What Works in Promoting Student Success

Steve Robbins
ACT, Inc.

University of Missouri-KC Retention Retreat
Overview

• Why College Students Stay
• What Works in Promoting Student Success
• The Importance of an Early Warning System
• A Model for Institution-wide Assessment and Intervention
• A Model for Effective Placement and Intervention with Developmental Students
• Putting It All Together
"Yes, I agree that man is master of his own destiny, but sometimes it helps if you pass algebra."

Why College Students Stay

Four-Year College Students:

• First-year GPA has large effects on the likelihood of retention and transfer.
• Motivation (Academic Discipline) and pre-collegiate academic preparation have indirect effects on retention and transfer by working through first-year GPA.
Why College Students Stay (cont)

• Social connection has a direct effect on retention.
• SES predictive of transfer behavior:
  – Higher SES students transfer while poor students give up.
  – African-American students have high commitment but difficulty with classes resulting in higher drop-out rates.

See Robbins et al. (2006); Allen et al. (2008)
"We're looking for a more comprehensive research strategy than simply 'Google it.'"
Meta-Analysis and Validity Generalization as Key Tools

• Summarizing the effect of something over multiple data points
• Create confidence intervals of the true effect size
• Interpretation of multiple studies is better than any individual study
Testing Integrated Meta-Analytic Path Analysis

The Effects of College Interventions on College Outcomes as Mediated by PSF’s

Motivation/Skills

Self-Regulation

Social Engagement

Performance Persistence

Intervention

Robbins et al. (2009)
Categorizing College Interventions

- **Orientation** (21 hours) – summer, early fall, time-limited
- **Freshman Year Experience** (45 hours)
- **Academic** (8 hours)
  - Study skills
  - Learning strategies
  - Note-taking
- **Self-Management** (6 hours)
  - Stress management
  - Self-control
  - Anxiety management
- **Hybrid of Academic & Self-Management** (12 hours)
Categorizing Psychosocial Factors (PSFs)

Three Categories

• Motivation:
  – Academic Discipline
  – Commitment to College

• Self-Regulation:
  – Steadiness
  – Academic Self-Confidence

• Social Engagement:
  – Social Connection
  – Social Activity

A Summary of Findings

- Interventions with an academic focus are key
- Boost academic interventions using self management strategies, i.e., Hybrid
- Align specific interventions to narrowed outcomes (PSF and/or success) to increase treatment effect
A Summary of Findings (cont)

- Rethink the goals & the focus of Freshman Year Experience
- Understand mediating role of motivation and self-regulation factors to promote student success
Giving Guidance

“I would suggest that you get a good education, find a job that pays well, and be happy.
I wish I could be more specific.”

Herzog & Miller (1985)
Using the Student Readiness Inventory (SRI) as an Early Warning System

Met our criterion of being grounded in research:
- Reviewed meta-analysis of 109 studies that examined predictors of academic performance and retention

Met our criterion of considering the whole student:
- Motivation, self-regulation, and social engagement coupled with academic preparation factors
- Factors are amenable to change
Using the Student Readiness Inventory (SRI) as an Early Warning System

Able to:

- Administer at orientation and have for early in the semester
- Create an early warning system for targeted intervention
- Aid support of previously identified “at-risk” groups
- Create a cross walk of scales to our services and use within our existing framework of services including
  - Academic coursework for freshmen
  - Student Affairs programs and services
  - Academic advising
Development of the Student Readiness Inventory

Motivation and Skills
- Commitment to College
- Goal Striving
- Academic Discipline
- General Determination
- Study Skills
- Communication Skills

