Using Business Intelligence to Improve the College Experience

The State Assessment Meeting: Florida State College's 6th Annual Gathering
Jesse Coraggio
AVP, Institutional Effectiveness, Research and Grants

Dan Gardner
Director, Institutional Research

Presenters
Since 2010, SPC has focused its strategic efforts on student success, shifting personnel, financial resources, and energy in an intentional, data-driven way to:

- **Help students finish what they start.**
- **Engage and train staff at all levels to support students in class and out.**
- **Produce graduates whose lives are changed by earning a degree or certificate.**

Overview
College Experience

- New Student Orientation
- My Learning Plan
- Early Alert System
- Career Advising
- Learning Support

College Experience
GOAL: Give students the information and tools they need to start off strong in their first term at SPC.

WHAT WE LEARNED

95% visited the Learning Centers

81% made career decisions and started their individual learning plan

New Student Orientation
GOAL: Enhance out-of-class academic support to increase student success*

rates.

*Success= Grades A, B or C.

WHAT WE LEARNED

Students who visited the Learning Centers 10X or more were successful in 82% of their courses.

Out-of-class support
GOAL: Help students identify career choices as early as possible and follow the proper academic plan to reach their goals.

WHAT WE LEARNED
Students who have identified a career are 13.3% more successful* in their classes than students who have not.

*Success = Grade of A, B or C.
GOAL: Keep students enrolled in courses, on track with assignments and fully engaged when they need assistance to succeed.

WHAT WE LEARNED

More than 80% of students receiving early alerts were assisted by a coach.

Early Alert / Student Coaching
GOAL: To get 12,500 students to enter one or more terms into individual learning plans; To reach 95% of students in the College Experience course (SLS-1101).

**WHAT WE LEARNED**

Success rates for FTIC students with a My Learning Plan were 20.3% higher than those without a plan.

My Learning Plan
FIRST-TIME-IN-COLLEGE ETHNICITY TREND COMPARISON

FALL

<table>
<thead>
<tr>
<th></th>
<th>Fall 2011</th>
<th>Fall 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black/African-American</td>
<td>58.9%</td>
<td>66.9%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>67.9%</td>
<td>77.8%</td>
</tr>
<tr>
<td>White</td>
<td>72.7%</td>
<td>75.2%</td>
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</tbody>
</table>

*Success= Grades A, B or C.

College Experience Results
The College Experience
St. Petersburg College

New Student Orientation

Our orientation introduces students to everything they'll need at SPC, including libraries, online and in-person tutoring and career advising, to name a few. In the face-to-face session, students register for their classes and discover My Learning Plan. So far, we have found that attending the new student orientation increases a student's chance of succeeding in their first semester classes.

"So much more prepared." 83% Success Rate

"I would have never known." Online Orientation Site
• **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 Data Culture**
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

Where we were...
• 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...
Culture of Inquiry
We encourage a data-driven environment that allows for open, honest dialogue about who we are, what we do, and how we continue to improve student success.

Transparency
We embrace openness in communication by providing access to college processes and procedures, expenditures, institutional effectiveness, and student success rates.

http://www.spcollege.edu/mission/

Values-based
• 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 650 users including faculty, staff, and administration (“Public” = 362; “Detail” = 338)

• Twenty different dashboards for student information
Pulse Training

Level 1
- Enrollment and Characteristics

Level 2
- Student Success Measures

Level 3
- College Experience
The most important element of the SPC Pulse philosophy has been end-user empowerment.

Teaching them how to fish...
Pulse BI Demonstration
Challenges

- Managing accelerated expectations
- Documenting while building
- Limited programming resources
- Tailoring specialized solutions
- Building competence among executives, academic leaders, and faculty
- Ensuring security/privacy
Save the Date – November 6-7 – Clearwater, FL

Institutions will be sharing their transformational data strategies and best practices

Moving the Needle 2014
Questions
Additional Slides
System Architecture
SQL Server (2008)
- SQL Server Database. Hosts Staging Area and Data Warehouse.
- SQL Server Integration Services (SSIS). Used for ETL (extract, transform, load) jobs to populate Data Warehouse.
- SQL Server Analysis Services (SSAS). Hosts Data Marts.
- Visual Studio. Used for development of SSIS packages.

SharePoint (2010)
- Performance Point. Presentation of dashboards and reports.
- Dashboard Designer. Used for development of reports, filters, and dashboards.

SPC has college-wide licenses for SharePoint and SQL Server technologies. No additional software purchased.
Timeline

- 2009: Investigation
- 2010: Proof of concept
- 2011: IR involvement, Development
- 2012 (January): Live with Student System
- 2013 (March): Live with Financials
- 2014: Financial Aid information

Effort

- Less than 1 full time developer
- Reports, dashboards driven/built by power users
- Closer operation of IT and IR (weekly meetings)
Next Steps

• Validation of cohort tracking (Predictive Analytics)
• Detailed Financial Aid information
• Prospect and Admissions information
• Human Resources information
• Facilities and inventory information
• Further development of finance data
• Resources, Resources, Resources!
• Leadership support
• Cross functional development team
• Financial support for technology/infratructure requirements
• End-user buy in and involvement in the development
• Managing expectations

Lessons Learned