Assessment-based Planning: A Systems Approach

Connecting the Classroom to the College Mission

ACCJC Annual Conference
April 6, 2017

Los Angeles Harbor College
Dr. Joachin Arias
Faculty SLO Coordinator & Chair, Assessment Committee
Dr. Edward Pai
Dean, Institutional Effectiveness
Historical Development of the Assessment Process
Evidence of “Continuous Sustainable Quality Improvement”

- **Phase I** – Introductory period (2002 – 2006)
  Creation of SLO/Assessment Webpages

- **Phase II** – Development and Data Collection (2006 – 2015)
  Assessment Cycle 1 (2006 – 2012)
  Posting of Assessments Using Word-Based Reporting Forms

- **Phase III** – Integration of Assessment, Planning, Resource Allocation
  Assessment Cycle 3 (Fall 2015 - Current)
  SLO/Campus Wide Assessment Guidebook.
  Web-Based Data Management System

- **Phase IV** – Improving the Quality of the SLO assessments.
  Macro (Soft Skills) vs Micro (Hard Skills)
Accreditation Visitation 2006

Compliance Recommendations:

1. The team recommends that as part of its assessment of its evaluation mechanism, the College should revisit and revise as necessary the current instructional program review process and review it for effectiveness in improving instructional programs based in evidence that is relevant, verifiable, representative, and actionable using District/College institutional research data (not program self-developed data) and that a key measure of program success be its response to discipline, cluster, and College developed SLOs. The team suggests that the review and revision of the instructional program review process should be completed with sufficient time to allow review and confirmation that the College has an operational and sustainable instructional program review process as evidenced by completed program review cycles inclusive of all instructional programs. Further the College program review policy and procedure manual should reflect the key and decisive role of the administration of the College in the decisions effecting scheduling of courses and the continuance/discontinuance of programs (IB, IB1, IB3, IB4, IB5, IB6, IB7, IIA2, IIA2a, IIA2f, IIA6b, IVB.2).

2. The College needs to develop an on-going and systematic cycle of evaluation, integrated planning, resource allocation, implementation, and re-evaluation. This should be based in deep analysis of District and institutional research provided data and assure a broad involvement and participation in the institutional planning cycle (IB1).

3. Using the planning process and the governance process the College should construct a meaningful dialogue about student learning which assures understanding and infusion of Student Learning Outcomes. This dialogue should rely on robust information focused on the accomplishment of students as defined in program, inter-departmental, and institutional student learning outcomes. The team suggests that the College revisit the Commission’s definition of dialogue and description of Shaping the Dialogue for assistance. (IB1, IB2, IB4, IIA1c).
Accreditation Visitation 2012

Compliance Recommendations:

1. As previously stated in Recommendation 2 by the 2006 Comprehensive Evaluation Team and in order to meet Standards, the planning process needs to reflect an ongoing and systematic cycle of evaluation, integrated planning, resource allocation, implementation, and re-evaluation that use data as the central focus to inform decisions. The process needs to be made clear to the college constituencies so they understand the steps, as well as which plan informs which plan. In addition, human resource planning for classified personnel and administrators needs to be evidence-based and integrated with institutional planning and program review. An evaluation of the effectiveness of the planning process as well as the effectiveness of programs and services need to be included. (I.B.2, I.B.3, I.B.6, I.B.7, III.A.6)

2. As previously stated in Recommendation 1 by the 2006 Comprehensive Evaluation Team and in order to meet the Standards, the college needs to demonstrate an operational and sustainable instructional program review process as evidenced by completed program review cycles inclusive of all instructional programs. (II.A.1, II.A.2, II.A.2.e)
Accreditation Visitation 2016

Compliance Recommendations:

None
The “Systems” Approach

• Von Bertalanffy defined a system as "elements in standing relationship"

• Harbor’s Assessment-based Planning System (HAPS) makes the following assumptions:
  • Alignment of Mission, Institutional Outcomes and Assessment activities
    • Identifying the “Elements” and “Relationships” in HAPS
    • Establishes the “Mission Hierarchy” and roll-up assessment of all outcomes
  • Assessment-based Planning Model
    • Assessments result in Improvement Actions that make up a Unit’s Plan
  • Closing the Assessment Loop
    • Macro vs. Micro Assessment processes to improve quality
      • Macro processes assure Institutional Outcomes are achieved
      • Micro processes assure SLOs are delivered
“Elements” of the System

Pyramid of Student Success
(with thanks to John Wooden)

Student Success / College Mission

Institutional Outcomes:
ISLOs:
Communication, Cognition, Information Competency, Social Responsibility
SEMP Goals:
Access & Preparation, Teaching & Learning, Organizational Effectiveness, Resources & Collaboration

