and after modification].
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Example 1: Connecting the dots

Part 1 - Over the past few years, the program saw poor performance on the final lab report in the capstone course. Specifically in the area of quantitative analysis.

Part 2 - In response the program made the following modifications as recommended by the Undergraduate Curriculum Committee and implemented by faculty:

- created a 1 credit laboratory class to be taken in conjunction with an existing 300 level course
- increased the number of credits for ODUU 310 from 3 to 4 to include a recitation section to give more opportunities for students to work on quantitative problems.

Part 3 - We will see the impact of these modifications in the final lab report for the capstone course in 2 years. In the meantime, we will monitor impact by collecting grades and rubrics scores from a major assignment in the new lab and ODUU 310 course.
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Example 2: Connecting the dots

Part 1 - Faculty noticed that students in ODUU 351 were not meeting the target set by the program. Students were struggling to integrate knowledge of scientific foundations in a final project. This was then causing issues in a 400 level course.

Part 2 - As a result, the program and its instructors implemented additional online resources to supplement class lectures.

Part 3 - In the following year, students improved their project scores by 13% and their ability to integrate knowledge of scientific foundations was meeting the target set by the program.
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Where and how to connect the dots in Weave...

Interpretation and Use of results - Guided questions are included to help you tell this story

**TARGET / BENCHMARK**
90% of papers will rate as “Meets Standard” on all areas of the rubric.

**RESULTS / FINDINGS**
In 20-21, 87% (87/100) of papers rated as "Meets Standard" on all areas of the rubric.

**INTERPRETATION AND USE OF RESULTS**
2020-2021 INTERPRETATION **Please use the following prompts as a guide to analyze at least two results within the report**

1) Interpretation of Results:
What are the strengths and weaknesses of student learning in this area?
How do results compare to previous years? and between cohorts, for programs with both online and on-campus degree programs?

2) Modifications or Previous Changes:
What actions or changes were made this year or in previous years to improve this student learning outcome?
What information and discussions prompted these actions?
How/when will impact of these changes be assessed?

3) Planned Use of Results:
How is assessment information about the quality of learning shared and used for program decision making in areas such as curriculum, pedagogy, and other aspects that impact learning?
What actions do the results suggest need to be implemented?
What concrete actions will the program take to sustain or improve this outcome? What is the timeframe of these actions?
Where and how to connect the dots in Weave...

**Action Plan** - Highlight use of results to improve as a completed action item

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last year, [describe data or circumstance that prompted action and specify student learning outcome].</td>
</tr>
<tr>
<td>In response the program made the following modifications – [list completed action plans or modifications to the program].</td>
</tr>
<tr>
<td>This year, we can see that results are [compare results before and after modification] OR This year, we can see that the impact of these modifications through [describe new measure] OR We will see the impact of this modification in X number of years through a desired increase in [existing measure] scores.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BUDGET SOURCE</th>
<th>AMOUNT</th>
<th>DUE DATE</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enter text</td>
<td>$0.00</td>
<td>--/--/----</td>
<td>Complete</td>
</tr>
</tbody>
</table>
Common issues in our ability to connect the dots
The connection between the outcome and the measures are unclear.
Example 1

Outcome = Public Speaking

Target = 100% of all majors will complete the final research presentation as part of their degree requirement

The connection between the outcome and the measures are unclear
Example 2

Outcome = Written Communication

Target = 100% of students will pass the proposal or dissertation defense

The connection between the outcome and the measures are unclear
How does this relate to that?

How is the quality of the student learning outcome being assessed?

Is this actionable information?
Strengthen the connection

1. Where and how are students demonstrating the learning outcome?
2. What is the purpose of the measure and how does it relate to the outcome?
3. How is the measure of student learning evaluated (rubric, faculty panel, answer key, survey, etc.)?
4. What scale, criteria, or standard is used to evaluate the student learning outcome?
5. How is this consistently measured across administrations?
6. What makes this measure trustworthy and useful?

Answer our guided questions to describe the measure
Strengthen the connection

1. Outcome
2. Measures

- Use the Measures section of our How-to Guide to strengthen at least one of your measures.
Example 1: Measure - Research project rubric, Outcome – Research methodology

In [1] ODUU 400, students should complete a research project on a topic of their choosing. The purpose of the assignment is to have students [2] ask a research questions, provide a rationale for an appropriate methodology, conduct or outline that methodology, and then provide a list of possible recommendations. Students are asked to demonstrate advanced research methodology skills in this assignment.

