Meeting the Challenge of Closing the Loop for Student Learning Outcome Assessment

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Lone Star College System

TAIR, February 18-21, 2014
Addison (Dallas), Texas
At the end of this presentation, participants will be able to

I. Define Student Learning Outcome Assessment Terms
II. Use strategies to meet challenges of Student Learning Outcome Assessment based on what has been learned from Lone Star College System’s Assessment Practice
III. Design a PLO Assessment Plan
IV. Compose a PLO Closing-the-Loop Report
Lone Star College System

Over 76,000 credit students in Fall 2013
Six main campuses
Six centers
Two University Centers
Eleven ISDs in service area
62% Female
37% White, 19% Black, 30% Hispanic
36% between 20 and 24
ORIE Structure and Tasks

**Institutional Research**
- Ad Hoc Reporting Report (generation & interpretation)
- Standardized Reporting

**Enterprise Reporting**
- State Reporting
- Dashboards
- Automated Reporting

**Institutional Effectiveness**
- Continuous Improvement
- Learning Effectiveness
- Operational Effectiveness
Promote a culture of continuous improvement and data-informed decision making

- Leading the institutional planning, assessment, and effectiveness processes
- Providing timely, accurate, objective, and clear reporting to internal and external stakeholders
- Coaching stakeholders for report interpretation and context
- Collaborating with other institutions in pursuit of best practices in planning, assessment, and institutional research
The student learning outcome (SLO) is a statement that explains what the student is learning, including the accumulated and demonstrated knowledge, skills, abilities, behaviors, and habits of mind, as a result of actively participating in the course or program of study.
Program Learning Outcomes (PLOs) answer the question:

What will students know or be able to do when they exit the program?

Course Learning Outcomes (CLOs) answer the question:

What will students know or be able to do when they complete the course?
**Definition of Terms**

**Direct measures:** Refer to the type of data that can be used to directly measure students’ knowledge and skills (examples: exams, essays, and skill demonstration, etc.)

**Indirect measures:** Refer to the type of data that can be used to infer student learning or achievement (surveys, interviews, and graduation rates, etc.)
**Program level measures:** Refer to assignments assessing students’ knowledge and skills at the end of the program, not embedded in any particular course (Comprehensive exit exam, licensure exam, and capstone assignments, etc.)

**Course-embedded measures:** Refer to assignments given in specific courses selected to measure PLOs (exams and essays in a history or an English course)
Challenges of SLO Assessment

Why do I have to assess each learning outcome with separate assignments? Isn’t a course grade enough?

Challenge: Concern about common assessment

Challenge: Confusion about SLO assessment and course grade/too much work!
Challenges of SLO Assessment

Challenges:

1. Make no recommendations;
2. Make recommendations but don’t implement them;
3. No follow up reports on implementation;
4. Make recommendations that are too broad to be implemented.

“We have met the outcome, so no recommendations for improvement at this time.”
Involving Faculty in the SLO Assessment Process

SLO Assessment Process

System Level
- Curriculum Team
  - Identify Course and Develop SLOs

Campus Level
- Curriculum Team Representatives, Deans, Chairs, Faculty

Plan:
- Develop Assessment Plan

- Analyze and Use Results:
  - Campus Discipline SLO Rep/Liaisons
  - Reports on Implementation of Recommendations
  - Dean, Chair, Faculty Implement Recommendations

- Re-assess

Assess:
- Dean and Chair Identify Sections, Faculty Assess SLOs

Report:
- Individual Faculty Submits SLO Results
- Using SLO Data Entry Tool, OIE Aggregates Data

* If assessment plan stays the same, then re-assess.
## Integrating PLO Assessment with Regular Class Assignments or Program Exit Assessment

The PLO Assessment at Lone Star College System involves forms and compliance assistance for various academic disciplines and program-level measures. The alignment approaches can be categorized as bottom-up or top-down.

### PLO Assessment Forms

<table>
<thead>
<tr>
<th>Forms in Compliance Assist</th>
<th>Users</th>
<th>PLO Alignment Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLO Assessment Form</td>
<td>AA/AS Academic Disciplines</td>
<td><strong>Bottom-up approach:</strong> Course Level SLOs aligned with AA/AS PLOs</td>
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<tr>
<td>PLO Assessment Form</td>
<td>• AAS/Certificate Workforce Programs • AAT Program</td>
<td><strong>Top-down approach:</strong> AAS/Certificate &amp; AAT PLOs, assessed with course-embedded and/or Program level measures</td>
</tr>
</tbody>
</table>
## Integrating PLO Assessment with Regular Class Assignments or Program Exit Assessment

### PLO Map (Example)

<table>
<thead>
<tr>
<th>Program Learning Outcomes</th>
<th>GOVT2311</th>
<th>GOVT2304</th>
<th>PLO Assessment1*</th>
<th>PLO Assessment2*</th>
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<tbody>
<tr>
<td>Students will demonstrate a level of civic engagement</td>
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<td>Students will understand the role that Mexican Americans play in the U.S. political system</td>
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<td>Students will be able to present complex ideas orally</td>
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- **Internship Project**
- **Essay on the role of Mexican Americans in the U.S. political system**
- **In-class presentation of research topic**

* Including exit exams, capstone project, portfolio, thesis, dissertation, final report, etc.