Program-level Outcomes:
PLOs:
Courses in Program or Pathways that lead to a degree or certificate
GELOs:
Courses in a discipline that lead to a GE degree/requirement
Service Areas:
Student Support Administration
SEMP Objectives / Strategies

Course/Service-level Outcomes:
SLOs:
All courses that have assigned grades and services with a student learning component
SAOs:
Services Area Outcomes for Student Support and Administrative Services
SEMP Measures:
Student Achievement Outcomes metrics and standards (IEPI, SSSP, Strong Workforce), Federal, State or Grant requirements,
“Relationships” between the Mission and Institutional Outcomes

• Parallels with Student Achievement and Student Learning outcomes were becoming clear

• ISLO-PLO-SLO alignments/hierarchy were already identified (Nichols’ 5-column model)

  Example: Chaffey College, Crafton Hills, etc.…

• A conceptual model became clear…
Alignment of the Mission and Institutional Outcomes – the “Mission Hierarchy”

- Institution
- Institution-level Outcomes
- Program / Service Area Outcomes
- Student Achievement and Course / Service-level Learning Outcomes

- Mission
- SEMP/Goals
- ISLOs
- Objectives
- PLOs
- Measures
- SLO/SAOs
The Mission Hierarchy – Results

- Assessment of SLO process enabled (we can count in real time, we know which ISLOs and courses have or haven’t)
- Alignment of ISLOs, PLOs and SLOs enables use of the roll-up model
- Roll-up model allows assessment of ISLOs and PLOs
- As long as SLOs are being assessed, everything else is being assessed
- As long as ISLO and SLO exists, PLOs, GELOs and the middle part can be fluid and college-based

*Links the classroom to the college mission*
Assessment-based Planning

- All plans are based on an assessment of outcomes

- Two types of outcomes:
  - Student Achievement (Strategic Goals)
    - State scorecard
    - Assessed in Program Review
  - Student Learning (ISLOs)
    - Workforce skills/soft skills
    - Assessed in the SLO Process
Alignment of the Mission Hierarchy and Planning

- Institution
  - Mission
  - Institution-level Outcomes
    - SEMP/Goals
    - ISLOs
  - Program / Service Area Outcomes
    - Objectives
    - PLOs
  - Student Achievement and Course / Service-level Learning Outcomes
    - Measures
    - SLO/SAOs
  - Outcomes Assessment-based Planning → Improvement Action
    - Improvement Actions
    - Improvement Actions
Assessment-based Planning

SEMP

Learning Outcomes
Closing the Loop

• Macro versus Micro Assessment Processes
  • Macro processes assure Institutional Outcomes are met
    • Aligns course SLOs with ISLOs
    • Assures ISLOs are being achieved
      • Assessment results can be disaggregated at the course level to identify where they are NOT being achieved
    • Programs are achieving their outcomes
      • ISLOs are being delivered
      • Assessment responsibilities are being executed
      • Unit Plans reflect the results of assessment activities
  • Micro processes assure course outcomes are being achieved
    • Course-based SLOs are functioning
    • Course-based SLOs are being achieved
    • Improvement activities (i.e., unit plans) are identified and recorded where appropriate based on assessment activities
Conceptual/Data Roll-up Model Examples (Macro)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Measure_explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional_Outcome: (79)</td>
<td></td>
</tr>
<tr>
<td>Institutional_Outcome: Goal 1: Access and Preparation for Success (152)</td>
<td></td>
</tr>
<tr>
<td>Institutional_Outcome: Goal 2: Teaching and Learning for Success (307)</td>
<td></td>
</tr>
<tr>
<td>Institutional_Outcome: Goal 3: Organizational Effectiveness (97)</td>
<td></td>
</tr>
<tr>
<td>Institutional_Outcome: Goal 4: Resources and Collaboration (54)</td>
<td></td>
</tr>
<tr>
<td>Institutional_Outcome: ISLO 1 - Communication (316)</td>
<td></td>
</tr>
<tr>
<td>Institutional_Outcome: ISLO 2 - Cognition (530)</td>
<td></td>
</tr>
<tr>
<td>Institutional_Outcome: ISLO 3 - Information and Technological Competency (143)</td>
<td></td>
</tr>
<tr>
<td>Institutional_Outcome: ISLO 4 - Social Responsibility and Ethics (84)</td>
<td></td>
</tr>
<tr>
<td>Institutional_Outcome: Other Requirement (52)</td>
<td></td>
</tr>
<tr>
<td>Add new item</td>
<td></td>
</tr>
</tbody>
</table>
### Assessment Results by Institutional Outcome and Cluster

