First-Year Survey and Reforming the Student Success Prediction Model

Jennifer Schneider, Amy Robertson, Mike Brake, Shannon LaCount & The Early Experience Assessment Committee
The Taking Stock program was created to better understand students’ first year experiences, further success opportunities and improve first-year retention.
Accreditation Focus

• The Taking Stock initiative is specifically designed to address our institution’s commitment to educational improvement through ongoing attention to retention, persistence, and graduation rates.

• Taking Stock project results are used to inform initiatives and improvements uncovered by the data.
Two primary objectives of the program:

1. Assist students early in the semester in order to ultimately improve student retention
   - Inform meaningful conversations with RAs and other staff
   - Provide initial feedback to guide students earlier
   - Inform and create a support network for each student
Objectives

2. Track new students’ experiences in relation to their student success outcomes

- Use subpopulation gaps and patterns to inform policies, initiatives, and opportunities that will provide more positive experiences for students
- Examine psychosocial data’s association to student success outcomes
- Provide a foundation for the beginning of longitudinal data collection and comparison of first year students
The original motivation for creating the Taking Stock program:

• Find out more about student experiences four weeks into their first year
  – Needs assessment!
  – Improve the student experience with students’ help
  – Provide resources in a timely manner
• Create a platform for peers to have a discussion
  – Normalizing the transition
  – Listening AND reacting to concerns
  – Leveraging interest areas to engage more deeply

Target a rich conversation with EVERY student possible

• Began in the residence halls with resident assistants
  – Focused only on new first year students living on campus
• As more institutional support became available, other groups were brought in
  – First year students living off-campus (Off Campus Life Staff)
  – Transfer students (Transfer Transition Leaders)
  – International students (International Programs staff)
Fall 2002: The Taking Stock program began
  – Went through four instrument iterations in a decade

Fall 2013: Wanted to better address the specific needs of the CSU first-year student population
  – Committee of staff formed from across campus departments (Early Warning programs, IR, Student Affairs, Residence Life, Off Campus Life, Health Network, etc.)
  – Item and construct development

Fall 2014: Customized survey was piloted with all first-year CSU students (on-campus and off-campus)

Fall 2015: After minor edits, survey was implemented

Fall 2016: Expanded program with the addition of international student and transfer students questions
Methodology

- Web-based administered via Campus Labs
  - All first year students
  - Survey sent out in fourth week
  - Approximately 20 minutes to complete
  - Email initiation and 1 week follow-up reminder sent by Resident Assistants and other campus staff
  - 92% response rate in residence halls!
  - 87% of first-year students met with their RA within 2 weeks of survey completion
I. Agreement Statements
II. Expectations
III. Skills and Abilities
IV. Behaviors
V. Reasons chose CSU
VI. Financial Support
VII. Employment
VIII. Hours studying per week
IX. Possible CSU exit reasons
X. Requested Resources
XI. Open End Items
Commitment to CSU

• I'm committed to completing my degree at CSU
• If I could do things over again, I would still choose to attend CSU
• I would recommend CSU as a place to go to school
• I intend to return to CSU in the spring
• I will most likely transfer to another institution before graduating*
• I'm confident that attending college was the best decision for me
Financial concerns

- Financial obligations are interfering with my ability to focus on my academics
- College expenses are causing a strain on my family
- I feel confident that I will be able to pay for next semester's tuition and fees*
- I often feel worried about paying for college
- I have concerns about my ability to pay for my college education through graduation
Homesickness and Family Responsibilities

• My homesickness is affecting my ability to engage at CSU
• My concerns about my family makes it difficult to be at CSU
• I feel like everyone else is having an easier time adjusting to college
• It is hard being away from my home, family, significant other, and/or friends
• Family obligations are interfering with my ability to focus on my academics
- No matter what obstacles are placed before me, I'm confident in my abilities to succeed.
- I feel I can handle most things that come my way.
- I am confident that I will succeed at CSU.
- By working hard I can almost always achieve my goals.
- I'm generally optimistic, even when things are difficult.
- I feel that I cope with academic stress in a healthy way.
- I am able to make a plan when a challenge arises.
- When I fail at something, I work harder to succeed the next time.
- I am able to ask for help when needed.
State of Mind

- I lead a purposeful and meaningful life
- I am emotionally healthy
- I feel competent and capable in the activities that are important to me
- I am self-confident
- I am optimistic about my future
- I am physically healthy
- I am comfortable in groups
Adjustment

Personal
- I've been able to adjust to living on campus
- I feel at home at CSU
- I feel I am adjusting well to CSU academically
- CSU is meeting my expectations academically
- I am engaged and interested in my daily activities
- I feel that I am a part of the CSU community

