

An Introduction to Dashboards in Higher Education: Graphic Representation of Key Performance Indicators



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- 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



- 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





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- Institutional leadership has a responsibility to be accountable to both internal and external stakeholders
- Stakeholders want/need accurate, concise, easy-tounderstand, 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





- 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



- 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



- 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



- 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





- 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

- 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 NCCBPDr. Jeff Seybert

- et live and the second second
- 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

<u>Definition:</u> 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%

O Meeting Expectation: 50% - 60%

Needs Improvement: 40% to 49.9%

Alarm Bells: <40%</p>



Sample NCCBP Benchmark

Dr. Jeff Seybert



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

Johnson County Community College

	Institution		NCCBP Percentiles					
-	Reported Value	% Rank	N	10th	25th	Mdn	75th	90th
FORM 2: Proportions of Students That								
% Completed in Three Years (Col 3)								
Full-time, First-time in Fall, 2005	19.12%	55%	210	8.34%	12.28%	18.18%	25.65%	34.50%
Part-time, First-time in Fall, 2005	20.75%	91%	172	2.18%	3.25%	6.57%	11.49%	20.41%
% Transferred in Three Years (Col 5)								
Full-time, First-time in Fall, 2005	29.43%	89%	192	8.60%	13.15%	18.12%	22.43%	29.90%
Part-time, First-time in Fall, 2005	13.97%	77%	139	2.96%	4.90%	9.17%	13.64%	23.33%
% Compl. or Transf. in Three Years (Col 6)								
Full-time, First-time in Fall, 2005	48.55%	84%	192	22.99%	27.85%	37.73%	44.42%	53.03%
Part-time, First-time in Fall, 2005	34.72%	89%	139	7.83%	11.11%	16.03%	25.00%	37.03%
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%







ZogoTech's Dashboard / Scorecard

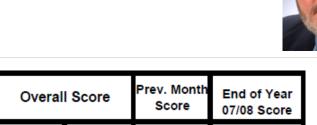
				Score	Trend
		stitutional Score ghted average)	<u> </u>	86	×
	De	tails (weighting factor)			
+	1	Student Access and Success (30%)	Y	92	×
+	2	Financial and Administrative Stability (20%)		63	×
+	3	Economic Responsiveness (15%)	Y	91	M
+	4	Community Engagement (15%)	Y	96	M
+	5	Diversity and Cultural Competency (10%)		83	×
+	6	Operational Strength (10%)	Y	94	×

Note: this is randomized data



Dashboard Examples – Richland College (Dallas, TX)





	Overall Score		Prev. Month Score	End of Year 07/08 Score
Richland College Monthly Key Performance Index Score	9.6		9.6	9.4

Strategic Priorities for Student Learning					
Key Performance Indices (Weighting Factors)	Monthly Score		Prev. Month Score	End of Year 07/08 Score	
Identify and Meet Community Educational Needs (20%)	9.7		9.4	9.5	
Enable All Students to Succeed (35%)	9.7		9.6	9.3	
Enable All Employees to Succeed (20%)	8.9		9.4	9.8	
Ensure Institutional Effectiveness (25%)	9.8		9.8	9.2	
All scores based on a scale of 10. Green = Within target range, Yellow = 89.99% - 85.00% of of target range, Red = Less than 85% of target range					



Dashboard Examples – St. Charles Community College



SCC PI Report: Executive Dashboard Summary

O Student Success

- 1 Persistence Rate Fall To Fall^{1,2}
- Occupational-Technical Degree Satisfaction³
- 3 O Transfer-Degree Satisfaction⁴

Career Preparation

- 4 Licensure Pass Rate⁵
- 5 Placement Rate In Workforce³

O Student Satisfaction

- 6 Overall Student Satisfaction⁶
- 7 O Student Services⁶
- 8 O Academic Services⁶
- 9 O Administrative Services⁶
- 10 O Non-Academic Facilities⁶
- 11 Academic Facilities⁶

Developmental Education

- 12 Math²
- 13 English²

Student Self-Assessment Of General Education Gains

- 19 Personal/Social Gains⁷
- 20 General Education Gains⁷
- 21 Practical Competencies⁷

Transfer Success

- 22 O Transfer Rate^{1,8}
- 23 Academic Success After Transfer^{1,8,9}
- 24 O Persistence After Transfer^{1,8}

Best Educational Practices

- 14 Active And Collaborative Learning⁷
- 15 O Student Effort⁷
- 16 Academic Challenge⁷
- 17 Student-Faculty Interaction⁷
- 18 Support For Learners⁷

PI Standard

- Exceptional performance
- O Above Benchmark
- Below Benchmark
- Alarm Bells





- 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





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NCCBP <u>www.nccbp.org</u>

Kansas Study <u>www.kansasstudy.org</u>

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