<table>
<thead>
<tr>
<th>SEMP Goals</th>
<th>Academic Affairs</th>
<th>Administrative Service</th>
<th>Student Services</th>
<th>Total Count</th>
<th>Total Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1: Access and Preparation for Success</td>
<td>10 12.2%</td>
<td>0.0%</td>
<td>30 45.5%</td>
<td>40</td>
<td>23.5%</td>
</tr>
<tr>
<td>Goal 2: Teaching and Learning for Success</td>
<td>58 70.7%</td>
<td>0.0%</td>
<td>31 47.0%</td>
<td>89</td>
<td>52.4%</td>
</tr>
<tr>
<td>Goal 3: Organizational Effectiveness</td>
<td>4 4.9%</td>
<td>3 13.6%</td>
<td>1 1.5%</td>
<td>8</td>
<td>4.7%</td>
</tr>
<tr>
<td>Goal 4: Resources and Collaboration</td>
<td>2 2.4%</td>
<td>15 68.2%</td>
<td>1 1.5%</td>
<td>18</td>
<td>10.6%</td>
</tr>
<tr>
<td>Other Requirement</td>
<td>8 9.8%</td>
<td>4 18.2%</td>
<td>3 4.5%</td>
<td>15</td>
<td>8.8%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>82 100.0%</td>
<td>22 100.0%</td>
<td>66 100.0%</td>
<td>170</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Institutional Student Learning Outcomes</th>
<th>Academic Affairs</th>
<th>Student Services</th>
<th>Total Count</th>
<th>Total Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISLO 1 - Communication</td>
<td>123 29.9%</td>
<td>0.0%</td>
<td>123</td>
<td>29.3%</td>
</tr>
<tr>
<td>ISLO 2 - Cognition</td>
<td>156 47.6%</td>
<td>4 50.0%</td>
<td>200</td>
<td>47.6%</td>
</tr>
<tr>
<td>ISLO 3 - Information and Technological Competenc</td>
<td>69 16.7%</td>
<td>3 37.5%</td>
<td>72 17.1%</td>
<td></td>
</tr>
<tr>
<td>ISLO 4 - Social Responsibility and Ethics</td>
<td>24 5.8%</td>
<td>1 12.5%</td>
<td>25 6.0%</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>412 100.0%</td>
<td>8 100.0%</td>
<td>420</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
## Assessment Results by Institutional Outcome and Cluster

### 2015-16 Final Summary: Assessment Results by Institutional Outcome and Cluster

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Academic Affairs</th>
<th>Administrative Services</th>
<th>Student Services</th>
<th>Total Count</th>
<th>Total Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1: Access and Preparation for Success</td>
<td>16</td>
<td>36</td>
<td>0%</td>
<td>52</td>
<td>13%</td>
</tr>
<tr>
<td>Goal 2: Teaching and Learning for Success</td>
<td>215</td>
<td>37</td>
<td>6%</td>
<td>254</td>
<td>63%</td>
</tr>
<tr>
<td>Goal 3: Organizational Effectiveness</td>
<td>34</td>
<td>10</td>
<td>11%</td>
<td>53</td>
<td>13%</td>
</tr>
<tr>
<td>Goal 4: Resources and Collaboration</td>
<td>2</td>
<td>3</td>
<td>3%</td>
<td>24</td>
<td>6%</td>
</tr>
<tr>
<td>Other Requirement</td>
<td>14</td>
<td>4</td>
<td>12%</td>
<td>22</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>281</strong></td>
<td><strong>34</strong></td>
<td><strong>90</strong></td>
<td><strong>405</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

### ISLOs

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Academic Affairs</th>
<th>Student Services</th>
<th>Total Count</th>
<th>Total Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISLO 1 - Communication</td>
<td>243</td>
<td>0%</td>
<td>243</td>
<td>26%</td>
</tr>
<tr>
<td>ISLO 2 - Cognition</td>
<td>488</td>
<td>44%</td>
<td>492</td>
<td>54%</td>
</tr>
<tr>
<td>ISLO 3 - Information and Technical Corr</td>
<td>101</td>
<td>56%</td>
<td>106</td>
<td>12%</td>
</tr>
<tr>
<td>ISLO 4 - Social Responsibility and Ethics</td>
<td>77</td>
<td>0%</td>
<td>77</td>
<td>8%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>909</strong></td>
<td><strong>9</strong></td>
<td><strong>918</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Closing the Loop – System Demo

• Macro processes assure Institutional Outcomes are met

• How does Harbor use HAPS to address the Accreditation Standards?
Accreditation Standards: Mission and Outcomes Achievement

Standard IA.2 – *The institution uses data to determine how effectively it is accomplishing its mission, and whether the mission directs institutional priorities in meeting the educational needs of students.* CW New, IA1

Standard I.A.3 - The *institution’s programs and services are aligned with its mission.* The mission guides institutional decision-making, planning, and resource allocation and informs institutional goals for student learning and achievement. CW IA1, IA4

Standard I.B.1 - The institution demonstrates a *sustained, substantive and collegial dialog about student outcomes*, student equity, academic quality, institutional effectiveness. CW IB1+