Social
- So far this semester I've been able to make friends with other students
- So far this semester I've been able to connect with others who share common interests with me
- I feel I am adjusting well to CSU socially
- CSU is meeting my expectations socially
Objective 1:
One-on-One Results
Personalized Conversations

- One-on-one discussions and reflections
  - What did they talk about?
  - General descriptive, trends
  - Significance of these conversations
  - Needs assessment: Do students know where they are struggling?
    - Academic
    - Social
    - Family/Homesick
    - Financial
Strengths

The following topics may be great opportunities to help your student build confidence in their transition to CSU:

- Works harder to succeed when failure occurs.
- Has confidence that hard work will assist in achieving goals.
- Is able to ask for help when needed.
- Social relationships are supportive and rewarding.
- Has set academic goals.
- Time spent with roommate is meeting expectations.
- Has a feeling of fitting in well at CSU.
- Has been able to adjust to living on campus.
- Has support when help is needed.
- Adjusting well to CSU academically.
- Adjusting well to CSU socially.
Challenges

Make sure that you direct the student to resources based on the topics below. Share your experiences in coping strategies.

- Student indicated on survey that they intend to sleep more.
- Intends to utilize tutoring services. Ask if student needs more information.
- Student indicated on survey that they intent to exercise regularly. Ask if student needs more information re: Rec Center.
## Response-Based Recommendations

Shown under **Strengths** on student report when student responds to a question a specific way.

<table>
<thead>
<tr>
<th>Question</th>
<th>Recommendation</th>
</tr>
</thead>
</table>
| When I fail at something, I work harder to succeed the next time.  
   • Slightly Agree  
   • Agree  
   • Strongly Agree | Works harder to succeed when failure occurs. |
| By working hard I can almost always achieve my goals.  
   • Slightly Agree  
   • Agree  
   • Strongly Agree | Has confidence that hard work will assist in achieving goals |
| I am able to ask for help when needed.  
   • Slightly Agree  
   • Agree  
   • Strongly Agree | Is able to ask for help when needed |
Common Roadblocks

- Personal struggles: 18.4%
- Paying for college: 33.9%
- I want to obtain a degree not offered at CSU: 3.6%
- I miss my family and friends back home: 20.8%
- I don't think college will be worth the...: 3.2%
- I am worried about my major: 22.5%
- Family issues: 6.5%
- CSU isn't my community: 4.3%
- College isn't for me: 2.4%
- Classes are too difficult: 14.4%
- Adjustment to CSU: 11.7%
How CSU stacks up against First Year Student expectations

- Feeling at home in my residence hall
- Time I spend with my roommate
- Number of friends I have met
- Freedom on a day-to-day basis
- Partying
- Interesting classes
- Amount of group work required in my class
- How well my high school prepared me for college
- Large class sizes
- Challenging classes
- Homework/studying outside of class
- Time spent attending class

1-Much less than I expected
2-Less than I expected
3-Slightly less than I expected
4-About what I expected
5-Slightly more than I expected
6-More than I expected
7-Much more than I expected
Having a class that shows you how to take notes in class, good ways to study on your own, and other things to help with the academic transition.

I feel that there isn't really any one thing to improve my experience, because for me college is what you make of it. So if I'm not enjoying myself the only one I can blame is me.

SOMEONE TEACH ME HOW TO NOT BE AWKWARD. AHHHHH

I believe that I need to spend more time studying, need to seek help from a tutor, and go talk to my professors during there office hours just to talk.

I do not think I am able to pass any classes here at CSU, therefore I just want to leave.
## Top 10 Resources ~ Fall 2015 Taking Stock survey

<table>
<thead>
<tr>
<th>Resources</th>
<th># of Students</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math skills</td>
<td>2469</td>
<td>58%</td>
</tr>
<tr>
<td>Writing skills</td>
<td>2363</td>
<td>55%</td>
</tr>
<tr>
<td>Public speaking skills</td>
<td>2248</td>
<td>52%</td>
</tr>
<tr>
<td>Time management</td>
<td>2229</td>
<td>52%</td>
</tr>
<tr>
<td>Test taking/test anxiety</td>
<td>2212</td>
<td>52%</td>
</tr>
<tr>
<td>Internship opportunities</td>
<td>2157</td>
<td>50%</td>
</tr>
<tr>
<td>Memory and concentration</td>
<td>2132</td>
<td>50%</td>
</tr>
<tr>
<td>General study skills</td>
<td>2055</td>
<td>48%</td>
</tr>
<tr>
<td>Study Abroad</td>
<td>1933</td>
<td>45%</td>
</tr>
<tr>
<td>Textbook reading</td>
<td>1782</td>
<td>42%</td>
</tr>
<tr>
<td>Job opportunities/Work Study</td>
<td>1771</td>
<td>41%</td>
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</table>
Objective 2:
Student Success Results
## About the Students

