Identifying Key Performance Indicators: The Foundation of an Institutional Dashboard

Jeffrey A. Seybert, Ph.D., Director
National Higher Education Benchmarking Institute
Johnson County Community College
What is a Dashboard in Higher Education?

- A brief document that graphically displays critical institutional information in a succinct, easily understood, visually appealing format
- A tool to communicate the current health of the organization and its progress toward its strategic objectives
Purposes of Dashboards

• To communicate current information about major indices of organizational performance to primary stakeholders

• To provide information to assist in evaluation of organizational performance

• To provide a comprehensive analysis of how the organization’s achievement of its strategic objectives leads to effectively carrying out its mission and vision

• To provide information about organizational performance compared to appropriate benchmarks
Why Do We Need Dashboards in Higher Ed.?

• Institutional leadership has a responsibility to be accountable to both internal and external stakeholders

• Stakeholders want/need accurate, concise, easy-to-understand, up-to-date data & information about organizational performance

• Traditional communication sources in higher ed. (e.g., annual reports) are usually obsolete by the time they reach stakeholders and typically fail to provide necessary/sufficient detail about organizational performance
Components of Dashboards

• A limited set of measures—usually referred to as “Key Performance Indicators” (or KPIs)
• An integrated data structure for that set of measures
• A source of comparative benchmarks for the measures
• Graphics for displaying the measures
Characteristics of an Effective Dashboard

• Operationally focused—tied to the institution’s mission and strategic plan
• Timely
• Accurate
• Easy to understand
• Represents the current state of the organization
• Provides a straightforward summary of organizational performance
Data elements that:

- Measure core inputs, outputs, and outcomes
- Reflect the institution’s strategic plan and core business
- Measure high priority operations of the institution
- Measure institutional characteristics that are important and meaningful to stakeholders
- Measure institutional performance in areas in which it must be successful to survive and be competitive
Examples of KPIs

- Enrollment
  - Fall headcount enrollment
  - Percent of area high school grads enrolling subsequent fall
- Student progress
  - Fall-to-fall persistence
  - Term-to-term persistence
- Student success
  - Graduation rate
  - Transfer rate
  - Workforce placement rate
Sources of KPIs

• Institution mission statement and strategic plan
• For community colleges—”Core Indicators of Effectiveness for Community Colleges” (Alfred, Shults, & Seybert), published by AACC
  – Identifies and describes 16 core indicators in six major categories:
    • Student progress
    • General education
    • Outreach
    • Workforce development
    • Contribution to the public good
    • Transfer preparation
Identification of KPIs—Who’s involved

- Effort usually led by a Dashboard Development Team
  - Representative of senior leadership
  - Representative of IR
  - Representatives of key constituencies
    - Faculty
    - Student affairs
    - Others

- Team solicits input from affected work groups and administrators

- Senior leadership (president’s cabinet?) makes final determination of which measures reflect key functions and are included in the dashboard
• **President & Members of President’s Cabinet**
  – Vice President of Instruction
  – Vice President of Student Services
  – Vice President of Institutional Advancement
  – Dean – Bowie Campus
  – Senior Director of Campus Operations

• **Instructional Leadership Team**
  – Dean of Health Sciences
  – Dean of Arts & Sciences
  – Dean of Advanced & Applied Technology
  – Dean of Lifelong Learning
  – Department Chair – College Preparatory Studies
• **Other Administrators**
  – Dean – Corinth Campus
  – Associate Dean of Student Services (Corinth Campus)
  – Director of Admissions/Registrar
  – Chief Information Officer
  – Director of Institutional Research & Effectiveness
  – Director of Academic & Student Support Services
  – Coordinator – Student Success Center
• Selecting a facilitator
  – Critical decision
    • Internal or external
    • Experience & expertise

• Team solicits input

• Pre-workshop “homework”
  – Mission/vision/values statements
  – Strategic plan
  – AACC “Core Indicators of Effectiveness for community colleges”
• The “work”
  – Introductory presentation by facilitator (45-60 minutes)
  – Divide into small groups
  – Round 1
    – Goal is to identify the college’s “core business”/most important institutional functions/key mission components (60-75 minutes)
    – Reconvene: groups report progress (30-45 minutes)
    – Entire group comes to consensus on core functions (60 minutes)
  – Lunch
How KPIs are Identified

