

# Noncognitive Assessment and Student Success: Converting Research to Practice

**Ross Markle**

Educational Testing Service

**Lori Meono**

Santa Monica College



**How do you know if a student is likely or unlikely to succeed at your institution?**

# Eaton & Bean (1995)

*"Scholars base most research on retention on sociological principles and theory, and focus on **groups rather than individuals**. As a result, we know that some groups of students, such as **educationally disadvantaged students and certain minority groups**, often adapt poorly to their college environments.*

***We know less about the characteristics of individuals within such a group that increase the likelihood of their remaining in school until graduation."***

WHO > WHY

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# Traditional Approaches

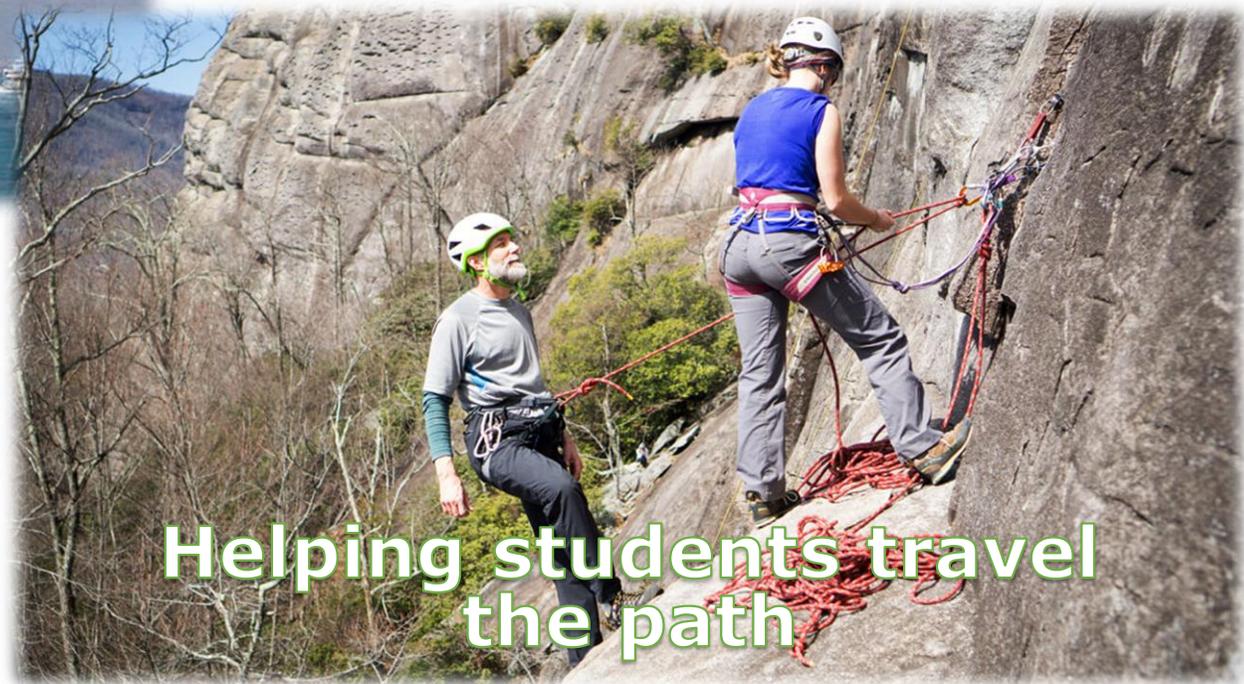
[Engle & Tinto \(2008\)](#): Moving Beyond Access College Success For Low-Income, First-Generation Students

Recommendation	Challenge(s)
“Improve academic preparation for college”	<ul style="list-style-type: none"><li>- <i>Length of K12 reform</i></li><li>- <i>What about current students, adults?</i></li></ul>
“Provide additional financial aid for college”	<ul style="list-style-type: none"><li>- <i>Costly</i></li><li>- <i>Students with resources still struggle</i></li><li>- <i>Social, cultural capital</i></li></ul>
“Ease the transition to college” (by providing bridge, orientation, advising, tutoring, etc.)	<ul style="list-style-type: none"><li>- <i>Isn’t this done already?</i></li></ul>
“Encourage engagement on the college campus”	<ul style="list-style-type: none"><li>- <i>What are the barriers to engagement?</i></li></ul>