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*Courses used to assess PLO*

*Program Level Measure*

*Course Embedded Measure*
Integrating PLO Assessment with Regular Class Assignments or Program Exit Assessment

**PLO Map (Worksheet)**

<table>
<thead>
<tr>
<th>Program Learning Outcomes</th>
<th>Course 1</th>
<th>Course 2</th>
<th>Course 3</th>
<th>Course 4</th>
<th>PLO Assessment 1 *</th>
<th>PLO Assessment 2 *</th>
<th>PLO Assessment 3 *</th>
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* Including exit exams, capstone project, portfolio, thesis, dissertation, final report, etc.
Participants’ Activity

Question for Pair Dialogue:

1. How is PLO assessment integrated with faculty’s regular course assessment at your college?

2. Can you think of more ways to make assessment meaningful to faculty?

“Take this test for SLO assessment.”
Program Learning Outcome Assessment Plan (Worksheet)

<table>
<thead>
<tr>
<th>PLO Statement</th>
<th>Assessment Method A: Measure (Student Work/Performance)</th>
<th>Assessment Method B: Teacher's Evaluation Method</th>
<th>Criterion (What cut-off score is considered as meeting PLO for each student?)</th>
<th>Target Outcome (Group Success: % of the group meeting the PLO)</th>
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What other components are needed to guide the assessment activities?
**Associate Degree in Political Science Program Learning Outcomes**

**Mission**: The Political Science Department is committed to producing students who are knowledgeable about the operation of Texas and national government. Students should also have the ability to think critically about important political topics that will prepare them for transfer to higher institutions of learning and provide a framework for lifetime learning skills.

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<tr>
<th>PLO Statement</th>
<th>Assessment Method A: Measure (Student Work/Performance)</th>
<th>Assessment Method B: Teacher's Evaluation Method</th>
<th>Criterion (What cut-off score is considered as meeting PLO for each student?)</th>
<th>Target Outcome (Group Success: % of the group meeting the PLO)</th>
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<tbody>
<tr>
<td>Students will understand the American politics subfield of political science.</td>
<td>GOVT2304 (Intro to Political Science) Essay Question on American Politics</td>
<td>Essay Assessment Rubric</td>
<td>A score of 3 or above on essay (on a scale of 1-5)</td>
<td>80% of the students answering the essay question will get a score 3 or above.</td>
</tr>
<tr>
<td>Students will understand the political theory subfield of political science.</td>
<td>GOVT2304 Essay Question on Political Theory</td>
<td>Essay Assessment Rubric</td>
<td>A score of 3 or above on essay (on a scale of 1-5)</td>
<td>80% of the students answering the essay question will get a score 3 or above.</td>
</tr>
<tr>
<td>Students will demonstrate a level of civic engagement</td>
<td>Internship Project</td>
<td>Comments on strengths and weaknesses of the students’ internship performance in an evaluation letter</td>
<td>70% of the comments in the evaluation letter are positive.</td>
<td>95% of the students will get a positive evaluation letter from their internship supervisor.</td>
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</table>
Involving faculty in creating a PLO Closing the Loop Report

PLO Closing the Loop Report (Worksheet)

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<tbody>
<tr>
<td>Faculty discussed the actual results and found that students who scored below “3” failed to demonstrate critical thinking skills when designing the intervention plan, which prompted the necessity to implement critical thinking activities in OTHA2302.</td>
<td>Faculty will design student critical thinking activities and incorporate these activities in OTHA2302.</td>
<td>The recommendation, “Faculty will design student critical thinking activities and incorporate these activities in OTHA2302,” was implemented by Faculty who designed and implemented the critical thinking activities in OTHA2302 in Fall 2013.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What other components are needed to close the loop on PLO assessment?

Faculty will design student critical thinking activities and incorporate these activities in OTHA2302.
➢ Report on the Actual Results
➢ Interpret the Data
➢ Make Recommendations (Future Tense)
➢ Implement Recommendations
➢ Report on Implementation (Past Tense)
Report on the Actual Results

1. Report the % meeting criteria (group success)
2. State if the targeted outcome was met or not
   (CA: Results of the target outcome. Was the student learning outcome met?)

**Example 1**

**PLO:** Identify and describe the use of various ceramic materials, production methods, and firing processes. (Art)

**Target Outcome:** 70% of students enrolled will pass the final exam for the course.

**Actual Results:** 85% of the students in the course passed the final exam, exceeding the target.
1. Report the % meeting criteria (group success)
2. State if the target was met or not
(CA: Results of the target outcome. Was the student learning outcome met?)

Example 2

PLO: Gather information and formulate conclusions regarding the client's needs and priorities to develop a client centered intervention plan. (Occupational Therapy Assistant)

Target Outcome: 80% of students should score a 3 and 100% should score a 2 or above on a scale of 1-3).