Social Engagement
- Social Activity
- Social Connection

Self-Management
- Academic Self-Confidence
- Steadiness

Robbins et al. (2004)
<table>
<thead>
<tr>
<th>SRI Scale</th>
<th>Definition</th>
<th>Sample Item</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic Discipline</strong></td>
<td>The amount of effort a student puts into schoolwork and the degree to which a student is hardworking and conscientious.</td>
<td>I consistently do my school work well.</td>
</tr>
<tr>
<td><strong>Academic Self-Confidence</strong></td>
<td>The belief in one's ability to perform well in school.</td>
<td>I achieve little for the amount of time I spend studying.</td>
</tr>
<tr>
<td><strong>Commitment to College</strong></td>
<td>One's commitment to staying in college and getting a degree.</td>
<td>A college education will help me achieve my goals.</td>
</tr>
<tr>
<td><strong>Communication Skills</strong></td>
<td>Attentiveness to others' feelings and flexibility in resolving conflicts with others.</td>
<td>I'm willing to compromise when resolving a conflict.</td>
</tr>
<tr>
<td><strong>General Determination</strong></td>
<td>The extent to which one strives to follow through on commitments and obligations.</td>
<td>It is important for me to finish what I start.</td>
</tr>
<tr>
<td><strong>Goal Striving</strong></td>
<td>The strength of one's efforts to achieve objectives and end goals.</td>
<td>I bounce back after facing disappointment or failure.</td>
</tr>
<tr>
<td><strong>Social Activity</strong></td>
<td>One's comfort in meeting and interacting with other people.</td>
<td>I avoid activities that require meeting new people.</td>
</tr>
<tr>
<td><strong>Social Connection</strong></td>
<td>One's feelings of connection and involvement with the college community.</td>
<td>I feel part of this college.</td>
</tr>
<tr>
<td><strong>Steadiness</strong></td>
<td>One's responses to and management of strong feelings.</td>
<td>I have a bad temper.</td>
</tr>
<tr>
<td><strong>Study Skills</strong></td>
<td>The extent to which students believe they know how to assess an academic problem, organize a solution, and successfully complete academic assignments.</td>
<td>I summarize important information in diagrams, tables, or lists.</td>
</tr>
</tbody>
</table>
Sample SRI Profiles

- Class of 2007 college students completed the SRI at the beginning of their 1st semester (Fall 2003)
- Sample profiles selected to contrast academic preparation and motivation

<table>
<thead>
<tr>
<th>ACT Score</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Student A</td>
<td>Student B</td>
</tr>
<tr>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Student C</td>
<td>Student D</td>
</tr>
</tbody>
</table>

Student A
Student B
Student C
Student D
Low ACT score (composite = 14)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Percentile</th>
<th>Student A</th>
<th>Percentile</th>
<th>Student B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Discipline</td>
<td>6</td>
<td>Low</td>
<td>95</td>
<td>Low</td>
</tr>
<tr>
<td>General Determination</td>
<td>17</td>
<td>Medium</td>
<td>72</td>
<td>Medium</td>
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<tr>
<td>Goal Striving</td>
<td>13</td>
<td>High</td>
<td>80</td>
<td>High</td>
</tr>
<tr>
<td>Commitment to College</td>
<td>9</td>
<td>Low</td>
<td>51</td>
<td>Low</td>
</tr>
<tr>
<td>Study Skills</td>
<td>47</td>
<td>Medium</td>
<td>59</td>
<td>Medium</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>34</td>
<td>High</td>
<td>99</td>
<td>High</td>
</tr>
<tr>
<td>Social Connection</td>
<td>76</td>
<td>Low</td>
<td>49</td>
<td>Low</td>
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<tr>
<td>Social Activity</td>
<td>9</td>
<td>Medium</td>
<td>83</td>
<td>Medium</td>
</tr>
<tr>
<td>Academic Self-Confidence</td>
<td>2</td>
<td>High</td>
<td>46</td>
<td>High</td>
</tr>
<tr>
<td>Steadiness</td>
<td>6</td>
<td>Low</td>
<td>71</td>
<td>Low</td>
</tr>
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</table>

SRI Indices
- Academic = 1
- Retention = 3
- 1st-year GPA = 1.5
- Fall 07 status = dropped out