# Possible shortcomings of traditional approaches

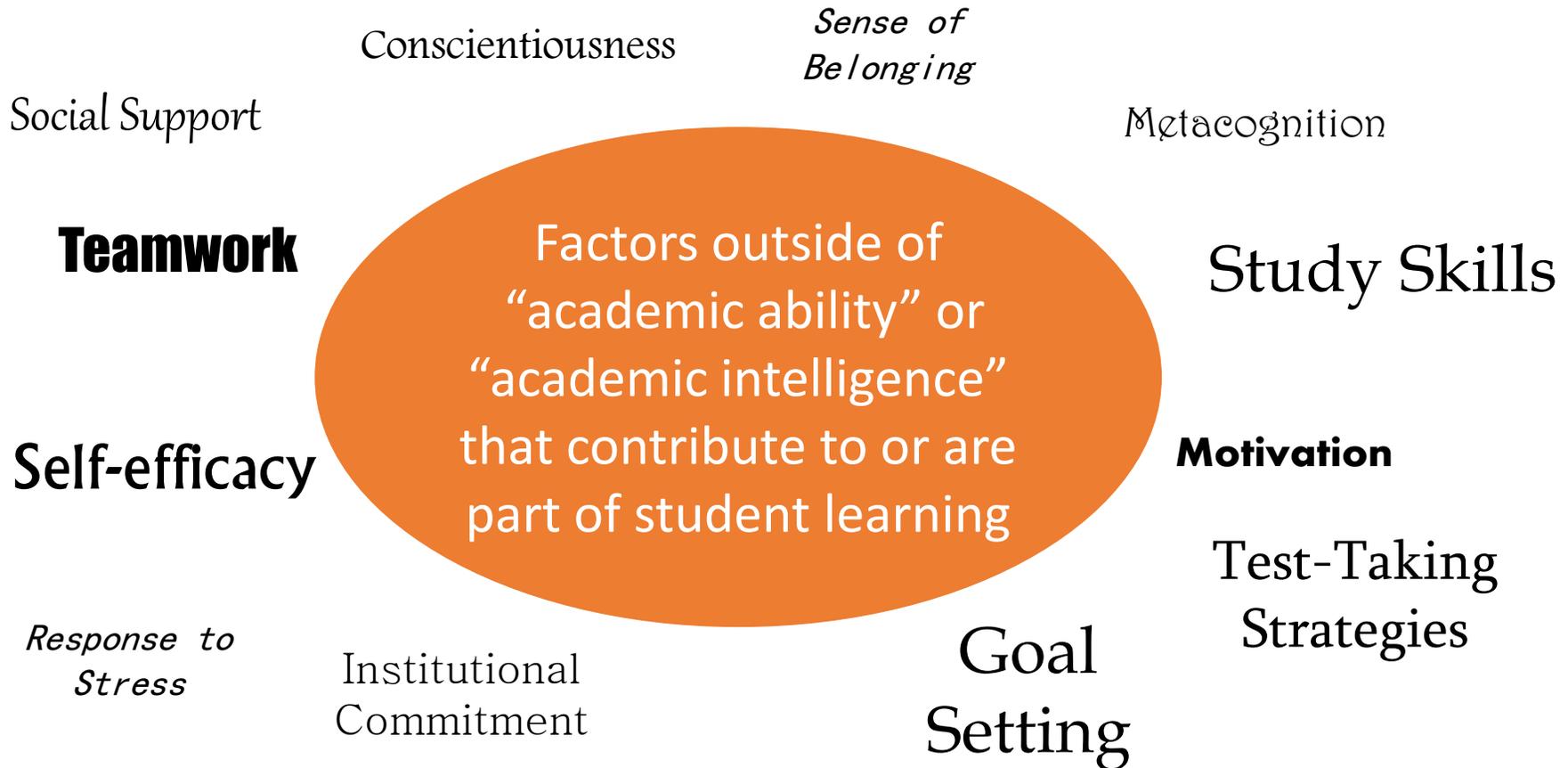
- Focus: Are efforts addressing the key strengths and challenges?
- Access: Are efforts reaching the students who need them?
- Sustainability: Can efforts be implemented at sufficient scale to impact student success?

# Building a better path



Helping students travel  
the path

# What are noncognitive skills?



# Research Into Noncognitive Skills and Student Success

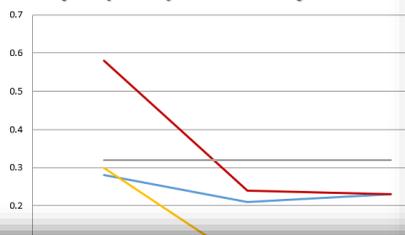
## Esposued Importance: Synthesizing mission statements from

- Knowledge, learning, mastery of general principles
- Continuous learning, intellectual interest and curiosity
- Artistic cultural appreciation and curiosity
- Multicultural tolerance and appreciation

## Employers also care about noncognitive skills

	Skill	% Important	% Prepared
Cognitive	English Language	88	26
	Mathematics	64	18
	Science	33	15
	Teamwork/Collaboration	94	25

## Poropat (2009) Meta-analysis



Construct	r <sub>GPA</sub>	r <sub>retention</sub>
Academic-related Skills	.129	.301
Academic Goals	.155	.212
Academic Self-efficacy	.378	.259
Institutional Commitment	.108	.206

Math Readiness	Effort Level (participation, attendance)	Effort Level	
		High	Medium
High	High	92%	80%
	Medium	86%	67%
	Low	74%	50%

n=713  
Li, K., et al. (2013). Readiness, behavior, and foundations course success. *Journal of Developmental Education*, 13 (

## Noncognitive skills in underserved populations

A host of studies have looked at noncognitive factors within underserved populations, for example:

- Noncognitive factors predict graduation better for African-American students than white students (while SAT does not predict for either; Tracey & Sedlacek, 1986).
  - Motivational and social support as predictors of adjustment and academic success in minority, first-generation college students (Dennis, Phinney, Chateco, 2005).
  - Noncognitive factors predict persistence among first-generation students better than SAT scores (Ting, 2003).
- ^Single institution studies with smaller samples
- On the intervention side: larger benefits (engagement, noncognitive outcomes, persistence, academic success) for first-generation college students when they do participate (Pascarella, Pierson, Wolniak, & Terenzini, 2004).

