

Integrating Key Performance Indicators into the Strategic Planning Process



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Overview



- SCC's first attempt at developing Key Performance Indicators (KPIs)
- Integrating Performance Indicators into Planning
- Development of Balanced Scorecard



SCC's first attempt
at developing
Key Performance
Indicators (KPIs)



- Learning from our failures
- “All my success has been built on my failures.”
--Disaeli
- “Success is not the result of spontaneous combustion. You must first set yourself on fire.”
--Fred Shero (hockey player and coach)
- Our first attempt to establish KPI system ended up as a spectacular failure
- Will briefly explore why

Request for Performance Measures



- The President asked the IR office to develop a set of KPIs in 2002
- Why KPIs were needed
 - Satisfy growing accountability concerns from our stakeholders (e.g., Board of Trustees)
 - Help set priorities for our planning process
 - Assist College decision making
- Posted on the Internet for transparency reasons

The Design:

The decision was made to use a “dashboard” approach



- An easy-to-understand way of presenting management information
- An engaging presentation format to communicate digestible information
- Summarizes performance expectations and measures success

The Report's Design



SCC PI Report: Executive Dashboard Summary

○ Student Success

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

● Career Preparation

- 4 ● Licensure Pass Rate⁵
- 5 ● Placement Rate In Workforce³

○ Student Satisfaction

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

● Developmental Education

- 12 ● Math²
- 13 ● English²

● Best Educational Practices

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

● Student Self-Assessment Of General Education Gains

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

● Transfer Success

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

Sources:

1. STACS
2. Colleague
3. 180-Day Survey of Occupational Technical degree graduates
4. Transfer Degree Survey
5. Licensure Exam Dataset
6. Student Opinion Survey
7. CCSSE (Community College Survey of Student Engagement)
8. NSLC (National Student Loan Clearinghouse)
9. EMSAS (Enhanced Missouri Student Achievement Study)