Outcome
- Academic = 20
- Retention = 17
- 1st-year GPA = 2.22
- Fall 07 status = still enrolled
High ACT score (composite = 27)

**HIGH ACT**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Percentile</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Discipline</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Determination</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal Striving</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment to College</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study Skills</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Skills</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Connection</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Activity</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Self-Confidence</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steadiness</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Student C**  
Low Motivation

**Student D**  
High Motivation

<table>
<thead>
<tr>
<th>SRI Indices</th>
<th>Academic = 60</th>
<th>Academic = 96</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retention</td>
<td>50</td>
<td>88</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outcome</th>
<th>1st-year GPA = 3.7</th>
<th>1st-year GPA = 4.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 07 status</td>
<td>dropped out</td>
<td>graduated</td>
</tr>
</tbody>
</table>
Two Case Examples:

1. Targeting at-risk students and coordinating interventions across all segments of the university

2. Developmental classes in college
Case I: Northern Arizona

- Public university
- 4-year institution with 800 faculty serving 22,000 students
- 13,000 undergraduate students on the Flagstaff campus
- ~30% dropout rate after freshman year
- Implemented a card swiping system to monitor resource use
- Required the SRI and created a smorgasbord of systematic interventions for at-risk students

Robbins et al. (2008)
Strategic Intervention Model: What We Wanted

- Implement early in the first semester
- Include groups known to be at risk
- Collaborate and not duplicate
  1. Academic advising and first year programs
  2. Native American Student Services outreach program
  3. Summer bridge program and first year mentoring
  4. Student Support Services, a TRIO program
  5. Any key groups interfacing with new freshmen
Strategic Intervention Model:
What We Wanted (cont)

• Be systematic
• Address the whole student
• Rely on a framework grounded in research
SRI Work Group

Creating a Network of Academic and Social Resources

• VP identified a group of staff to spearhead effort
• Group planned and administered instrument over the summer
SRI Work Group (cont)

• **Group identified:**
  1. Target populations (risk categories)
  2. Services linked to needs
  3. Other campus collaborator
     - Freshman year seminar/experience
     - First year advising center
  4. A process for:
     - Assigning students to most appropriate offices
     - Making appointments with students
     - Notification and outreach
     - Follow up expectations
Program Model

Assigning Students & Distributing Profiles

• Student Affairs Programs and Services
• Academic Advising Center for Freshmen
• Freshman Year Experience 101
• Freshman Skills-Based Course, EPS 101
Prioritizing Student Groups in Student Affairs

“Waterfall” Approach: Assessing Risk & Targeting Students to Be Seen by Each Office

• Summer Bridge Program
  *(Ethnic Minority, First Gen, Low Income)*

• Native American Students
  *(Native American Student Services)*

• Other Ethnic Minorities
  *(Multicultural Student Center)*
Prioritizing Student Groups in Student Affairs (cont)

- Other First Generation/Low Income (SSS/Learning Assistance Centers)
- Living Off Campus (Learning Assistance Centers)
- Other Low Scoring (Advising and FYE/EPS) (less than 50th percentile on either index)
Student Groups & University Departments

STUDENT AFFAIRS

Ethnic Minority Students
- Multicultural Student Center
- Native Amer. Student Services
- Student Life (African American)

First Generation/Low Income Students
- Student Support Services
- Learning Assistance Centers

Learning Communities/Res Life

FIRST YEAR ADVISING CENTER

FRESHMAN YEAR PROGRAMS
- FYE course
- Skills-based course

COORDINATING OFFICES
- Dean of Students
- Assessment Office
One-on-One Meetings in Student Affairs

Reaching Out and Intervening: A Systematic Outreach

• Assign students to programs/office according to service populations
• Look up student schedules and set appointment times
One-on-One Meetings in Student Affairs (cont)

• Send postcard home with appointment time
• Send postcard to campus address with appointment time