- Noted importance from both within and outside of higher education
  - Oswald et al., 2005; Casner-Lotto & Benner, 2006
- Significant predictive validity
  - Robbins et al, 2004; Poropat, 2009; Richardson, Abraham, and & Bond, 2012
  - Even when controlling for previous academic achievement (test scores, HSGPA)
  - Equal or stronger predictor of retention than previous academic achievement (Robbins et al., 2004; Markle et al., 2013)
- Evidence for compensatory effects among students with lower academic achievement, certain traditionally underserved populations
  - Li et al., 2013; Tracey & Sedlacek, 1986; Dennis, Phinney, Chateco, 2005; Ting, 2003

Background

Parent(s) never went to college

Influence

*Why do YOU need to go to college?*

*You BETTER go to college!*

“Behaviors”

- Lower commitment to college goals
- Lower social support
- “College knowledge”?

- Higher commitment to college goals
- Higher social support
- College knowledge?

<i>General Skill</i>	<i>Subskill</i>	<i>Definition</i>	<i>Example Items</i>
<b>Academic Skills</b> Tools and strategies for academic success	<i>Organization</i>	Strategies for organizing work and time.	I make a schedule for getting my school work done. I take due dates seriously.
	<i>Meeting Class Expectations</i>	Doing what’s expected to meet the requirements of your course including assignments and in-class behaviors.	I attend almost all of my classes. I complete the reading that is assigned to me.
<b>Commitment</b> Active pursuit toward an academic goal	<i>Commitment to College Goals</i>	Perceived value and determination to succeed in and complete college.	One of my life goals is to graduate college. The benefit of a college education outweighs the cost.
	<i>Institutional Commitment</i>	Attachment to and positive evaluations of the school.	This is the right school for me. I’m proud to say I attend this school.
<b>Self-management</b> Reactions to academic and daily stress	<i>Sensitivity to Stress</i>	Tendency to feel frustrated, discouraged or upset when under pressure or burdened by demands.	I get stressed out easily when things don't go my way. I am easily frustrated.
	<i>Academic Self-Efficacy</i>	Belief in one’s ability to perform and achieve in an academic setting.	I'm confident that I will succeed in my courses this semester. I can do well in college if I apply myself.
	<i>Test Anxiety</i>	General reactions to test-taking experiences, including negative thoughts and feelings (e.g., worry, dread).	When taking a test, I think about what happens if I don't do well. Before a test, my stomach gets upset.
<b>Social Support</b> Connecting with people and students resources for success	<i>Connectedness</i>	A general sense of belonging and engagement.	I feel connected to my peers. People understand me.
	<i>Institutional Support</i>	Attitudes about and tendency to seek help from established resources.	If I don't understand something in class, I ask the instructor for help. I know how to find out what's expected of me in classes.
	<i>Barriers to Success</i>	Financial pressures, family responsibilities, conflicting work schedules and limited institutional knowledge.	Family pressures make it hard for me to commit to school. People close to me support me going to college.

# A Holistic Assessment Solution

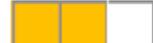
- Targets students between pre- and early enrollment (post-admissions)
- Inclusion of both cognitive and noncognitive factors
- Alignment between assessment and institutional practices
  
- Added value:
  - Respects the whole student (examines cognitive and noncognitive factors)
  - Focuses on the unique characteristics of each student
  - Focuses on factors educators can control such as motivation, social connectedness, as opposed to socioeconomic, situational factors

<b>Student Name:</b> <b>Student ID:</b> <b>Institution:</b> Honore <b>Test Date:</b>	 <b>Advisor Report</b>
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<b>The Student's Background</b> <ul style="list-style-type: none"> <li>• Gender: Male</li> <li>• Race: Black or African American</li> <li>• Age: 20</li> <li>• Is English your best language? No</li> </ul>	<b>COURSE ACCELERATION*</b> <div style="background-color: green; color: white; padding: 2px; text-align: center;">MATH: YES</div> <div style="background-color: green; color: white; padding: 2px; text-align: center;">ENGLISH: YES</div> <b>RECOMMENDATION</b>	<b>ACADEMIC SUCCESS INDEX**</b>  <b>MODERATE</b>	<b>RETENTION SUCCESS INDEX***</b>  <b>HIGH</b>
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**Success Indices:** Separate indices for both classroom and enrollment success. Based on background, cognitive and psychosocial information and supported by statistical relationships with success.