PI Standard

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

Details Of How One KPI Was Measured



- Definition
- Cohort specification
- Data source
- Criteria for our standard

How The KPI Was Created



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%

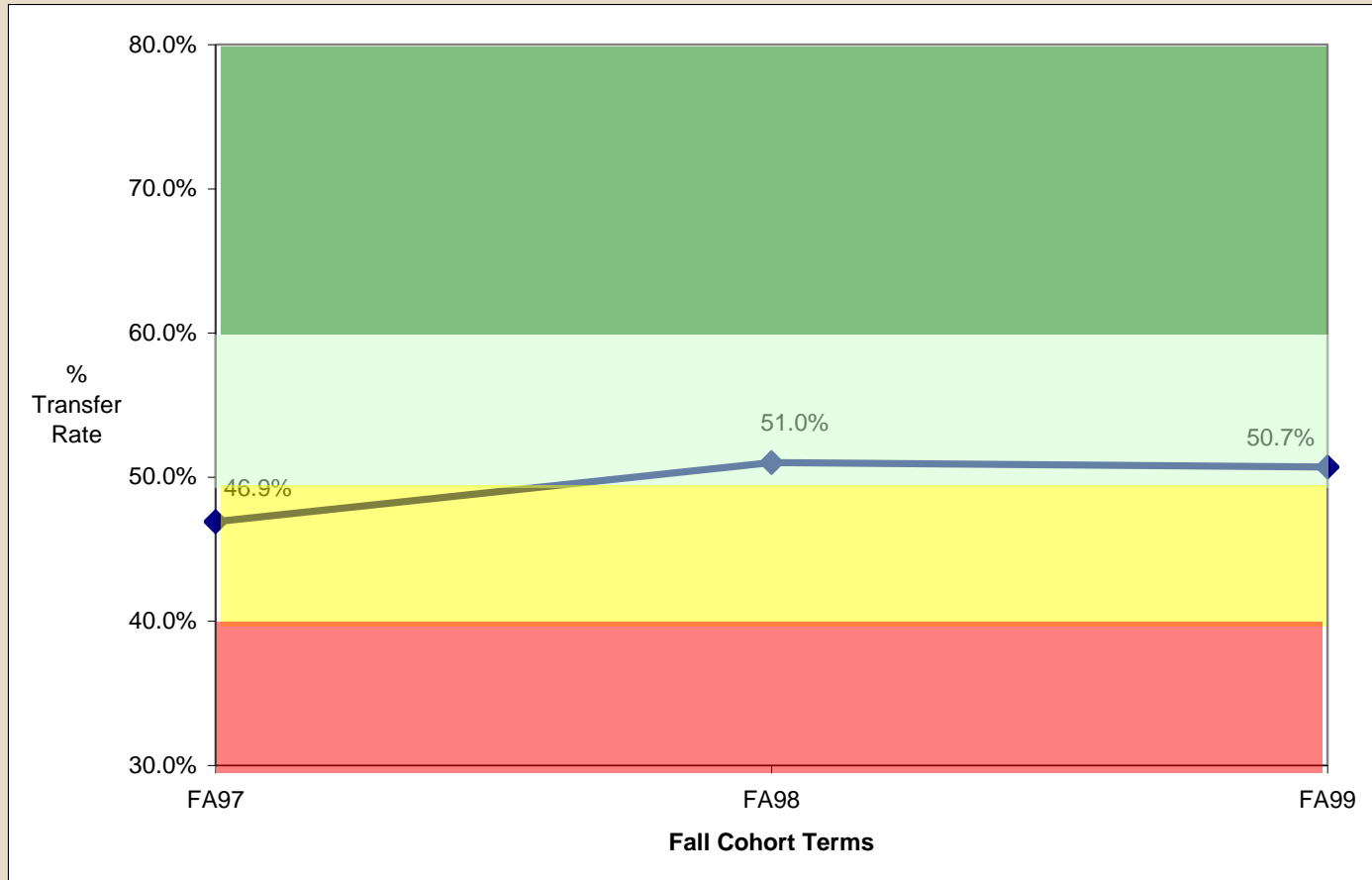
Criteria for Standard:

Transfer rates from three studies were used to get the most likely expected value for this PI.

Sources:

1. Boughan, Karl; "Closing the Transfer Rate Gap: Using National Student Clearinghouse Data in Community College Outcomes Research" in the Journal of Applied Research in the Community College, Vol. 8, No. 2, Spring 2001, pgs. 107-116.
2. Transfer Assembly Results: 1984-1990 in Table 3.9, pg. 68 of The National Profile of Community Colleges: Trends and Statistics.
3. Fonte, Richard, "The Transfer Rate Debate: Toward a Reasonable Measurement of Transfer Effectiveness," Journal of Applied Research in the Community College, Vol. 1, No. 1, Summer, 1993, pg. 11-24.

Outcome Example: Transfer Rate Of Fall, Transfer-Intent, First Time Students



Results



- Produced reports from 2003 to 2005
- Presented to Board of Trustees
- Upper management disagreement over
 - How some measures were defined
 - How target ranges were measured and presented
 - Overall complexity of the report's design
- Received positive comments from outside the organization
- Took a lot of resources to produce the report
- **Most Important:** Was never incorporated into the planning process

Reasons for Failure



- Needed a simpler format to display the data in order to facilitate
 - Understanding
 - Report preparation
- Needed to use benchmarks
 - To add legitimacy to how KPIs were operationally defined
 - To make comparisons between institutions for a particular KPI to define objective standards for success
 - ✦ Empirically define what scores were above average, average, below average
 - ✦ Make peer group comparisons
 - ✦ Identify best practices schools for SCC to study

Reasons for Failure (continued)



- Needed ownership buy-in
 - No one took KPIs seriously because no one was held accountable for them
 - Importance of incorporating KPIs into a larger, more strategic organizational context
 - KPIs needed to be made actionable
 - **Planning...Planning...Planning**

