Identifying Key Performance Indicators: The Foundation of an Institutional Dashboard

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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
## KPIs — What Are They?

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
NCTC KPI Workshop Participants

• **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

NCTC KPI Workshop Participants

• **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
The KPI Day-long Kickoff Workshop

• 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”

NCTC KPI Workshop

• 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

Context for KPIs: Benchmarks & Target Values

• 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

A KPI in Detail

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%
### Sample NCCBP Benchmark

Percentile ranks are the percents of benchmark values that fall below the institution’s values.  

Johnson County Community College

<table>
<thead>
<tr>
<th>Institution</th>
<th>N</th>
<th>10th</th>
<th>25th</th>
<th>Median</th>
<th>75th</th>
<th>90th</th>
</tr>
</thead>
<tbody>
<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>
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<tr>
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<td>20.73%</td>
<td>91%</td>
<td>172</td>
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<td>9.17%</td>
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### FORM 3: Student Performance at Transfer Institutions (Most Recent AY)

- Cumulative First-year GPA (Col 2): – – –
- Average First-year Credit Hours (Col 4): – – 95 15.36 18.09 20.66 23.50 25.32
- Percent Enrolled Next Year (Col 5): – – 55 63.43% 71.53% 76.77% 82.61% 86.91%

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

| Percent Completed in Three Years (Col 3) | 32.45% | 24% | 206 | 57.23% | 63.47% | 68.6% | 71.73% | 74.62% |

### FORM 2: Proportions of Students That Completed in Three Years

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### Dashboards for Johnson County Community College and Lincoln Land Community College
Dashboard Examples – Richland Community College

Richland College Monthly Key Performance Index Score

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<th>Overall Score</th>
<th>Prev. Month Score</th>
<th>End of Year Score</th>
</tr>
</thead>
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<tr>
<td>9.6</td>
<td></td>
<td></td>
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**Strategic Priorities for Student Learning**

<table>
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<th>Key Performance Indices (Weighting Factors)</th>
<th>Monthly Score</th>
<th>Prev. Month Score</th>
<th>End of Year Score</th>
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</thead>
<tbody>
<tr>
<td>Identify and Meet Community Educational Needs (20%)</td>
<td>9.7</td>
<td>9.4</td>
<td>9.5</td>
</tr>
<tr>
<td>Enable All Students to Succeed (35%)</td>
<td>9.7</td>
<td>9.6</td>
<td>9.3</td>
</tr>
<tr>
<td>Enable All Employees to Succeed (20%)</td>
<td>8.9</td>
<td>9.4</td>
<td>9.8</td>
</tr>
<tr>
<td>Ensure Institutional Effectiveness (25%)</td>
<td>9.8</td>
<td></td>
<td>9.2</td>
</tr>
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All scores based on a scale of 10. Green = Within target range. Yellow = 85.99% - 85.99% of target range. Red = Less than 85% of target range.

Dashboard Examples – St. Charles Community College

**SCC PI Report: Executive Dashboard Summary**

- **Student Success**
  1. Persistence Rate Fall To Fall
  2. Occupational-Technical Degree Satisfaction
  3. Transfer-Degree Satisfaction
- **Career Preparation**
  4. Licensure Pass Rate
  5. Placement Rate In Workforce
- **Student Satisfaction**
  6. Overall Student Satisfaction
  7. Student Services
  8. Academic Services
  9. Administrative Services
  10. Non-Academic Facilities
  11. Academic Facilities
- **Developmental Education**
  12. Math
  13. English
- **Student Self-Assessment Of General Education Gains**
  19. Personal/Social Gains
  20. General Education Gains
  21. Practical Competencies
- **Transfer Success**
  22. Transfer Rate
  23. Academic Success After Transfer
  24. Persistence After Transfer
- **Best Educational Practices**
  14. Active And Collaborative Learning
  15. Student Effort
  16. Academic Challenge
  17. Student-Faculty Interaction
  18. Support For Learners

PI Standards:
- Exceptional performance
- Above Benchmark
- Below Benchmark
- Alarm Bells
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)

Dashboards – Challenges

- 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
Exercise I

1. Discuss and identify the sources of your institution’s core business/most important functions

2. Select three elements of core business for which you will identify KPIs

3. Identify one first-level KPI for each aspect of your institution’s core business

3. Report results of your deliberations

Contact

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NCCBP  www.nccbp.org