### Skill Report

Academic Skills- Tools and strategies to succeed in the classroom		
A student with similar skills:	<ul style="list-style-type: none"> <li>• Effectively uses strategies to manage time and assignments</li> <li>• Always attends class and is prepared</li> </ul>	 <b>HIGH</b>
Tools/Tips	The Tutoring Center can provide strategies to help you set goals and organize your time. See your Advisor for more information, or click <a href="#">here</a> for helpful tips and tools.	
Commitment- Active pursuit toward an academic goal		
A student with similar skills:	<ul style="list-style-type: none"> <li>• Sees some value in a college degree</li> <li>• Feels some attachment to the college</li> </ul>	 <b>MODERATE</b>
Tools/Tips	The Career Center can provide strategies to help you set goals and plan your academic career. See your Advisor for more information, or click <a href="#">here</a> for helpful tips and tools.	
Self-Management- Reactions to academic and other stressors		
A student with similar skills:	<ul style="list-style-type: none"> <li>• Has difficulty managing stress in a positive, productive manner</li> <li>• Doubts personal skills and abilities</li> </ul>	 <b>LOW</b>
Tools/Tips	The Counseling Center can help you manage stress that arises from college life. See your Advisor for more information, or click <a href="#">here</a> for helpful tips and tools.	
Social Support- Connecting with people and resources for student success		
A student with similar skills:	<ul style="list-style-type: none"> <li>• Holds strong connections to people and resources</li> <li>• Effectively balances the demands of college and personal life</li> </ul>	 <b>HIGH</b>
Tools/Tips	The Office of Student Life can connect you with important student groups on campus. See your Advisor for more information, or click <a href="#">here</a> for helpful tips and tools.	

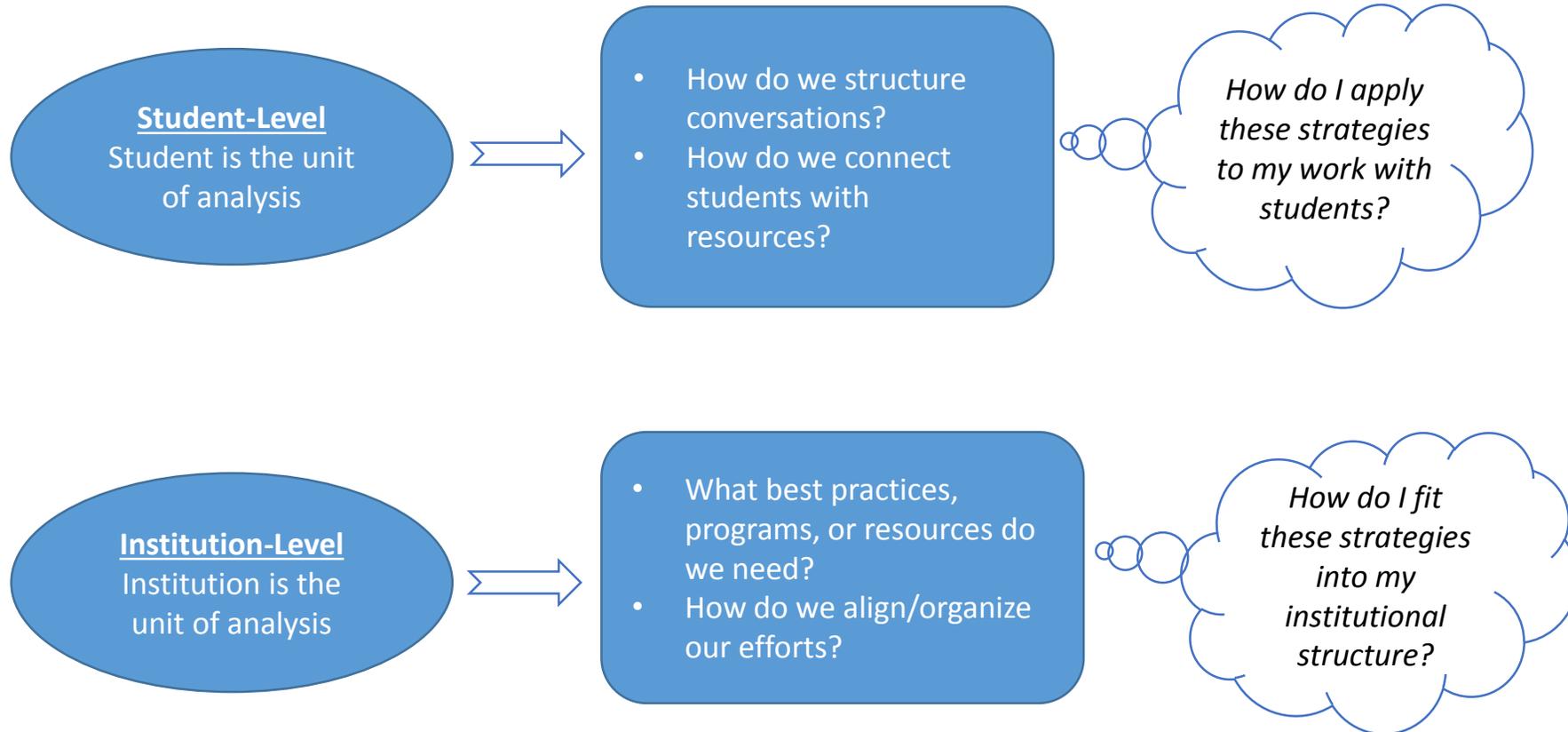
**Background Information:** Communicate key student information from both *SuccessNavigator*® and SIS to faculty/advisor.