Aftermath



- In 2006, SCC reorganized its departments
- Planning profile raised in a newly created Technology, Research, and Planning Area
- A new Vice President with a strong planning background was appointed
- Institutional Research pulled down the old dashboard KPI system and redesigned a new system so that KPIs could be:
 - more easily understood
 - benchmarked
 - totally integrated into the Planning process
 - used to guide improvement efforts



Integrating
Performance
Indicators into
Planning

Overview



- SCC Planning Council and Strategic Plan Structure
- Where we were
- Where we are – Progress in 2007-2008
- Where we want to go

Planning Council Structure



- **President and Cabinet:**
 - VP Academic and Student Affairs
 - VP Administrative Services
 - VP Human Resources
 - VP Technology, Research, and Planning
 - Associate VP Foundation
 - Associate VP Marketing and Communications
- **Administrative Representative**
- **Faculty Representatives (3)**
- **Staff Representatives (3)**
- **Director of Institutional Research**

Strategic Plan Structure



- Planning Council develops
 - Critical Issues
 - Goals
 - Strategic Organizational Objectives and KPIs
- Areas/Departments develop
 - Area/Department Objectives
 - Prioritized budget requests
- Cabinet determines
 - Funding priorities based on college-wide priorities

Where We Were



- Data rich but not used systematically to focus improvement efforts
- No direct linkage between Strategic Organizational Objectives (SOOs) and performance indicators
- No systematic process for using performance indicators in the planning process
- All objectives were not measurable
- No systematic process for measuring progress toward SOO achievement
- No systematic process for results review and analysis to determine next steps

Progress in 2007-2008



- Rewrote SOOs for clarity and measurability
- Assigned Responsible Parties for each SOO
- End of year reports by Responsible Parties on status of each SOO
- Selected Key Performance Indicators for SOOs
- Created Balanced Scorecard for selected KPIs
- Shared new Balanced Scorecard with College for 2008-2011 planning process – Intranet
- Increased emphasis on use of KPI information during unit planning
- Strategic Planning training for Unit Leaders and any interested SCC employee

Where we want to go



- Continue to refine SOOs – clear, measurable, actionable
- Continue yearly strategic planning training
- Discipline to systematically assess progress toward SOOs at departmental and area levels
- Develop KPIs at departmental level
- Link individual objectives and action plans to SOOs to ensure alignment and unified focus on mission
- Refine list of college-wide KPIs
- Celebrate progress toward SOOs and improve communication of successes



Development of Balanced Scorecard

Needed a new format to put KPIs into



- A report format that would:
 - Include benchmark data
 - Report data in an easy to understand format
 - Provide the ability to drive down into the data
 - Could be linked to Strategic initiatives (**most important**)
- Investigated the use of balanced scorecards
- Took a PDO session by Jan Lyddon and Bruce McComb at an AIR PDO in 2006
- Found what we needed

Building Balanced Scorecards according to Lyddon and McComb



- They relied heavily on the work of:
 - Paul Niven, Balanced Scorecard for Government and Non-Profit Agencies (2003)
 - Kaplan, Robert & Norton, David, The Balanced Scorecard (1996)
- What is it? A communication, informing, and learning system – **not to be used as a controlling system**
- New article out: Strategic Reporting Tool: Balanced Scorecards in Higher Education, Lyddon, Jan & McComb, Bruce., *Journal of Applied Research in the Community College*; 15 (2); Spring, 2008, Pg 163-170.

Building Balanced Scorecards according to Lyddon and McComb (continued)



- Necessary conditions must exist in the organization before undertaking
 - A viable strategic plan must be in place
 - Support from upper management participants
 - Culture of measurement
 - Ability to obtain data for a chosen performance measure
 - Willingness to take action to change the direction of a performance measure (intervention strategies)
 - Need for a project Champion:
 - ✦ Serves as a buffer to other lower priority projects
 - ✦ Is a sounding board beyond the IR office for what matters most
 - ✦ May provide a “big picture” perspective
 - ✦ Willingness to plan across organizational silos i.e., departments
 - Rise of the Phoenix: Earlier Dashboard failure helped provide the foundation for these necessary conditions to exist at SCC