1. Personal e-mail with appointment time
2. Appointment time/date placed on student’s web calendar
3. Reminder phone call 1-2 days before appointment
4. Facebook contacts and text reminders
5. If miss scheduled meeting, protocol for rescheduling at least two more times.
Meeting Purpose

• Above all else, connect with student.
• Acknowledge the student’s strengths and identify campus activities to reinforce them.
Meeting Purpose (cont)

• Match the student’s needs to campus resources.
  1. Website: home.nau.edu/emsa/sri.asp
  2. Tool Shop: act.org/sri/studentguide/toolshop.html

• Gather some data on SRI experience.
  1. How did you hear about your appointment?
  2. How seriously did you take the SRI when you completed it at orientation?
Evaluating the Effects of Meeting and Other Resource Use

Academic and Persistence Outcomes
## 2007 Retention in 2008

<table>
<thead>
<tr>
<th>Group</th>
<th>Total</th>
<th>Not Retained</th>
<th>Retained</th>
<th>% Retained</th>
</tr>
</thead>
<tbody>
<tr>
<td>All -- All NAU FYR (w/o International and Unknown)</td>
<td>2848</td>
<td>884</td>
<td>1964</td>
<td>69%</td>
</tr>
<tr>
<td>Targeted and Met</td>
<td>652</td>
<td>208</td>
<td>444</td>
<td>68%</td>
</tr>
<tr>
<td>Targeted and Not Met</td>
<td>427</td>
<td>163</td>
<td>264</td>
<td>62%</td>
</tr>
<tr>
<td>Non -Targeted Students</td>
<td>1357</td>
<td>349</td>
<td>1008</td>
<td>74%</td>
</tr>
<tr>
<td>Invalid or No SRI</td>
<td>412</td>
<td>164</td>
<td>248</td>
<td>60%</td>
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</tbody>
</table>
## 2007 Retention in 2008

<table>
<thead>
<tr>
<th>Group</th>
<th>Total</th>
<th>Not Retained</th>
<th>Retained</th>
<th>% Retained</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American --All NAU FYR</td>
<td>102</td>
<td>35</td>
<td>67</td>
<td>66%</td>
</tr>
<tr>
<td>Targeted and Met</td>
<td>54</td>
<td>14</td>
<td>40</td>
<td>74%</td>
</tr>
<tr>
<td>Targeted and Not Met</td>
<td>23</td>
<td>9</td>
<td>14</td>
<td>61%</td>
</tr>
<tr>
<td>Non-Targeted Students</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>---</td>
</tr>
<tr>
<td>Invalid or No SRI</td>
<td>23</td>
<td>11</td>
<td>12</td>
<td>52%</td>
</tr>
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</table>
## 2007 Retention in 2008

<table>
<thead>
<tr>
<th>Group</th>
<th>Group Total</th>
<th>Not Retained</th>
<th>Retained</th>
<th>% Retained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic --All NAU FYR</td>
<td>316</td>
<td>109</td>
<td>207</td>
<td>66%</td>
</tr>
<tr>
<td>Targeted and Met</td>
<td>175</td>
<td>50</td>
<td>125</td>
<td>71%</td>
</tr>
<tr>
<td>Targeted and Not Met</td>
<td>88</td>
<td>37</td>
<td>51</td>
<td>58%</td>
</tr>
<tr>
<td>Non-Targeted Students</td>
<td>9</td>
<td>2</td>
<td>7</td>
<td>---</td>
</tr>
<tr>
<td>Invalid or No SRI</td>
<td>44</td>
<td>20</td>
<td>24</td>
<td>55%</td>
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</table>
## 2007 Retention in 2008

<table>
<thead>
<tr>
<th>Group Total</th>
<th>Not Retained</th>
<th>Retained</th>
<th>% Retained</th>
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<tbody>
<tr>
<td>White --All NAU FYR</td>
<td>2208</td>
<td>654</td>
<td>1554</td>
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<tr>
<td>Targeted and Met</td>
<td>301</td>
<td>98</td>
<td>203</td>
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<tr>
<td>Targeted and Not Met</td>
<td>258</td>
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<td>166</td>
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<tr>
<td>Non -Targeted Students</td>
<td>1340</td>
<td>345</td>
<td>995</td>
</tr>
<tr>
<td>Invalid or No SRI</td>
<td>309</td>
<td>119</td>
<td>190</td>
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</table>
First Semester Academic Probation for fall 2007 & fall 2008