Research projects are evaluated by [3] a rubric, with three rubric areas directly evaluating research methodology (research questions, methodology selection, methodology skills). Rubric sections are scored on a scale of [4] 1 - 4, with 4 for Exceeds Standard, 3 for Meets Standard, 2 for Approaches Standard, and 1 for Needs Attention.

The program addresses the consistent application of the rubric across administrations with [5] the use of a shared program rubric for the final project. All faculty members teaching this course use the program rubric. This measure and the data are considered to be trustworthy and useful because [6] the rubric was collaboratively developed by program faculty and informed by educational best practices in our field. Additionally, all senior students are required to take ODUU 400 and the research project represents a large portion of the final grade. For these reasons, the program believes that this measure will provide useful data for improving student learning.
The connection between the measures/data and the action is unclear.
Example 1

100% of students met the target set for the final exam, but actions were taken to improve.

The connection between the measures/data and the action is unclear.
Example 2

The dissertation defense is pass/fail and 100% of the students passed,

but the actions indicate that students were struggling and changes need to be made/were made.

2 The connection between the measures/data and the action is unclear

3
How does this relate to that?

What discussions and information led you to these conclusions/.actions?

How do the results fit into the larger landscape of student learning in the program?
Strengthen the connection

2 measures

3 actions

- Describe the discussions and information that led you to these conclusions and actions

TEMPLATE: All students met or exceeded the [existing target/measure/outcome]; while students were able to meet the objective, process observations and feedback from instructors indicate they continue to struggle [describe areas of student weakness related to the overarching outcome].
All students met or exceeded the target of scoring 80 or higher on the research proposal in COUN 835 & the Dissertation Research proposal in COUN 898; while students were able to meet the target for Research and Scholarship, process observation and feedback from instructor indicate they continue to struggle developing research questions that lead to adoption of aligned research methodologies, and then are able to follow-up with sound and complete analysis.

We are re-aligning our research sequence so that students have more standardized exposure to these issues between COUN 835 and COUN 898, including offering COUN 835 earlier to act as an advanced organizer for student learning in research. We anticipate that students will have less difficulty by the time they come to COUN 898.

We will be able to determine the impact of this modification in 2 years and reassess in COUN 835 and COUN 898. We will explore creating a rubric to better assess this outcome at these milestones.
Example - Strengthen the connection between the measures/data and the action

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Strengthen the connection

2 measures
3 actions

- Discuss areas in the curriculum/program that support the outcome
The connection between the action and the outcome is unclear
Example 1

Outcome = Applied Knowledge

Action Plans = Helping students improve their citations

The connection between the action and the outcome is unclear
Example 2

Outcome = Complex Decision Making

Action Plans = Adding discussion boards to the course

The connection between the action and the outcome is unclear
Example 3

Outcome = Written Communication

Action Plans = Vaguely written, adding modules to the course

The connection between the action and the outcome is unclear
How does this relate to that?

How is this action intended to improve student learning?
Strengthen the connection

- Clarify how the action is intended to improve student learning

Outcome: Complex decision making

Original action plan: Will improve communication and require online discussion
Strengthen the connection

Clarity how the action is intended to improve student learning

Outcome: Complex decision making

Revised action plan: Instructor will require online discussion posts in the course (this is currently optional) with several direct prompts designed to help students assess the complexity of the situation and the potential impacts of their decision making. The instructor believes that the student engagement that takes place within discussion boards (posting their own ideas, and responding to others) will provide a key learning experience for students to develop this skill.
Strengthen the connection

3 actions

1 outcomes

- Clarify how the action is intended to improve student learning

Outcome: Complex decision making

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Strengthen the connection

Create a new outcome related to the action

Original
Outcome = Applied Knowledge

Action Plans = Helping students improve their citations
Strengthen the connection

Create a new outcome related to the action

Revised
Existing Outcome = Applied knowledge
Action Plans = Strategies related to applying knowledge

New Outcome = Writing or Professionalism (following directions)
Action Plans = Helping students improve their citations
Strengthen the connection

Create a program outcome

Original
Outcome = Applied knowledge
Action plans = Curricular change
Strengthen the connection

3 actions

1 outcomes

Create a program outcome

Revised
Existing Outcome = Applied knowledge
Action Plans = Strategies related to applying knowledge

New Program Outcome = Maintain a high quality curriculum

New Measures = 3 year review of peer institutions and professional associations, 3 year review of curriculum map, annual student survey results about program (curriculum, courses, faculty) satisfaction

Action plans = Curricular change
CONNECTING THE DOTS

Next Steps

➔ Use these strategies to document recent actions taken to improve student learning

➔ Strengthen an existing area of the assessment report for 20-21