

Using Mixed Methods and Longitudinal Studies to Assess Student Learning

Preliminary Findings from the New England Consortium on Assessment and Student Learning

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Outline of the Presentation

- Background on the New England Consortium on Assessment and Student Learning
- Academic, social, and personal engagement
 - A typology of student engagement
 - What does “lack of engagement” or “low coping” look like? Reading interviews against the typology
- Student success in the first two years
 - Multiple definitions of success
 - Quantitative and qualitative methods
 - Comparison of multiple measures of success and change over time
- Where do we go from here?

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New England Consortium on Assessment and Student Learning

(www.wellesley.edu/NECASL)

New England Consortium on Assessment and Student Learning

- Participating institutions
 - Bates College
 - Bowdoin College
 - Colby College
 - Middlebury College
 - Smith College
 - Trinity College
 - Wellesley College
 - New England Association of Schools and Colleges
- Funding sources
 - Andrew W. Mellon Foundation
 - Teagle Foundation
 - Spencer Foundation

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New England Consortium on Assessment and Student Learning

- General goals of the project
 - Explore student learning in relation to institutional policies and practices
 - Better understand students' transition from high school to college
 - Better understand how students make important academic and social decisions
 - Involve faculty and students more directly in assessment
 - Share institutional research findings

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New England Consortium on Assessment and Student Learning

- Quantitative collaborations
 - Comparative CIRP analysis
 - Sophomore survey administration and analysis
 - Planned junior and senior surveys
- Qualitative collaborations
 - Pilot studies (e.g., focus groups, capstone experiences, transcript analyses)
 - Panel study of the Class of 2010

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Panel Study of the Class of 2010

- 36 students at each college (N = 252)
- Race-stratified random sample (African American, Asian American, Latino/a, International, and domestic white students)
- Equal numbers of women and men at coed schools
- Three interviews in first year, two in subsequent years
- Student interviewers at all but one college

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Panel Study of the Class of 2010

- Interviews attempt to capture immediacy of experience
- **Academic experiences:** best/worst courses, choice of major, study habits, interactions with faculty, self-assessment of knowledge and skills
- **Social experiences:** interactions with family and friends, residential life, extracurricular activities, social life
- **"Personal" experiences:** managing time and life, being away from home, balancing competing demands
- **Aspirations, expectations, and self-reflection:** definitions of success, perceptions of change, hopes and fears

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Using Surveys to Develop a Typology of Student Engagement

Three Dimensions of Student Experience

Academic engagement

How often this semester did you feel excited by a class?
(not at all, occasionally, often, very often)

How often this semester did you discuss course contents outside of class?
(not at all, occasionally, often, very often)

Social engagement

I have developed close friendships with students.
(strongly disagree, disagree, agree, strongly agree)

Have you found people here with whom you can discuss personal issues?
(never, rarely, sometimes, usually)

Coping skills

I have managed my time successfully.
(strongly disagree, disagree, agree, strongly agree)

I have successfully managed stress.
(strongly disagree, disagree, agree, strongly agree)

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Student Typology of Engagement

Cross-classification of academic and social engagement

		Academic Engagement		
		low	moderate	high
Social Engagement	low	<i>U</i>	<i>U</i>	<i>A</i>
	moderate	<i>U</i>	<i>A & S</i>	<i>A</i>
	high	<i>S</i>	<i>S</i>	<i>A & S</i>

Low coping trumps all to create final typology

		Coping Skills		
		High		
<i>Low Coping</i> (13%)	Academic Engagement	Social Engagement		
		Low	High	
	Low	<i>Unengaged</i> (17%)	<i>Primarily Social</i> (19%)	
		High	<i>Primarily Academic</i> (18%)	<i>Academic and Social</i> (32%)

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Women tend to report more academic engagement

Coed Colleges	Low academic engagement	Moderate academic engagement	High academic engagement	N
Women	14%	35%	51%	847
Men	25%	37%	38%	559
Total	19%	36%	46%	1406

Women	Low academic engagement	Moderate academic engagement	High academic engagement	N
Women's College	14%	32%	54%	712
Coed College	14%	35%	51%	847
Total	14%	33%	52%	1559