- 2007: 19% Met, 25% Not Met
- 2008: 18% Met, 32% Not Met
Conclusions Based on Assessment

• Non-targeted students that were expected to do well did (74% retained one year later). Is this number acceptable to UM-KC?
• Targeted students who met fared better than similarly at-risk students who declined to meet.
  1. GPA /Academic Probation
  2. Retention
• There is room for growth within all categories.
Additional Research Findings and Projects

Service Utilization

– Academic
– Social
– Recreational
– Academic referrals (advising center)
– Advising/Career sessions (advising center)
### Resource & Services Utilization

<table>
<thead>
<tr>
<th>Resource/Service Category</th>
<th>Level of Utilization</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High Ret.</td>
<td>Moderate Ret.</td>
</tr>
<tr>
<td>Academic Services</td>
<td>.75</td>
<td>.79</td>
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<td>2.75</td>
<td>2.92</td>
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<tr>
<td>Recreational Resources</td>
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<td>.77</td>
</tr>
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<td></td>
<td>2.87</td>
<td>2.76</td>
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<tr>
<td>Social Resources</td>
<td>.72</td>
<td>.85</td>
</tr>
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<td></td>
<td>2.83</td>
<td>2.91</td>
</tr>
<tr>
<td>Academic Referrals</td>
<td>--</td>
<td>.88</td>
</tr>
<tr>
<td></td>
<td>--</td>
<td>2.95</td>
</tr>
<tr>
<td>Advisory / Career Sessions</td>
<td>.84</td>
<td>.79</td>
</tr>
<tr>
<td></td>
<td>2.67</td>
<td>2.83</td>
</tr>
</tbody>
</table>

Robbins et al. (2008)
## Association of Risk Level & Academic Service Use on Retention & 1st-year GPA

<table>
<thead>
<tr>
<th>Service Use</th>
<th>Risk Level</th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>High Ret.</td>
<td>GPA</td>
<td>Moderate Ret.</td>
<td>GPA</td>
</tr>
<tr>
<td>0 use</td>
<td></td>
<td>.61</td>
<td>2.11</td>
<td>.72</td>
<td>2.58</td>
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<tr>
<td>1 – 3 Sessions</td>
<td></td>
<td>.72</td>
<td>2.41</td>
<td>.77</td>
<td>2.81</td>
</tr>
<tr>
<td>4+ Sessions</td>
<td></td>
<td>.62</td>
<td>2.35</td>
<td>.81</td>
<td>2.81</td>
</tr>
</tbody>
</table>

Gains show interaction on GPA
Summary Points

• Intervene early and strategically
• Designate a visible individual to coordinate
• Collaborate and use natural fits with existing resources
• Conduct systematic analysis
• Use your data/feedback and improve the process
• Maximize utility of the instrument
• Go beyond the limits of the instrument
Summary Points Continued: Ensuring Student Success

- Academic preparation & performance are at the hub
- Be clear on goals
  
  *Satisfaction, learning, & persistence are not the same*

- Be strategic in your use of resources
- Move the mountain to the students
  
  *Don’t be afraid of intrusive advising*
A Model for Wilbur Wright College

Illinois Innovations in Education Awardee for 2009
College
Developmental Course
Best Practices

1. New Student
   a. Administer COMPASS & SRI¹
   b. Supportive review & re-test policy²

2. Developmental Student
   a. Administer diagnostics¹
   b. Assess non-cognitive factors for risk²

3. Developmental Instruction
   a. Instruction tied to diagnostics²
   b. SRI practice & use²

4. Monitoring Status
   a. Effort of students in class³
   b. Students’ non-class service use³
      a. Academic support
      b. Non-academic