Standard I.B.4 – The institution uses *assessment data and organizes its institutional processes to support student learning* and student achievement. CW IB, IB3, IB4

Standard I.B.5 - The *institution assesses accomplishment of its mission through program review and evaluation of goals and objectives, student learning outcomes, and student achievement.* Quantitative and qualitative data are disaggregated for analysis by program type and mode of delivery. CW IA3, IB3
The Mission Hierarchy – Aligning the Mission, Institutional Outcomes Assessment & Planning

- Institution
- Mission
- Institution-level Outcomes
  - SEMP/Goals
  - ISLOs
- Program / Service Area Outcomes
  - Objective
  - PLOs
- Student Achievement and Course / Service-level Learning Outcomes
  - Measure
  - SLO/SAO
- Outcomes Assessment-based Planning → Improvement Action
  - Improvement Action
  - Improvement Action
Assessing Mission Achievement

Institutional_Outcome: (79)
  Institutional_Outcome: Goal 1: Access and Preparation for Success (152)
  Institutional_Outcome: Goal 2: Teaching and Learning for Success (507)
  Institutional_Outcome: Goal 3: Organizational Effectiveness (97)
  Institutional_Outcome: Goal 4: Resources and Collaboration (64)
  Institutional_Outcome: ISLO 1 - Communication (316)
  Institutional_Outcome: ISLO 2 - Cognition (630)
  Institutional_Outcome: ISLO 3 - Information and Technological Competency (143)
  Institutional_Outcome: ISLO 4 - Social Responsibility and Ethics (84)
  Institutional_Outcome: Other Requirement (62)
  Add new item
Accreditation Standards – Learning Outcomes & Assessment Requirements

Standard IIA.11 – The institution includes in all of its programs, student learning outcomes, appropriate to the program level, in communication competency, information competency, quantitative competency, analytic inquiry skills, ethical reasoning, the ability to engage diverse perspectives, and other program-specific learning outcomes. CW IIA2c, IIA3b, IIB3d

Standard IIA.12 – The institution requires of all of its degree programs a component of general education based on a carefully considered philosophy for both associate and baccalaureate degrees that is clearly stated in its catalog. The institution, relying on faculty expertise, determines the appropriateness of each course for inclusion in the general education curriculum, based upon student learning outcomes and competencies appropriate to the degree level. The learning outcomes include a student’s preparation for and acceptance of responsible participation in civil society, skills for lifelong learning and application of learning, and a broad comprehension of the development of knowledge, practice, and interpretive approaches in the arts and humanities, the sciences, mathematics, and social sciences. (ER 12) CW IIA3, IIB3b+

Standard IIA.13 – All degree programs include focused study in at least one area of inquiry or in an established interdisciplinary core is based upon student learning outcomes and competencies, and include mastery, at the appropriate degree level, of key theories and practices within the field of study. CW IIA4+
ER 11. Student Learning and Student Achievement
The institution defines standards for student achievement and assesses its performance against those standards. The institution publishes for each program the program’s expected student learning and any program-specific achievement outcomes. Through regular and systematic assessment, it demonstrates that students who complete programs, no matter where or how they are offered, achieve the identified outcomes and that the standards for student achievement are met. (Standard I.B.2, I.B.3, and II.A.1)

ER 12. General Education
The institution defines and incorporates into all of its degree programs a substantial component of general education designed to ensure breadth of knowledge and promote intellectual inquiry. The general education component includes an introduction to some of the major areas of knowledge. General education courses are selected to ensure students achieve comprehensive learning outcomes in the degree program. Degree credit for the general education component must be consistent with levels of quality and rigor appropriate to higher education. (Standard 11.A.12 and 11.A.5)
Assessing Institutional Student Learning Outcomes Achievement

Outcomes Assessment and Improvement Actions

- Institutional, Outcome: (38)
- Institutional, Outcome: ISLO 1 - Communication (408)
  - Objective: (7)
  - Objective: Observing (77)
  - Objective: Reading (60)
  - Objective: Speaking (58)
  - Objective: Teamwork (11)
  - Objective: Technological competency (1)
  - Objective: Writing (204)
- Institutional, Outcome: ISLO 2 - Cognition (967)
- Institutional, Outcome: ISLO 3 - Information and Technological Competency (187)
- Institutional, Outcome: ISLO 4 - Social Responsibility and Ethics (108)
Assessing Program-level Learning Outcomes Achievement
Assessment-based Planning: A Systems Approach
Connecting the Classroom to the College Mission

Questions, Comments and Discussion

Los Angeles Harbor College
Dr. Joachin Arias
Faculty SLO Coordinator & Chair, Assessment Committee
Dr. Edward Pai
Dean, Institutional Effectiveness