• They are an outgrowth of strategic planning
  – Important and meaningful to stakeholders
  – Viewed as important to the organization
  – Linked to strategic plan and organizational priorities
  – Help determine the extent to which the organization is progressing toward its stated goals

• Team can begin with a large number of potential KPIs and then whittle down to the vital few—no more than 15-20
Process also requires establishing benchmarks and target values

- Benchmarks
  - What are reasonable values for measures
    - Upper and lower limits
    - What is “good” and “bad” for a given measure

- Targets
  - How do we know where we want to be?
  - Based on both benchmarks and past performance
  - Must be reasonable and achievable
    - Can (should?) be “stretch objectives”

- Possible Sources: NCCBP
  Achieving the Dream Database
  IPEDS Peer Analysis System
A Valuable Source for Community College Benchmarks: The NCCBP

• A national community college data collection/reporting consortium

• Collects and reports on over 120 benchmarks covering all areas of interest to community colleges:
  – Institutional characteristics
  – Student characteristics
  – Student learning outcomes
  – Community outreach
  – Faculty and staff data

• 210 colleges participated in 2009

• www.nccbp.org
Performance Indicator (PI 22): Transfer Rate

Definition: The percent of Fall, transfer-intent, first-time SCC enrolled students who also enter a degree program at a four-year institution within three years (9 terms).

How the PI is measured: To be eligible for the cohort, students had to have the following characteristics:
1. Were enrolled at SCC for the first time in a Fall cohort term.
2. Were 18-22 years old.
3. Were enrolled full time in a Fall cohort term (i.e., taking 12 or more hours).
4. Cumulated at least 12 SCC credit hours three years after their first Fall cohort term at SCC.
5. Specified a transfer intent on their SCC application.

Source:
- National Student Loan Clearing House data
- STACS

PI Standard:
- Exceeding Expectation: > 60%
- Meeting Expectation: 50% - 60%
- Needs Improvement: 40% to 49.9%
- Alarm Bells: <40%
Percentile ranks are the percents of benchmark values that fall below the institution's values.

Johnson County Community College

### FORM 2: Proportions of Students That

<table>
<thead>
<tr>
<th>Institution</th>
<th>Reported Value</th>
<th>% Rank</th>
<th>N</th>
<th>10th</th>
<th>25th</th>
<th>Mdn</th>
<th>75th</th>
<th>90th</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Completed in Three Years (Col 3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time, First-time in Fall, 2005</td>
<td>19.12%</td>
<td>55%</td>
<td>210</td>
<td>8.34%</td>
<td>12.28%</td>
<td>18.18%</td>
<td>25.65%</td>
<td>34.50%</td>
</tr>
<tr>
<td>Part-time, First-time in Fall, 2005</td>
<td>20.75%</td>
<td>91%</td>
<td>172</td>
<td>2.18%</td>
<td>3.25%</td>
<td>6.57%</td>
<td>11.49%</td>
<td>20.41%</td>
</tr>
<tr>
<td>% Transferred in Three Years (Col 5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time, First-time in Fall, 2005</td>
<td>29.43%</td>
<td>89%</td>
<td>192</td>
<td>8.60%</td>
<td>13.15%</td>
<td>18.12%</td>
<td>22.43%</td>
<td>29.90%</td>
</tr>
<tr>
<td>Part-time, First-time in Fall, 2005</td>
<td>13.97%</td>
<td>77%</td>
<td>139</td>
<td>2.96%</td>
<td>4.90%</td>
<td>9.17%</td>
<td>13.64%</td>
<td>23.33%</td>
</tr>
<tr>
<td>% Compl. or Transf. in Three Years (Col 6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time, First-time in Fall, 2005</td>
<td>48.55%</td>
<td>84%</td>
<td>192</td>
<td>22.99%</td>
<td>27.85%</td>
<td>37.73%</td>
<td>44.42%</td>
<td>53.03%</td>
</tr>
<tr>
<td>Part-time, First-time in Fall, 2005</td>
<td>34.72%</td>
<td>89%</td>
<td>139</td>
<td>7.83%</td>
<td>11.11%</td>
<td>16.03%</td>
<td>25.00%</td>
<td>37.03%</td>
</tr>
</tbody>
</table>