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Women tend to report more social engagement, particularly women at coed colleges

Coed Colleges	Low social engagement	Moderate social engagement	High social engagement	N
Women	20%	23%	57%	838
Men	30%	29%	42%	546
Total	24%	25%	51%	1384

Women	Low social engagement	Moderate social engagement	High social engagement	N
Women's College	27%	27%	46%	705
Coed College	20%	23%	57%	838
Total	23%	25%	52%	1543

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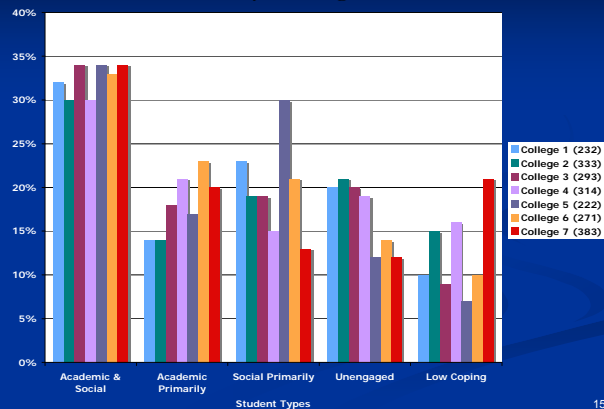
Men and women report similar coping skills, but women's college women report lower coping than coed women

Coed Colleges	Low coping	Moderate coping	High coping	N
Women	10%	27%	63%	838
Men	10%	28%	62%	545
Total	10%	27%	63%	1383

Women	Low coping	Moderate coping	High coping	N
Women's College	18%	29%	53%	705
Coed College	10%	27%	63%	838
Total	14%	28%	58%	1543

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Distribution of Types in the Sophomore Survey by College



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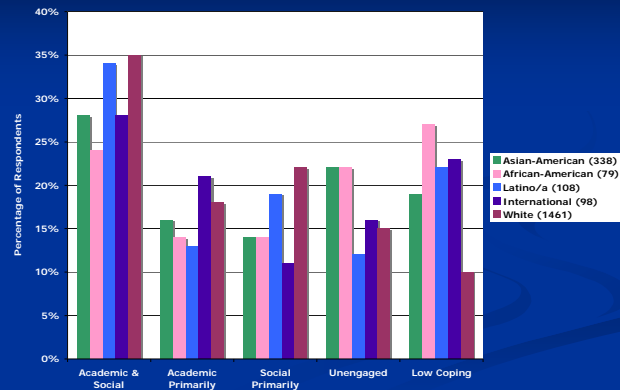
Sophomore Survey – Panel Study Comparisons

- Percentage “unengaged”
 - In sophomore survey (348/2048) 17%
 - In panel sample (28/169) 17%

- Percentage “low coping”
 - In sophomore survey (266/2048) 13%
 - In panel sample (21/169) 12%

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Distribution of Types in the Sophomore Survey by Race/Ethnicity



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Sophomore Survey – Panel Study Comparisons

- Percentage either “unengaged” or “low coping” (sophomore survey vs panel sample)
 - Asian American (41% vs 25%)
 - African American (49% vs 50%)
 - Latino/a (34% vs 25%)
 - International (39% vs 36%)
 - White (25% vs 25%)

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Unengaged and Low Coping Student are far less likely to:

- Understand faculty expectations
- Develop effective study skills
- Contribute to class discussion
- Study with other students
- Assess their writing as “good” or “excellent”
- Be comfortable with the college’s social climate
- Balance academic and extracurricular activities

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What does “lack of engagement” or “low coping” look like?
Reading interviews against the typology

“Unengaged” Student #1

- Academic experiences
 - Minimal expectations of faculty as advisors
 - Faculty interactions off campus (tennis, childcare)
 - Sees grades as a reflection of effort
 - Excited about classes
- Social/residential experiences
 - Lives off campus alone
 - Aunt visits everyday; sibling visits every weekend; parents visit frequently throughout the year
 - Helps families of similar ethnic background new to town
 - Little involvement in campus extracurricular activities
 - Doesn't like Facebook