### Personal Characteristics
- 55.1% Female
- 20.9% Minority
- 26.1% First Generation
- 1.7% Athlete
- 69% Resident

### Student Characteristics
- 40% STEM majors
- 8.4% Honors
- 11.3% First fall probation
- Avg. HS GPA = 3.61
- Avg. Index = 115.0
- Avg. FA15 credits = 14.92
- Avg. Fall 15 GPA = 2.92
- 93% Enrolled SP16

N= 4,202 First-Time Students, On-Campus (Fall 15)
## Instrument Summary

<table>
<thead>
<tr>
<th>Construct</th>
<th>Factors</th>
<th>Mean</th>
<th># of Items</th>
<th>Variance Explained</th>
<th>Cronbach's Alpha</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homesickness and Family Resp.*</td>
<td></td>
<td>3.22</td>
<td>5</td>
<td>37.3%</td>
<td>0.73</td>
<td>4,202</td>
</tr>
<tr>
<td>Commitment to Staying at CSU</td>
<td></td>
<td>5.60</td>
<td>6</td>
<td>51.2%</td>
<td>0.85</td>
<td>4,201</td>
</tr>
<tr>
<td>Financial Concerns*</td>
<td></td>
<td>3.66</td>
<td>5</td>
<td>61.7%</td>
<td>0.89</td>
<td>4,201</td>
</tr>
<tr>
<td>Resiliency</td>
<td></td>
<td>5.78</td>
<td>9</td>
<td>46.0%</td>
<td>0.87</td>
<td>4,201</td>
</tr>
<tr>
<td>State of Mind</td>
<td></td>
<td>5.79</td>
<td>7</td>
<td>41.7%</td>
<td>0.82</td>
<td>4,202</td>
</tr>
<tr>
<td>Adjustment</td>
<td>Personal Adj.</td>
<td>5.82</td>
<td>6</td>
<td>57.2%</td>
<td>0.83</td>
<td>4,201</td>
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<tr>
<td></td>
<td>Social Adj.</td>
<td>5.73</td>
<td>4</td>
<td></td>
<td>0.91</td>
<td></td>
</tr>
</tbody>
</table>

*Negative constructs, items worded in support of construct*

All questions were asked on a seven-point Likert scale (1= Strongly Disagree & 7= Strongly Agree)
Gender

Financial Concerns* | Commitment* | Resilency* | Homesickness & Family Resp.* | State of Mind* | Social Adj.* | Personal Adj.*
--- | --- | --- | --- | --- | --- | ---
Men (n=1,863) | Women (n=2,294)
3.51 | 5.55 | 5.80 | 3.08 | 5.85 | 5.79 | 5.84
3.79 | 5.63 | 5.75 | 3.34 | 5.75 | 5.68 | 5.80

STEM Major

Financial Concerns
Commitment*
Resiliency*
Homesickness & Fin. Resp.*
State of Mind
Social Adj.
Personal Adj.*

non-STEM majors (n=2,519)  STEM majors (n=1,682)

<table>
<thead>
<tr>
<th></th>
<th>non-STEM</th>
<th>STEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Concerns</td>
<td>3.68</td>
<td>5.56</td>
</tr>
<tr>
<td>Commitment*</td>
<td>3.64</td>
<td>5.64</td>
</tr>
<tr>
<td>Resiliency*</td>
<td>3.27</td>
<td>5.75</td>
</tr>
<tr>
<td>Homesickness &amp; Fin. Resp.*</td>
<td>3.15</td>
<td>5.81</td>
</tr>
<tr>
<td>State of Mind</td>
<td>5.77</td>
<td>5.77</td>
</tr>
<tr>
<td>Social Adj.</td>
<td>5.77</td>
<td>5.71</td>
</tr>
<tr>
<td>Personal Adj.*</td>
<td>5.78</td>
<td>5.87</td>
</tr>
</tbody>
</table>
Financial Concerns
Commitment
Homesickness & Fin. Resp.
State of Mind
Social Adj.