### FORM 3: Student Performance at Transfer Institutions (Most Recent AY)

| | | | | | | | | |
|---|---|---|---|---|---|---|---|
| Cumulative First-year GPA (Col 2) | -- | -- | 67 | 2.62 | 2.79 | 2.89 | 2.98 | 3.07 |
| Average First-year Credit Hours (Col 4) | -- | -- | 55 | 15.36 | 18.09 | 20.66 | 23.50 | 25.32 |
| Percent Enrolled Next Year (Col 5) | -- | -- | 55 | 63.90% | 71.50% | 76.77% | 82.61% | 86.91% |

### FORM 4: Fall 2007 Credit Students Who Enrolled Next Term and Next Fall

| Next-term Persistence Rate (Col 4) | 63.45% | 24% | 206 | 57.93% | 63.47% | 68.61% | 71.70% | 74.62% |

---

**Note:** Percentile ranks are the percents of benchmark values that fall below the institution's values.
<table>
<thead>
<tr>
<th>Details (weighting factor)</th>
<th>Score</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Student Access and Success (30%)</td>
<td>92</td>
<td>➤</td>
</tr>
<tr>
<td>2  Financial and Administrative Stability (20%)</td>
<td>63</td>
<td>➤</td>
</tr>
<tr>
<td>3  Economic Responsiveness (15%)</td>
<td>91</td>
<td>❌</td>
</tr>
<tr>
<td>4  Community Engagement (15%)</td>
<td>96</td>
<td>❌</td>
</tr>
<tr>
<td>5  Diversity and Cultural Competency (15%)</td>
<td>83</td>
<td>➤</td>
</tr>
<tr>
<td>6  Operational Strength (10%)</td>
<td>94</td>
<td>➤</td>
</tr>
</tbody>
</table>
SCC PI Report: Executive Dashboard Summary

- **Student Success**
  1. Persistence Rate Fall To Fall\(^1,2\)
  2. Occupational-Technical Degree Satisfaction\(^3\)
  3. Transfer-Degree Satisfaction\(^4\)

- **Career Preparation**
  4. Licensure Pass Rate\(^5\)
  5. Placement Rate In Workforce\(^3\)

- **Student Self-Assessment Of General Education Gains**
  19. Personal/Social Gains\(^7\)
  20. General Education Gains\(^7\)
  21. Practical Competencies\(^7\)

- **Transfer Success**
  22. Transfer Rate\(^1,8\)
  23. Academic Success After Transfer\(^1,8,9\)
  24. Persistence After Transfer\(^1,8\)

- **Student Satisfaction**
  6. Overall Student Satisfaction\(^6\)
  7. Student Services\(^6\)
  8. Academic Services\(^6\)
  9. Administrative Services\(^6\)
  10. Non-Academic Facilities\(^6\)
  11. Academic Facilities\(^6\)

- **Best Educational Practices**
  14. Active And Collaborative Learning\(^7\)
  15. Student Effort\(^7\)
  16. Academic Challenge\(^7\)
  17. Student-Faculty Interaction\(^7\)
  18. Support For Learners\(^7\)

- **Developmental Education**
  12. Math\(^2\)
  13. English\(^2\)
Dashboards – Strengths

• Relatively straightforward way to monitor current institutional performance
• Provide metrics on KPIs that represent core institutional goals, issues, and operations
• Easy to understand
• Engaging presentation format to communicate important information
• Can be used at all levels of the institution (institution as a whole, division, department)
• Design and implementation require a comprehensive understanding of complex data definitions, sources, appropriate analyses, and sources of appropriate benchmarks
  — Requires appropriate expertise (internal or external)
• Don’t provide an in-depth understanding of underlying data that drive the KPIs
  --Limited in scope and somewhat simplistic
  --Lack of detail makes it difficult to understand the “whys” of institutional performance
• Provide no information regarding what should be done—no guidance for institutional action
• To be optimally effective need to be supported by formal underlying data structure with drill-down capabilities—a balanced scorecard
1. Identify three elements of your institution’s mission/“core business.”

2. Identify first-level KPIs for each of the elements of your institution’s core business

3. Report results of your deliberations
Jeff Seybert  

jseybert@jccc.edu

NCCBP  

www.nccbp.org