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“Unengaged” Student #2

- Academic experiences
 - Wanted to go to Harvard but wasn't accepted
 - Difficult transition from British to American academic system
 - Close relationship with FY advisor, but little interaction with other faculty
 - Not “academically motivated”
- Social/residential experiences
 - Bad roommate experience in first year; “not so hot” this year
 - Involved in extracurricular activities off campus in F-Y
 - Transformative residential experience at another college last summer; travels there regularly now
 - Very close to and spends lots of time with her sister (who attends same college)
 - Admires and strives to please parents
 - “Addicted to Facebook”
 - Strong involvement in on campus extra-curricular activities this year

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“Unengaged” Student #3

- Academic experiences
 - Classes are interesting; professors are great
 - “Fell in love” with intended major
 - Has had a good deal of interaction with faculty
- Social/residential experiences
 - Has retained close ties to high school friends
 - Seriously considered transferring first year
 - Dislikes perfectionist attitudes of some other students
 - Spends “way too much time” on email; trying to “wean” self off of Facebook

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Low Coping Student #1

- Had problems balancing academic and other activities in first year (and still does)
- Based on high school experience, would not have anticipated problems at college
- Involved in extracurricular activities from the start; dropped some but has taken on more
- Incredibly reflective about experience and working hard to change
- But...is still “figuring it out”

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Low Coping Student #2

- “Took a while to settle in” first year
- Has become “more accepting” that “the entire world is not like California”
- “All or nothing” on the way to balance
- Did not return to college until the first day of classes this fall
- “I have no idea what I want to do with my life”

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Low Coping Student #3

- Serious health issues and roommate difficulties in first year
- Very difficult summer at home with parents
- “I’m not a planner” (but I’m becoming one)
- Doing much better in sophomore year
- Reflection on first year experiences have changed view of self and others

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Student Success in the First Two Years of College

- Multiple ways to define or measure success
 - Commonly used institutional measures
 - Behavioral measures of success
 - Students’ definitions of success
- Change in students’ definitions of success over time
- Comparison of students’ definitions of success to institutional and behavioral measures
- Quantitative and qualitative methods to explore success

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Data Sources

- Peer-conducted interviews on academic, social-residential, and life-management issues using structured protocols from the panel study of the class of 2010
- Institutional Records
 - Transcripts
 - Admissions' files
 - "Dean's Office" files on social and academic standing
 - Quantitative-skills assessment scores and writing samples
- Sophomore Survey

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Multiple Measures of Success

- Commonly used institutional measures (Transcript Analysis)
 - GPA
 - Retention
 - Course completion
- Behavioral measures (Sophomore Survey)
 - Develop relationships with faculty
 - Interest in or excitement about course content/ideas
 - Being academically responsible; managing time
 - Becoming independent
 - Establishing social networks/making friends
 - Participating in extracurricular activities
 - Managing stress and finding balance

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Students' Definitions of Success

(Question: What would make this a successful year for you?
Asked on three rounds of interviews.)

- Academic Goals
 - Course performance
 - Achieving milestones (declaring a major, planning off-campus study, finding internships) or completing requirements
 - Careers
 - Engagement (connect with faculty)
- Personal Goals
 - Time-management skills and independence
 - Psychological and physical wellness
- Social Goals
 - Extracurricular activities
 - Establish and maintain friendships
- Balance Goals: Balance, integrate, or be successful in academic and personal/social aspects of life

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■ Course performance

- Get "really good grades"
- "I just kind of want straight A's instead three A's and a B"
- "Have all my grades be B+ or higher. And if I get a B+, only one B+"

■ Milestones/Requirements

- "I want to try and get all my requirements out of the way"
- "And that I will have more of an idea of what I'm minoring or majoring or that type of thing, and where I'm going abroad and when. Just more of a plan than I do now."
- "And maybe even know what I'm doing with my summer, because I would rather have some sort of internship somewhere instead of waiting tables in a bad Italian restaurant"

