Using Business Intelligence to Improve Baccalaureate Student Success

Community College Baccalaureate Association
March 2015
About SPC

- Florida’s first two-year college (founded in 1927)
- Comprehensive Community College Mission
- State’s First Community College authorized to offer baccalaureate degrees
- Fall 2014 Enrollment: 33,188 (4,202 Baccalaureate)
- Fall 2014 SSH: 278,014 (33,471 Baccalaureate)
- 2013-14 Degrees and Certificates: 6,349
- Accredited by Southern Association of Colleges and Schools (SACS)
1998: Access to the Baccalaureate degree was identified as a significant problem.

1999: Legislature authorized community colleges to seek approval to grant Baccalaureate degrees in areas of high demand.

2001: SPC BOT was given authority to grant Baccalaureate degrees in Nursing, Education, and Information Technology.

2009: SPC BOT authorized to add additional degrees based on local workforce needs.
Opportunity

Source: Florida College System Economic Impact Report – Student Perspective
“Senate Bill 1148 - BACCALAUREATE DEGREES: Restricts the State Board of Education, and St. Petersburg College, from approving any new baccalaureate degrees before May 31, 2015. No special exceptions allowed.”

- One-year moratorium – *More to come*
  - Review of all current state baccalaureate programs
  - Develop guidelines for new degree program development

Where we were...

Two-to-three weeks to complete a data request

Discussions became stale

Arguments over the data definitions

New questions once data is received take another two-to-three weeks to get answered
• SPC exemplified the ‘data-rich, information-poor’ institution.

• Staff needed timely information for decisions to maximize **student success**.

• Need was for ‘management’ data (as opposed to state reported data) that was easily understood and actionable by college staff and faculty.

• SPC also needed to leverage data from across the College by linking multiple data systems and elements in one reporting interface.

Where we were...
Step 1: Acknowledge that data in its purest sense is not very useful.

Step 2: Design a tool that defines, aggregates, and organizes the data into useful and relevant information for the stakeholders.

Step 3: Provide end-user training to assist them in correctly interpreting and using information properly.

Step 4: Consistently remind all end-users that data and information can be powerful, but it is only the beginning of the conversation.

Changing the Culture
• Allows quick access to information required to make decisions.

• Provides standardized information with the ability to look at data measures through multiple views.

• Enables users to ‘drill-down’ to student-level detail and ‘roll-up’ to program, campus, and college-level perspectives.

Pulse Business Intelligence
• Over twenty different dashboards for student information
• Over 700 trained users including Provosts, Deans, Faculty, Advisors, Program Chairs, Senior Administrators, and Administrative Staff.
• 28+ Training Sessions this year.

Evolution of Pulse BI
Student System Dashboards

Enrollment by Term
- Headcount Enrollment by Term
- Student Semester Hours (SSH) by Term
- Enrollment Trends by Term

Enrollment by Day
- Headcount Enrollment By Day
- Student Semester Hours (SSH) By Day

Success Rates
- Success Rates By Campus
- Success Rates by Acad Org

Student Outcomes
- Fall 2010/2011 Cohort Retention
- Graduates

Course Enrollment
- Course Enrollment

Program Review
- Academic Program Viability Report

College Experience
- College Experience Outcomes
- Early Alert
- Out of Class
- My Learning Plan

Beta Dashboards
- Program Plan - Beta
- Daily Enrollment Trends - Beta
- Career Status - Beta
- Flexible Placement - Beta
- PSAV - Beta
- Fall 2014 Daily Enrollment Dashboard - Beta

https://onecollegesupport.spcollege.edu/spcpulse/SAA/Pages/Student_BI_Landing.aspx
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Programs</td>
<td>3</td>
<td>22</td>
</tr>
<tr>
<td>Enrolled</td>
<td>648</td>
<td>5,494</td>
</tr>
<tr>
<td>% of Total Enrollment</td>
<td>1.9%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Graduates</td>
<td>9</td>
<td>1,129</td>
</tr>
<tr>
<td>% of Total Graduates</td>
<td>0.3%</td>
<td>17.8%</td>
</tr>
</tbody>
</table>

Source: SPC Pulse BI System. Data Extracted March 2, 2015

Growth of Bacc Programs
6-yr Enrollment Trend

Source: SPC Pulse BI System. Data Extracted includes Summer Term as of March 2, 2015
<table>
<thead>
<tr>
<th>College/Department/School</th>
<th>BS/BAS Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Business</td>
<td>Business Administration, International Business, Management &amp; Org. Leadership, Sustainability Management</td>
</tr>
<tr>
<td>College of Computer and Information Technology</td>
<td>Technology Development &amp; Management</td>
</tr>
<tr>
<td>College of Education</td>
<td>7- Teacher Certifications&lt;br&gt;1 – Non-teacher Certification</td>
</tr>
<tr>
<td>College of Health Sciences</td>
<td>Health Services Administration, Dental Hygiene, Orthotics and Prosthetics</td>
</tr>
<tr>
<td>College of Nursing</td>
<td>RN-BSN Nursing</td>
</tr>
<tr>
<td>College of Public Safety</td>
<td>Public Safety Administration</td>
</tr>
<tr>
<td>Natural Science Department</td>
<td>Biology</td>
</tr>
<tr>
<td>School of Policy and Legal Studies</td>
<td>Paralegal Studies, Public Policy and Admin.</td>
</tr>
<tr>
<td>School of Veterinary Technology</td>
<td>Veterinary Technology</td>
</tr>
</tbody>
</table>