**Domain Scores:** Four general areas of student strengths and weaknesses. Scores are presented normatively.

**Feedback:** Determine by more specific "facet" scores (see next page).

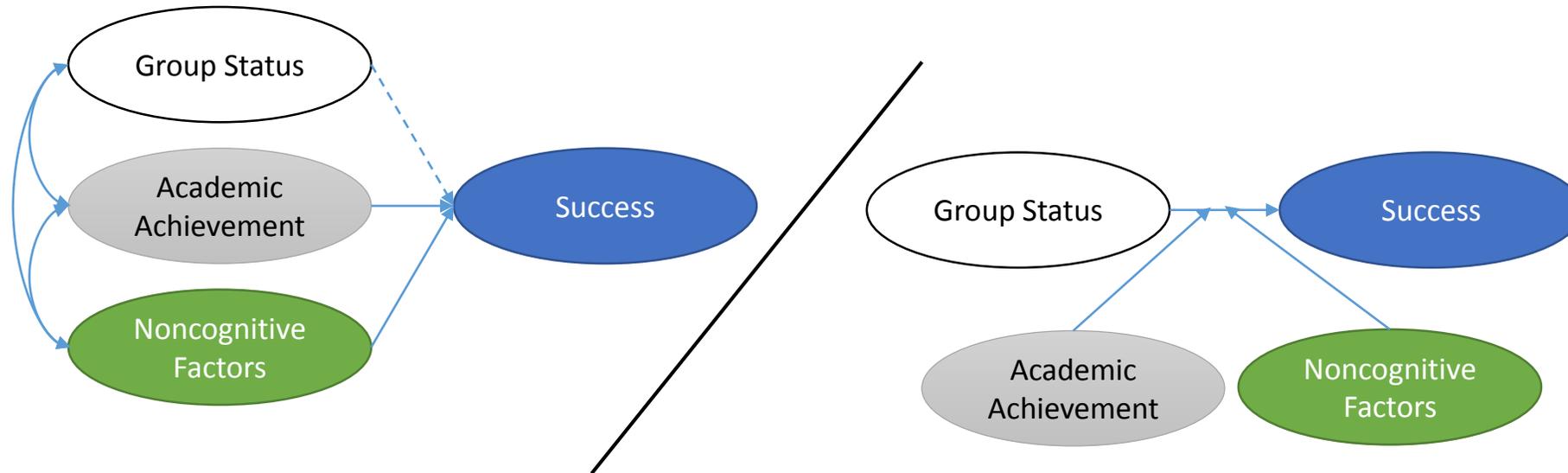
**Action Plans:** Suggested interaction with programs and services on campus.