Actual Result: 54% of the students scored a 3 (Excellent) and 100% of the students scored a 2 (Satisfactory) or above. The target was partially met.
1. Explain what factors contributed to the results.
2. Address why the target was met or not met?

Example 1
PLO: Identify and describe the use of various ceramic materials, production methods, and firing processes. (Art)
Target Outcome: 70% of students enrolled will pass the final exam for the course.
Actual Results: 85% of the students in the course passed the final exam, exceeding the target.

Interpretation of Data: Further analysis of the data indicated that of the 6 students who did not meet the outcome, 3 were clustered in one section taught by an adjunct instructor. This raised the issue about adjunct instructors’ professional development.
Example 2

**PLO:** Gather information and formulate conclusions regarding the client's needs and priorities to develop a client centered intervention plan. (Occupational Therapy Assistant)

**Target Outcome:** 80% of students should score a 3 and 100% should score a 2 or above on a scale of 1-3).

**Actual Result:** 54% of the students scored a 3 (Excellent) and 100% of the students scored a 2 Satisfactory). The target was partially met.

**Interpretation of Data:**
Faculty discussed the actual results and found that students who failed to score “3” failed to demonstrate critical thinking skills when designing the intervention plan, which prompted the necessity to implement critical thinking activities in OTHA2302.
1. Make recommendations based on your interpretation of data
2. Types of Recommendations include the following:

<table>
<thead>
<tr>
<th>Recommendation Types</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **Instructional Strategies** | (1). Adjust course delivery to teach the course using a topics-based approach and make it more engaging by incorporating active learning strategies and case studies to increase retention of concepts.  
(2). We would like to incorporate more hands on activity in lab to reinforce learning. |
| **Student support**          | (1). Continue to advise and motivate students: encourage attendance and encourage completion of coursework.  
(2). Offer tutoring during office hours                                          |
<table>
<thead>
<tr>
<th>Recommendation Types</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Curriculum Changes</strong></td>
<td>(1). Add more relevance and pertinence to the biology non-majors’ curriculum so that non-majors can use the basic concepts in biology to better understand social issues related to the environment and public health.</td>
</tr>
<tr>
<td></td>
<td>(2). We would like to add a research paper in the course, showing uses of the information in real life.</td>
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<td></td>
<td>(3). Require uniform amount of time to teach the learning outcome (e.g. 45 minutes).</td>
</tr>
<tr>
<td><strong>Teacher Development</strong></td>
<td>(1). We would like to provide professional development for faculty on collaborative learning.</td>
</tr>
<tr>
<td></td>
<td>(2). Implement faculty mentoring system</td>
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</tbody>
</table>
Implement recommendations in the real world. Ways to implement recommendations include the following:

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<tr>
<th>Types of Recommendations</th>
<th>Ways to Implement Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Changes</td>
<td>Carry the recommendation to Unit Effectiveness Plan (UEP) reflected by a Unit Objective Statement</td>
</tr>
<tr>
<td>Student Support</td>
<td>Or Implement the recommendations by Departmental Activities, taskforce work or Chair’s Requirements</td>
</tr>
<tr>
<td>Faculty Development</td>
<td></td>
</tr>
<tr>
<td>Instructional Strategies</td>
<td>By faculty classroom activities</td>
</tr>
<tr>
<td>Other</td>
<td>By other activities</td>
</tr>
</tbody>
</table>
Report on what and how recommendations were implemented, using past tense.

Example 1 (Carry the Recommendations to UEP):

The recommendation, “Continue to advise and motivate students: encourage attendance and encourage completion of coursework,” was addressed in the 2013-14 Unit Effectiveness Plan, Objective 2—“Instructors will call students with 2 or more absences to encourage them to attend class.”
Example 2 (Carry the recommendations to UEP):

The recommendation, “Offer full semester courses (16 weeks) rather than 8 week course, and restrict online enrollment to those students with a grade point average of 3.5 or better,” was addressed in the 2013-14 Unit Effectiveness Plan, Objective 4—“Implement the long semester and GPA requirement for the online courses.”
Example 3 (Departmental Activity and Chair’s Requirement)

The recommendation, “Provide professional development to adjunct faculty with regard to the course content standards set by the department and require them to abide by the standards,” was implemented by the chair who organized the professional development event and also communicated the requirements to the adjunct faculty in Fall 2013.
Example 4 (Faculty Classroom Activity):
The recommendation, “Faculty will design student critical thinking activities and incorporate these activities in OTHA2302,” was implemented by Faculty who designed and implemented the critical thinking activities in OTHA2302 in Fall 2013.
Participants’ Activity

Challenges | Solutions
---|---
1. | 1.
2. | 2.
3. | 3.
<table>
<thead>
<tr>
<th>Challenges</th>
<th>Solutions</th>
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<tbody>
<tr>
<td>1</td>
<td>1.</td>
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<td>2</td>
<td>2.</td>
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<td>3</td>
<td>3.</td>
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</tbody>
</table>
Participants’ Activity

What did you learn from the Lone Star College System’s Assessment Practice?
Thank you!
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