Building Balanced Scorecards according to Lyddon and McComb (continued)



- Scorecards need to be designed so that the user can find:
 - Variable names or descriptions
 - Operational definitions
 - Primary data sources and dates
 - Frequency of information updates
 - Stakeholders/principles
 - Drilldown details where appropriate
 - Signal values
- What are signal values?
 - Establish the levels at which scorecard signals change color
 - Related to statistical process controls
 - Typically specify three levels
 - ✦ Best or target levels
 - ✦ Middle
 - ✦ Worst

An Example of their Balanced Scorecard



Sample Community College – Balanced Scorecard

Date: 5/1/2006

Measure/Index Title	Above Target	At Target	Below Target	Far Below Target	Score or Level	Target	Last update
Retention rate (fall to winter return rate)	X				71.7%	68.0%	Fall 2005
Persistence rate (fall to fall return rate)	X				45.1%	40.0%	Fall 2005
Graduation rate (% of 1st time full time graduating 3 years later)				X	13.0%	18.0%	Fall 2005
Transfer rate (% of new students who have transferred 3 years later)	X				32.0%	30.0%	Fall 2005
% share from Level I & II high schools			X		21.1%	32%	Fall 2005
Dual enrolled high school students	X				340	325	3/15/2006
Headcount		X			5,915	5,817	4/27/2006
Student Credit Hours			X		45,670	45,977	4/27/2006
Student satisfaction - academics (satisfaction on a 4.0 scale)				X	3.05	3.25	2005-06
Student satisfaction - services (satisfaction on a 4.0 scale)				X	2.98	3.25	2005-06
Financial aid participation rate (% first time full timers receiving financial aid)		X			71%	72%	2005-06
Alumni satisfaction	X				88%	80%	2005-06
Employee turnover	X				0.25%	0.08%	3rd qtr 05-06
Enrollment of Students of Color		X			8.9%	8%	1/2/2006
Employees of Color		X			9.4%	8%	Fall 2005
CIP enrollment rate		X			19.1%	20%	2004-05
Student learning - multiculturalism	X				89.8%	83.57%	2004-05
Community support							
Action projects to improve community support							
Budget balance (% of tuition & fees revenue compared to target)				X	-0.5%	5.0%	3rd qtr 05-06
Private gifts (dollar value of donations during the quarter)	X				\$ 138,086	\$ 80,000	3rd qtr 05-06
Grant funds received (dollar value of the funds received in the quarter)		X			\$ 80,000	\$ 75,000	3rd qtr 05-06
Revenue from employer training (revenue received during the quarter)		X			24%	25%	3rd qtr 05-06
Facilities Condition Index (ratio of deferred maintenance to building value)		X			4.3	5.0	2005-06
IT systems response (Ratio of tickets open to completed)			X		0.93	1.0	May-06

Our Modification of the Lyddon/McComb Design



St. Charles Community College - Balanced Scorecard

Revised: 10/27/2008

Issue/Objective/Measure	Benchmark Percentiles*				Above Target	SCC Score	SCC Last Update	Target Range**	
	0%	25%	50%	75%					100%
	Below Target	<--Within Range-->							
		Lower Range	Upper Range						
A) Student Learning and Success									
1. Enhance student readiness for success in college level work									
1. (F8): Developmental math enrollee success rate (n=173) ¹									
2. (F9): First college-level crse enrollee success rate in math (n=163) ¹									
3. (F8): Developmental English enrollee success rate (n=165) ¹									
4. (F8): College-Level Course Enrollee Success Rate in English (n=164) ¹									
5. (F8): Enrollee Success in Reading (n=162) ¹									
6. (PH1G): Institutional Encouragement for Success (n=299) ⁵									
2. Increase percentage of students achieving their educational goals									
1. (F10): % Career Prgm Completers in a Related Field (n=125) ¹									
2. (PH2G) Perceived processes for Student Success (n=299) ⁵									
3. (F2): % FT/FstT completing or transferring in three years (n=157) ¹									
4. (F2): % FT/FstT completing in three years (n=177) ¹									
5. Student Opinion Survey Questions ⁵									
3. Identify and fulfill the educational needs of our community									
1. (F14A): Credit Student Penetration Rate (n=157) ¹									
2. (FB) Total population served by C&CD ⁵									
4. Create a culture for securing private funding for scholarships and initiatives that enhance the learning experience									
1. Annual total support \$'s raised for selected projects (Foundation data) ⁴									
B) Recruitment and Retention									
1. Develop enrollment and growth projections for the next 5-year period; continue enrollment management subgroups to begin implementation									
1. (F13B): % High School Graduates Enrolling: Pub & Pvt (n=124) ¹				X	27%	FA08	14% / 20% / 26%		
2. IRE Annual forecast ⁵									