**Current Programs**
- Contact Hours
- Internship Opportunities
- Authentic Learning (Capstone Courses, Projects, etc.)
- Program Advisory Boards

Workforce Emphasis
Fall 2014

- 4,202 Headcount Enrollment
- Older: 35.6% are 36 or older
- Part-Time: 70.4% (Avg. = 8.0 CHs)
- Female: 65.4%
- Diversity: 72.3% White; 9.1% Black/African American; and 9.8% Hispanic/Latino
- Online Only: 59.3% of students
- New Students: 226 students were ‘new’ to SPC

Source: SPC Pulse BI System. Data Extracted March 2, 2015
Note: Excludes Pass/Fail Grading basis courses and audits

Course Success Rates

Source: Pulse Business Intelligence System, Campus Success Rates dashboard, Data extracted June 8, 2014.
<table>
<thead>
<tr>
<th></th>
<th>Fall-to-Spring</th>
<th>Fall-to-Fall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolled Fall 2013-14</td>
<td>4,545</td>
<td>4,545</td>
</tr>
<tr>
<td>Graduated or Returned</td>
<td>3,948</td>
<td>3,552</td>
</tr>
<tr>
<td>Retention Rate</td>
<td>86.9%</td>
<td>78.2%</td>
</tr>
</tbody>
</table>

Note: Includes returning students and those who graduated prior to the start of the term.
• SPC has produced 7,953 baccalaureate graduates since inception

• Over 1,000 SPC graduates a year which leads the other 22 state colleges who have Bacc Programs

Graduate Analysis
Focus will be on the 1,129 BAS/BS graduates from the 2013-14 academic year (Fall 2013, Spring 2014, Summer 2014)

- 23 Different Baccalaureate Degrees
  - 12 Bachelor of Applied Science (BAS) Degrees
  - 11 Bachelor of Science (BS) Degrees

Graduate Analysis

Source: SPC Pulse BI System. Data Extracted March 2, 2015
<table>
<thead>
<tr>
<th></th>
<th>% Male</th>
<th>% Minority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n=175</td>
<td>11.4%</td>
<td>20.6%</td>
</tr>
<tr>
<td>Business/ Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n=413</td>
<td>47.9%</td>
<td>19.0%</td>
</tr>
<tr>
<td>Nursing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n=321</td>
<td>11.2%</td>
<td>28.6%</td>
</tr>
<tr>
<td>Other Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n=220</td>
<td>18.1%</td>
<td>25.6%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n=1,129</td>
<td>26.0%</td>
<td>22.5%</td>
</tr>
</tbody>
</table>

Note: Within the 1,129 total graduates there are 2.1% (24 students) with undisclosed gender and 4.1% (46 students) with undisclosed ethnicity.
<table>
<thead>
<tr>
<th>Semesters</th>
<th>1 to 3</th>
<th>4 to 6</th>
<th>7 to 9</th>
<th>10 to 12</th>
<th>12 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduates</td>
<td>12</td>
<td>654</td>
<td>369</td>
<td>86</td>
<td>36</td>
</tr>
<tr>
<td>Percentage</td>
<td>1.0%</td>
<td>56.5%</td>
<td>31.9%</td>
<td>7.4%</td>
<td>3.1%</td>
</tr>
</tbody>
</table>

- Average time to degree was 6.7 semesters.
- 94.7% of graduates took courses in at least one summer semester.

Time to Degree

Source: 12-13 Graduates, Pulse Business Intelligence System, Custom Query, Data extracted June 8, 2014.
SPC produces non-traditional workforce focused graduates:

- **Older**: Median age is 31 with one third over the age of 36
- **Committed**: Almost ninety percent (89.4%) completed the program within 3 years with almost all enrolled at least one summer term (94.7%)
- **Employed**: Over three quarters (79%) are employed with an average annual wage of $36,880 for education majors and $52,524 for non-education majors (Graduates from 2010-11)
- **Local**: Over three quarters of graduates received their previous degree within the local area.
Save the Date – October 28-30 – St. Petersburg, FL

Institutions will be sharing their transformational data strategies and best practices

Moving the Needle 2015

http://www.movingtheneedleconference.com
Questions
Using Business Intelligence to Improve Baccalaureate Student Success

St. Petersburg College was the first community college to offer baccalaureate programs in the State of Florida and is still the largest today with 1,000 graduates per year. With the recent Florida legislative ‘moratorium’ placed on the creation of new state college baccalaureate programs, ‘real-time’ access to data and information on baccalaureate programs has been more crucial than ever. To gather this information, SPC has relied on PULSE BI, a business intelligence data system of dashboards that empowers users to maintain the “pulse” of their respective program. SPC PULSE BI was developed by SPC out of the need for access to information to maximize decisions that affect student success and a desire for these conversations to occur with commonly defined metrics. SPC PULSE BI provides ‘real-time’, relevant, and valid information in an easy-to-interpret format, which supports sound decision-making and drives performance improvement. This information has been used to share college baccalaureate information and provide reporting information to the state. Information will also be provided regarding the original rationale for creating the baccalaureate programs at SPC and the model for implementing and developing these programs.

Session Description

http://www.accbd.org/conference/conference-overview/