# Student vs. Institution-Level Interventions

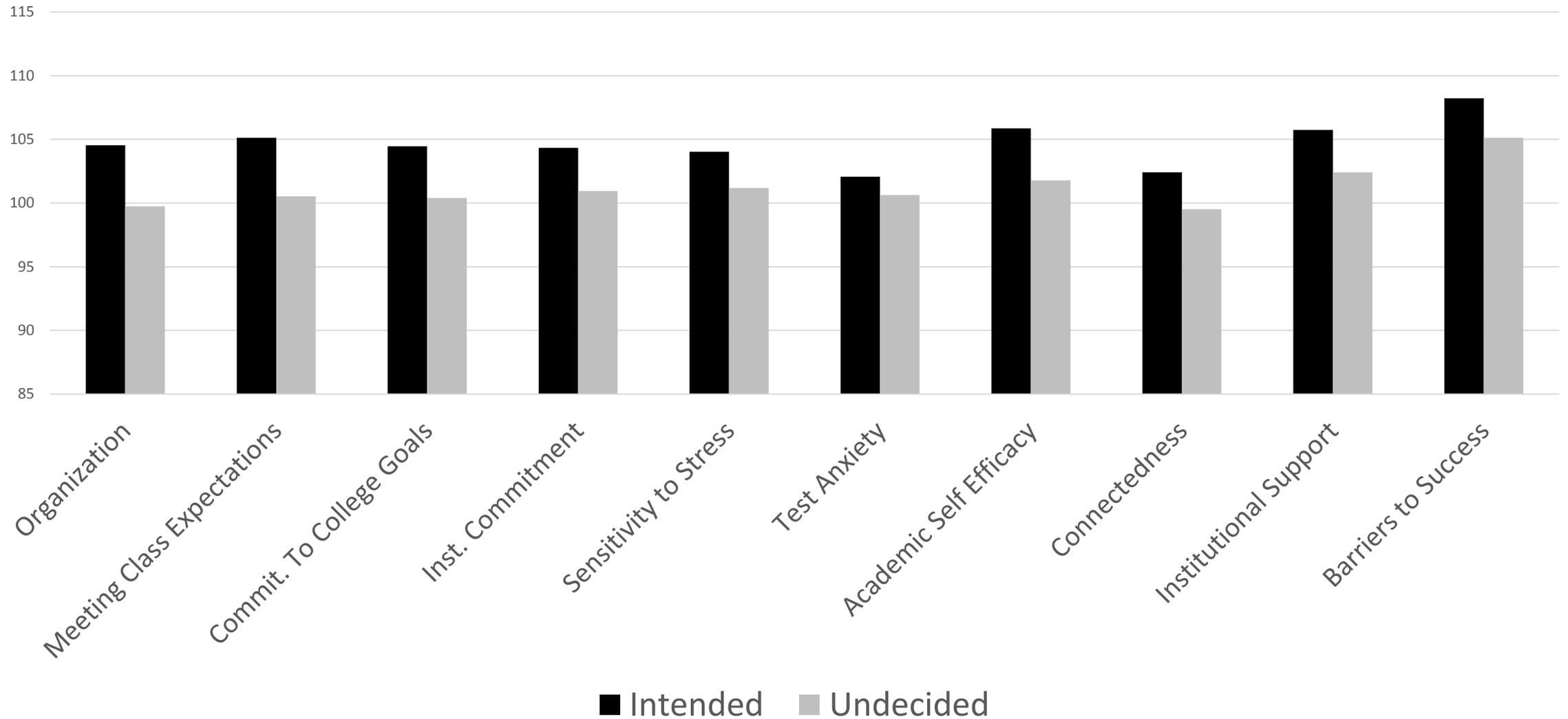


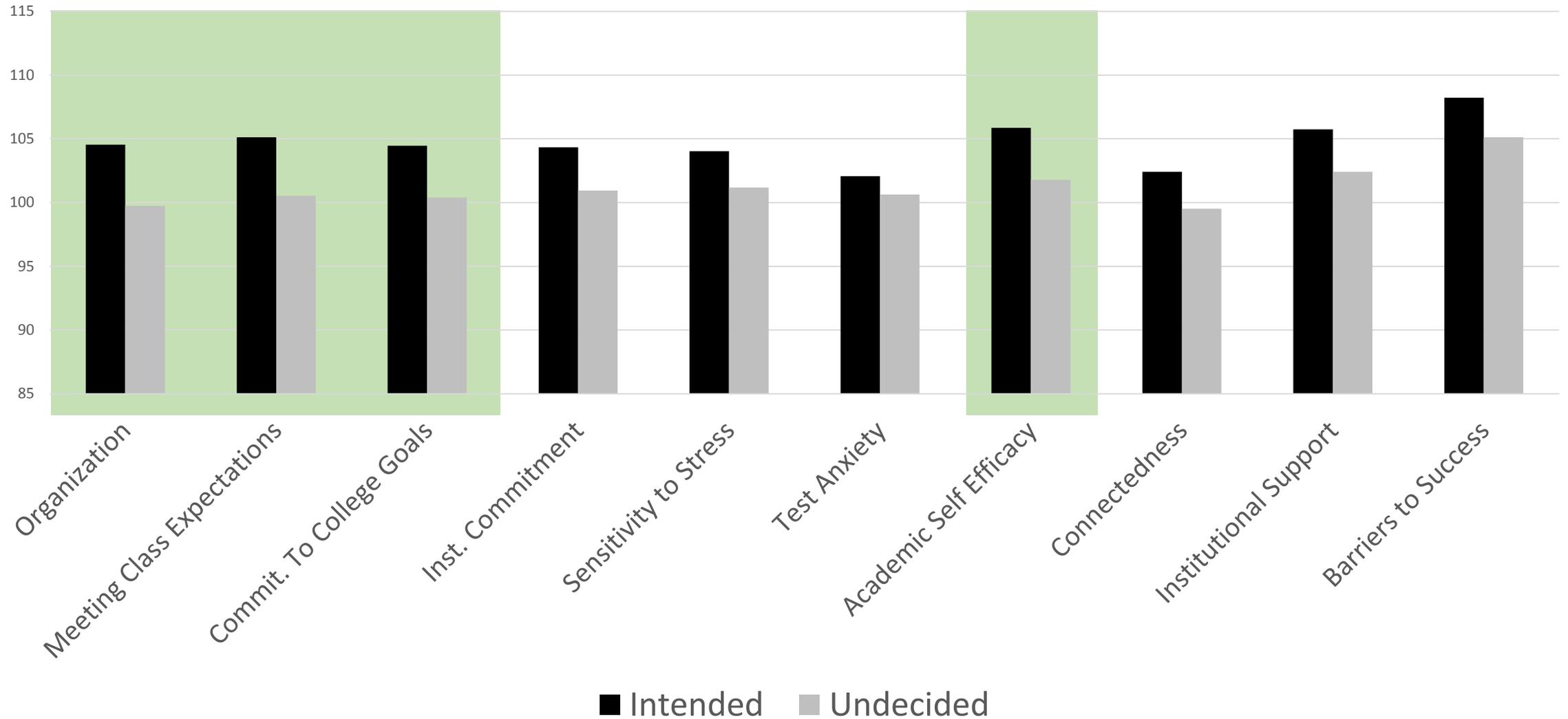
# Working with Subpopulations

- Many view noncognitive factors as key to improving success, particularly for traditionally disadvantaged populations (e.g., academically underprepared, first-generation or low-SES students).
- However, there are several possible ways in which noncognitive variables might relate to these populations, each of which has different implications for guiding intervention.



*Overall, however, even trying to model success within traditionally underserved populations still encourages a "one-size-fits-many" approach. The paths to success within a group are likely more varied than the paths within.*





# Touch Points for Holistic Assessment and Student Success Strategies

Advising, Coaching, Counseling

Course Placement

Institutional Planning



# Work with Minority Serving Institutions

ETS has committed to working with several sectors of minority serving institutions in order to support their efforts in student success.

- SuccessNavigator has been used in 12 of the 104 Historically Black Colleges and Universities (HBCU's) in the United States, with large-scale implementations at North Carolina Central Univ. and North Carolina A&T Univ.
- In addition to working with several institutions with large Tribal populations (e.g., Univ. of New Mexico, Bacone College), ETS has recently begun work with three Tribal colleges: Fond du Lac Tribal and Community College, Southwestern Indian Polytechnic Institute, and Nebraska Indian Community College.
- ETS is currently engaged in a multi-year demonstration project with three members of the Hispanic Association of Colleges and Universities (HACU): Texas State University, Valencia College, and California State University -Fullerton.

# SuccessNavigator Tribal College Partners

## **California State University – Fullerton (n ~ 700)**

- SuccessNavigator being administered as part of student success course
- Targeted toward 4+ sections of undecided students, as well as other interested academic programs

## **Texas State University (n ~ 4,000)**

- Provided SuccessNavigator to all incoming students as part of New Student Orientation
- Supports co-curricular best practices and holistic support network

## **Valencia College - Poinciana (n ~ 500)**

- Supporting student success at new campus in low college-attendance area of Orlando