* Benchmark percentiles used to classify target range categories.

** Reporting institutions' KPI scores at the 25%, 50%, and 75% levels (25% / 50% / 75%).

¹ (n=) is the number of reporting schools in the benchmark measure. Data is from the 2007 National Community College Benchmarking Project (NCCBP).

² (n=) is the number of survey respondents from schools in the benchmark measure. Data is from the 2005 Performance Horizon Employee Survey.

³ Data originated from the Kansas Cost Study, but is reported in the NCCBP Study.

⁴ To be developed.

⁵ Informational data items.

⁶ (n=) is the number of employee survey respondents forming the benchmark measure. Data is from the 2007 Performance Horizons Survey.

Our Modification of the Lyddon/McComb Design



B) 1.1 (F13B)

General Definition: The percent of St. Charles county high school students (public and private) who enrolled in credit courses at SCC in the fall, 2006 term after graduating from high school in the spring, 2006 term.

NCCBP operational definition

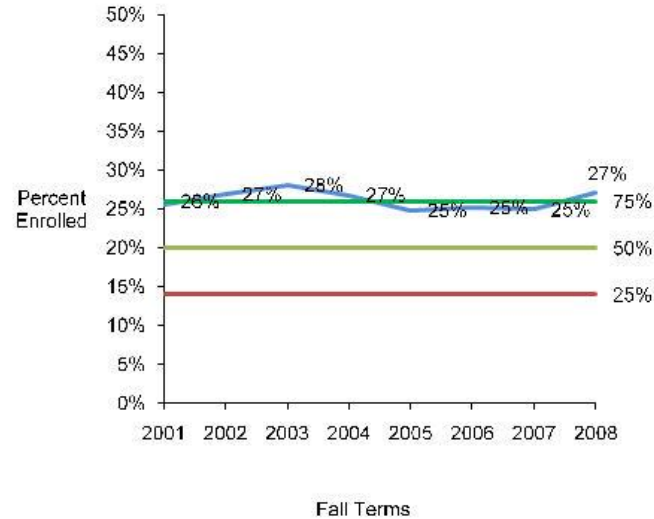
Col 1: Enter the total number of public and private spring 2006 high school graduates in St. Charles County. Include previous year's December graduates, but do not include home-schooled or GED students.

Col 2: Enter the total number high school graduates from Col 1 who enrolled at SCC in the fall, 2006 term.

Col 3: Col. 2 / Col 1

Use	Col 1	Col 2	Col 3
Fall 2006 Term	Spring 2006 High School Graduates	Total from Col 1 Who Enrolled for Fall 2006 Term	Percent Enrolling
Public HS	3,597	951	26.44%
Private HS	526	88	16.73%
Total	4,123	1,039	25.20%

Percent Of Area High School Graduates Attending SCC From Fall 2001 To Fall 2008 Compared To Benchmark Percentiles



Note: Blue line is SCC's KPI.

[Click here for additional drill down charts.](#)

[Return to Page 1 of the SCC Balanced Scorecard](#)

Concluding Points



- Limit number of KPIs
- Take action based on scorecard information
- How to get necessary conditions in place without setting yourself on fire first
- How to set Signal Values