5. Post-Test
   a. Diagnostics¹
   b. Placement¹
   c. Grades⁴
   d. Course completion⁴

6. Next Course
   a. Grades⁴
   b. Course completion⁴

Superscript Legend
1. Student Data / Characteristics
2. College Responses / Services / Instructional Resources
3. Student Effort / Involvement / Investment
4. College Records
Success in Developmental Courses Dependent on Academic and Psychosocial Risk

Success Rates in **English Composition**, by Academic and Psychosocial (SRI) Risk Levels

<table>
<thead>
<tr>
<th>Academic Risk Level</th>
<th>SRI Risk Level</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>High</td>
<td>23%</td>
<td>40%</td>
<td>44%</td>
</tr>
<tr>
<td>Medium</td>
<td>Medium</td>
<td>32%</td>
<td>47%</td>
<td>58%</td>
</tr>
<tr>
<td>Low</td>
<td>Low</td>
<td>53%</td>
<td>68%</td>
<td>78%</td>
</tr>
</tbody>
</table>
Success in Developmental Courses Dependent on Academic and Psychosocial Risk (cont.)

Success Rates in **Elementary Algebra**, by Academic and Psychosocial (SRI) Risk Levels

<table>
<thead>
<tr>
<th>Academic Risk Level</th>
<th>SRI Risk Level</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>15%</td>
<td>28%</td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>32%</td>
<td>41%</td>
<td>52%</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>50%</td>
<td>67%</td>
<td>69%</td>
</tr>
</tbody>
</table>
We Observe the Effects of In-class Student Behavior on Success

Success Rates in Elementary (precredit) Math, by COMPASS Pretest and Behavior Rating Levels

<table>
<thead>
<tr>
<th>COMPASS Pretest Scores</th>
<th>Behavior Rating Level</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>High</td>
<td>92%</td>
<td>77%</td>
<td>59%</td>
</tr>
<tr>
<td>Medium</td>
<td>91%</td>
<td>62%</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>69%</td>
<td>44%</td>
<td>6%</td>
<td></td>
</tr>
</tbody>
</table>
We Observe the Effects of In-class Student Behavior on Success (cont.)

Mean COMPASS Posttest Scores for Elementary (precredit) Math, by COMPASS Pretest and Behavior Rating Levels

<table>
<thead>
<tr>
<th>COMPASS Pretest Scores</th>
<th>Behavior Rating Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td>High</td>
<td>57.4</td>
</tr>
<tr>
<td>Medium</td>
<td>43.5</td>
</tr>
<tr>
<td>Low</td>
<td>39.8</td>
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</tbody>
</table>
We Observe the Effects of In-class Student Behavior on Success (cont.)

Mean COMPASS Gain Scores for *Elementary (precredit) Math*, by COMPASS Pretest and Behavior Rating Levels

<table>
<thead>
<tr>
<th>COMPASS Pretest Scores</th>
<th>Behavior Rating Level</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>19.5</td>
<td>8.9</td>
<td>8.7</td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>15.7</td>
<td>11.4</td>
<td>6.2</td>
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</tr>
<tr>
<td>Low</td>
<td>19.7</td>
<td>14.0</td>
<td>12.0</td>
<td></td>
</tr>
</tbody>
</table>
The 3 Pillars of Success

- Appropriately place and diagnose
- Address motivational skill and engagement behaviors within and outside classroom
- Connect instruction to the diagnostic and curriculum targets essential to academic achievement domain (e.g., Math, English)
Wrap-Up and Questions for You?

• Do you have a systematic way of assessing student risk?
• How coordinated are your services?
• Have Faculty “bought-in”?
• Do you monitor the Return on Investment (ROI) of your central and college based resources?
• Are you meeting your retention goals?
• Are you meeting your time to degree attainment goals?


References (cont.)


References (cont.)


What Works in Promoting Student Success

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