Factors by Residency Status
Non-Residents (n=1,301)  Residents (n=2,900)

Factors by Athlete Status
Non-Althletes (n=4,128)  Athletes (n = 73)

Honor Status
Non-Honors (n=3,846)  Honors (n=355)
Psychosocial Factors Impact on Student Success Outcomes

Covariates
- Index
- STEM major
- Gender
- Residency
- First generation status
- Minority status
- Pell status

- Financial Concerns*
- Resiliency
- Homesickness & Family Obl.
- State of Mind
- Commitment to Staying at CSU
- Social Adjustment
- Personal Adjustment*

CSU Fall 2015 GPA
Psychosocial Factors Impact on Student Success Outcomes

Covariates
- Index
- STEM major
- Gender
- Residency
- First generation status
- Minority status
- Pell status

- Financial Concerns*
- Resiliency
- Homesickness & Family Obl.
- State of Mind
- Commitment to Staying at CSU
- Social Adjustment
- Personal Adjustment

CSU End of First Spring GPA
Covariates

- Index
- STEM major
- Gender
- Residency
- First generation status
- Minority status
- Pell status

Psychosocial Factors Impact on Student Success Outcomes

- Financial Concerns
- Commitment to CSU
- Resiliency*
- Homesickness & Family Obl.*
- State of Mind*
- Social Adjustment
- Personal Adjustment*

Fall 16 Persistence
Covariates
- Index
- STEM major
- Gender
- Residency
- First generation status
- Minority status
- Pell status

Psychosocial Factors Impact on Student Success Outcomes

- Financial Concerns*
- Resiliency
- Homesickness & Family Obl.
- State of Mind*
- Social Adjustment
- Personal Adjustment

Commitment to Staying at CSU
Psychosocial Factors Impact on Student Success Outcomes

Covariates
- Index
- STEM major
- Gender
- Residency
- First generation status
- Minority status
- Pell status

- Financial Concerns
- Resiliency
- Homesickness & Family Obl.
- State of Mind*
- Commitment to Staying at CSU
- Social Adjustment
- Personal Adjustment

End of First Fall Probation Status
Psychosocial Factors Impact on Student Success Outcomes

Covariates
- Index
- STEM major
- Gender
- Residency
- First generation status
- Minority status
- Pell status

- Financial Concerns
- Resiliency +
- Homesickness & Family Obl.*
- State of Mind*
- Commitment to Staying at CSU*
- Social Adjustment*
- Personal Adjustment*

End of First Spring Completed Credits
Psychosocial Factors Impact on Student Success Outcomes

Covariates
- Index
- STEM major
- Gender
- Residency
- First generation status
- Minority status
- Pell status

• Financial Concerns
• Resiliency
• Homesickness & Family Obl.
• State of Mind
• Commitment to Staying at CSU
• Social Adjustment
• Personal Adjustment

MATH Placement Scores
65% of respondents indicated CSU was their first choice when applying for colleges.

Less than a quarter (22%) of students are the primary person who manages their college finances.
On average, how many hours per week do you study/complete assignments outside of class?

Term GPA related to study hours
Taking Stock ~ Fall 2015

<table>
<thead>
<tr>
<th>Study Hours per week</th>
<th>Term GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 hours or less</td>
<td>2.36</td>
</tr>
<tr>
<td>4-6</td>
<td>2.57</td>
</tr>
<tr>
<td>7-9</td>
<td>2.84</td>
</tr>
<tr>
<td>10-12</td>
<td>2.90</td>
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<tr>
<td>13-15</td>
<td>3.00</td>
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<td>16-18</td>
<td>3.17</td>
</tr>
<tr>
<td>19-21</td>
<td>3.20</td>
</tr>
<tr>
<td>22 hours or more</td>
<td>3.12</td>
</tr>
</tbody>
</table>
Taking Stock Program: Impact and Application
• Immediate action items
• Decisions and programming
• Utilizing the data
• Future directions
Immediate Action

- One-on-one conversations with students’ Resident Assistants
- Follow-up progress in the spring for those students who had an ‘at-risk’ score in the fall
- Academic advisor outreach
- Health network outreach
- Create a Support Network
- Identify the areas that new CSU students have concerns and “trouble” areas
- Resident hall programming
- U-Turn
- Learning programs
- Outreach by support team network
- Residence life academic initiatives
- Informs International programming and outreach
- Informs Health Network programming
- Resource dissemination
- Retention initiatives
- Off-campus programming
• Curricular/Academic Level
  – Course level, curriculum planning, D/F/W initiatives, major migration, persistence, probation, graduation

• Co-Curricular Level
  – Academic services, tutoring, advisors, resource usage, learning programs

• Institutional Research Level
  – Student success model
  – Longitudinal tracking
  – Students of Concern
Future Directions

- Survey Expansion
  - Transfer students
  - International students
  - Sophomore level experience
  - Follow-up studies
  - Longitudinal analysis
- Send targeted resources
- Data dissemination
  - Wide breadth of campus research projects
  - Encouraging others to combine psycho-social factors with research area
  - Engaging with the data will allow you to know your students better and serve them better
Questions/Comments?