Teaching@IUPUI: An Introduction to Course Evaluation and Assessment

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Presentation Outline

• Why is assessment and evaluation important?
• What is assessment versus evaluation?
• How do you develop an assessment/evaluation plan?
• What are common data collection techniques?
• What are acceptable data analysis procedures?
• How can you ensure that your results are valid and reliable?
• What should you do with your findings?
Why is assessment and evaluation important?
## What is assessment vs. evaluation?

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>To improve student learning in-situ</td>
<td>To improve student learning next time</td>
</tr>
<tr>
<td>To monitor what students are learning</td>
<td>To understand what students learned</td>
</tr>
<tr>
<td>To improve teaching</td>
<td>To judge teaching</td>
</tr>
<tr>
<td>To obtain feedback on activities</td>
<td>To judge the effectiveness of activities</td>
</tr>
<tr>
<td>To improve communication and collaboration within the classroom</td>
<td>To communicate findings beyond the classroom</td>
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</table>
How do you develop an assessment/evaluation plan?

- Identify the Desired Results
- Determine Acceptable Evidence
- Plan Learning Experiences

Are the desired results, assessments, and learning activities ALIGNED?
What are common data collection techniques?

<table>
<thead>
<tr>
<th>Qualitative</th>
<th>Quantitative</th>
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<tbody>
<tr>
<td>• Observations</td>
<td>• Content tests</td>
</tr>
<tr>
<td>• Interviews</td>
<td>• Quizzes</td>
</tr>
<tr>
<td>• Open-ended surveys</td>
<td>• Clicker questions</td>
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<tr>
<td>• Field notes</td>
<td>• Likert-type survey questions</td>
</tr>
<tr>
<td>• Documents</td>
<td>• Course Rubrics</td>
</tr>
<tr>
<td>• Artifacts</td>
<td>• Any other quantized qualitative data</td>
</tr>
<tr>
<td>• Sound, video, etc.</td>
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</tbody>
</table>
What are acceptable data analysis procedures?

QUALITATIVE

Versus

QUANTITATIVE
How can you ensure that your results are valid and reliable?

**QUANTITATIVE**

**Validity Aspects**
- Content
- Structural
- Generalizability
- Substantive
- Consequential
- External

**Techniques for attainment**
- Expert review
- Factor analysis
- Scaling up
- Prior theory, literature review
- Iteration, sampling in appropriate contexts
- Correlation with external variables

**QUALITITATIVE**

**Validity Aspects**
- Theoretical
- Procedural
- Communicative
- Pragmatic
- Ethical
- Process Reliability

**Techniques for attainment**
- Prolonged engagement
- Critical incident technique
- Peer debriefing
- Exhaustiveness or saturation
- Internal Review Board
- Thick description, member checking

An example based on a project...

CTL Assessment Strategies
• Classroom observations focused on (i) pedagogy, (ii) collaborations, and (iii) means to improve student learning.
• Focus groups focused on means to improve (i) student satisfaction and (ii) student-instructor interactions.
• Design of rubrics to assign points to student design artifacts and presentations

SEIRI Evaluation Strategies
• Quantitative: A pre and post self-report survey design used to test two hypotheses
• Triangulation: A thematic merging of data where quantitative findings inform qualitative data collection and analysis
• Qualitative: Multiple interviews used to help explain quantitative findings and further adding nuance to the research questions
What should you do with your findings?

Educational Practice

Identifies and motivates...

Questions Ideas

Which lead to...

Educational Research

That results in...

Answers Insights

Which help improve...

Developing an Assessment/Evaluation Plan

**Audience Question:**

Please describe a course objective.

We will envision possibilities for or questions we will need to address to assess/evaluate the said objective.
Thank you! Questions?

Check out our resources at:
https://seiri.iupui.edu/resources/index.html

Slides available at:
https://seiri.iupui.edu/doc/CTL_Webinar_final.pdf

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