- Piloted with ~30 students in Fall 2017, expanding to larger population in Spring 2018
- Supporting interventions as part of first-year experience course

# Integrating Noncognitive Assessment into Coaching and Advising

# Santa Monica College

- \* Two-year community college
- \* Approximately 34,000 students
  - \* Extremely diverse
  - \* Over 3,300 international students



# Santa Monica College

- \* Strong commitment to Student Services
  - \* Large counseling department
- \* Focus on non-cognitive skills
- \* “GRIT” Strategic Initiative



# GRIT Initiative

- \* **Growth, Resilience, Integrity, Tenacity**
- \* Aimed to close the equity gap
- \* Focused on fostering students' perseverance, sense of purpose, connection and engagement
- \* Encouraged professors to make their classes more relevant + enjoyable



# GRIT Initiative

- \* Created a GRIT Speaker Series
- \* SSSP funding used to purchase SuccessNavigator and to hire a SuccessNavigator Counselor

# SuccessNavigator at SMC

- \* Infused SuccessNavigator (SN) into a specific SMC class
  - \* Counseling 20
- \* 2 methods
  - \* Library setting
  - \* Classroom setting

# Counseling 20: Student Success Seminar

- \* *3 unit, UC transferable*
- \* *Optional*
- \* *2<sup>nd</sup> most enrolled in course*
- \* *Over 120 C20 sections offered annually*
  - \* *3500 to 4000 student enrollments*
- \* *Mostly 1<sup>st</sup> year students*

# Counseling 20: Student Success Seminar

- \* Exploration of various factors that impact learning, well-being, and success
- \* Focused on a variety of non-cognitive skills
  - \* (e.g., motivation, study strategies, time management, etc.)
  - \* SN measures several of these skills

# What is a SuccessNavigator Counselor?

- \* Hybrid role
  - \* Collaborator, coach, advisor, therapist
- \* Administer SuccessNavigator
- \* Interpret SN results
- \* One-stop shop for resources
  - \* Based on individual needs
  - \* Identified by SN results

# Application: Library

- \* Brief introduction to SN
- \* Students complete the assessment during class
  - \* Provides opportunities for clarification
- \* Results immediately available upon completion
- \* Results are then interpreted

# Application: Classroom

- \* Instructions provided to students by their professors
  - \* Students complete the assessment on their own time
- \* Results not immediately available
  - \* Handed out during class
- \* Results are interpreted at a later date

# Interpreting Results

- \* Remind students of the purpose of SN
- \* Describe the rating scale for scores
  - \* “High” scores represent a strength
  - \* “Low” or “Moderate” scores do not necessarily represent a weakness
- \* Define each domain and subscale
  - \* Provide relevant examples

# For example...

- \* Institutional Commitment
  - \* Measures the student's level of commitment to their school

# Survey

- \* At the end of each library presentation, students answer a survey re: their experiences with SN
- \* Survey results indicate that SN is accurate, enjoyable, and informative

# Survey Data

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Responses
My SuccessNavigator results reflect who I am as a student at SMC.	383 19.5%	953 48.4%	416 21.1%	168 8.5%	48 2.4%	1,968
I believe I can make changes to improve the skills in my Skill Profile.	840 42.7%	1,001 50.9%	93 4.7%	11 0.6%	20 1.0%	1,965
I intend to take steps to improve one or more of the skills in my Skill Profile.	744 37.9%	1,058 53.8%	130 6.6%	16 0.8%	17 0.9%	1,965
Today's session has provided me with some ideas to improve the skills in my Skill Profile.	693 35.2%	1,003 51.0%	217 11.0%	30 1.5%	23 1.2%	1,966
I found the SuccessNavigator process enjoyable.	505 25.7%	856 43.6%	496 25.3%	68 3.5%	38 1.9%	1,963
I found the SuccessNavigator process informative.	646 33.1%	1,030 52.7%	219 11.2%	26 1.3%	33 1.7%	1,954

# Follow Up to SN

- \* Individual meetings with students
- \* ~ 30 minutes
- \* Brief review of the domains and subscales
- \* Emphasize strengths
- \* Identify potential barriers to success
- \* Create an individualized plan
  - \* Build on existing strengths
  - \* Address and overcome barriers

# Evolution of SN at SMC

- \* Goal → integrate SN more with the C20 curriculum
  - \* Based on feedback from instructors
- \* Tips & Resources Handout
- \* Reflective class activity/assignment
  - \* Shared with other instructors

# Tips & Resources Handout

”Success is where  
preparation and opportunity meet.”

– Bobby Unser  
*Former automobile racer*

# Tips & Resources Handout

## Academic Skills

- Take and review class notes
- Participate in discussions; ask questions
- Use a planner, calendar, or To Do List
- Download apps to help stay organized (e.g., The Homework App, Class Manager, etc.)
- Create a quiet, productive study environment
  - Minimize distractions
  - Adjust temperature and lighting
- Give yourself enough time to study and complete assignments
  - Generally, 2 hours of homework/studying per unit
- Use campus resources (e.g., tutoring, math lab, writing lab, foreign language lab)
- Create study groups
- Use professor's office hours

## Commitment

- Choose a college and career path
  - Assess your own interests
- Meet with a counselor to help you
- Visit the Career Services Center (located in the Counseling Village)
- Explore your options
- Develop SMART goals: Specific, measurable, achievable, realistic, and time-bound
- Increase your involvement in campus activities and clubs
  - Attend events
  - Clubs list can be found on the SMC website:  
([www.smc.edu/StudentServices/AssociatedStudents](http://www.smc.edu/StudentServices/AssociatedStudents))

## Self-Management

- Create a schedule for yourself to reduce stress and procrastination
- Devote enough time to studying for tests to help reduce test anxiety
- Develop coping/stress management strategies (e.g., listen to music, talk to a friend, go for a walk, etc.)
- Exercise
- Engage in relaxation techniques
  - Deep breathing exercises, progressive muscle relaxation
  - Download the "Calm" app for guided exercises
- Use positive self-talk (positive, realistic statements) to replace self-criticism and increase confidence
- Make time for fun!
  - Engage in hobbies, pleasant activities

## Social Support

- Develop strong communication and conflict resolution skills
- Identify supportive others who you can turn to for help
  - Academic help: professors, tutors, academic counselors, peers
  - Personal help: friends, family, counselors from The Wellness and Wellbeing Center on campus (Liberal Arts room 110), trusted others
  - Financial help: Financial Aid Office
- Strengthen personal and professional relationships
- Identify your own personal barriers to success
  - Meet with your Success Navigator counselor to help you identify barriers and create a plan to overcome them

## **Academic Skills**

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# Reflective Class Activity

What did you learn about yourself from either the Discovery Wheel or the Success Navigator tool?

What are your strengths? Which areas might benefit from extra attention?



**SUCCESS**

Were you surprised by any of your results? Please describe.

What are your academic goals? What steps will you take to achieve them? Which resources might be helpful?

# Future Considerations

- \* Using SN for the STEM program
- \* Using SN with the Peer Educator program and/or other clubs on campus
- \* Providing a training for C20 instructors re: SN
  - \* Beneficial to newer instructors
  - \* May standardize SN use across C20 classes
- \* Ongoing conversations with C20 instructors

Ross Markle  
[rmarkle@ets.org](mailto:rmarkle@ets.org)

Lori Meono  
[meono\\_lori@smc.edu](mailto:meono_lori@smc.edu)



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