■ Career

- "If you don't do well then I have to change my major and plans for life"

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■ Engagement

- “Picking good courses that I’ll be interested in and I don’t fall asleep in”
- “And to learn all or most of what’s being taught in my classes”
- “Continued development in my interests and my knowledge”
- “Because I know that if I do end up choosing something, I want to be fully interested and fully involved in it 100% and know that it’s something that I love to do”

■ Connect with faculty

- “I want to obviously have a good relationship with at least one faculty member, which requires a little bit more effort on my part I think”
- “I’d like to do some research with a professor here”
- “Definitely stronger connections with my teachers”

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■ Time management and independence

- “I guess sort of completely adjusting to not having my parents, and not having to call them all the time about everything”
- “Give my best. Even though maybe I failed my classes, I’m going to still give my best in them. That’s a personal feeling of being able to do my best.”
- “Well, I need to just keep getting up at eight on Monday mornings for math, it’s just getting harder and harder as it gets colder and colder. I need to get a big down jacket, which I don’t have yet. I’ll just be a huge marshmallow rolling to classes. I don’t know, I, you know, I don’t feel drowned by the work yet, but I definitely need to get a better handle on some, on getting through reading.”

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■ Psychological and physical wellness

- “Enjoy myself”
- “I have to be able to go out on the weekends and just relax, which is hard at this point. But at the end, it definitely would have been nice to look back and be like, oh yeah, that Saturday night was really great. But so far I haven’t really had a good weekend here.”
- “Get a good sleep/eat schedule so you can stay healthy. If you’re not healthy your mood suffers. A lot of times I’ve been able to pull a smile from way out of the bottom of a bag when people are walking past or something. Like you get drained after awhile. So if you try to stay healthy in some way, shape, form or fashion, it helps you be able to do your academic stuff as well as your stuff even when you’re stressed out.”
- “Staying calm. Staying calm and just thinking. Because a lot of times, being younger, we tend to think that anything that happens, they throw us a monkey wrench in our program is like the end of the world. So it’s hard to see past stuff as soon as it happens. But if you just take a minute or try to think about things like the silver lining of a cloud, like be more positive you can a lot of times alleviate a lot of stress.”

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■ Extracurricular involvement

- “I really want to make the lacrosse team. Yeah, college shouldn’t be about sports, though. So let’s see. No, I really, really do want to make the lacrosse team.”
- “I want my community service program to all work out. It’s fairly important to me to give back to society, so I want that to work out well.”
- “On top of that, I guess learn how to incorporate clubs and stuff into my schedule as well. That’s another one of my goals, at least for sophomore year I can just jump in when it starts and stuff. I also want to become a proctor next year. Because I just love that interaction with people. I’m already working for Res. Life and like, they’re really, really cool people. Like one of the most coolest people on campus. So pursuing that somehow.”

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■ Establish/maintain friendships

- “So I guess it would be really nice if I, maybe not knew everyone personally, but obviously, knew their names and talked to them or something. So meeting a lot of people.”□
- “Develop some really intimate relationships. Have somebody that I can talk to about anything anytime”
- “And just, I think, I’ll feel like I had a good year if like when I leave and I just really like miss the people.”
- “And just staying in touch with my friends I think. That would be a big thing that would make my year successful, because I’ve heard that it gets really hard during sophomore year because you’re isolated in upperclassman housing and stuff and keeping in touch is hard. So just making it though the year with my friends and not having any more conflicts and stuff like that.”

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■ Balancing/integrating/succeeding in academics and personal/social aspects of life

- “For me right now I think if I got that balance between my work and my activities and go into all the activities that I want to do, I think that would be successful”
- “I need to find a balance between work and study and extracurricular. But I always try to find a balance.”
- “I just want to be great in everything I do”

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- Prevalence of each type of goal at each point in time (cross-sectional analysis)
- Consistency with which individual students mention particular goals over time (longitudinal analysis)
- Goals for individual students at each point in time

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Prevalence of Academic Goals at Each Interview Round

	Fall Yr 1	Spring Yr 1	Fall Yr2
Course Performance	71%	62%	82%
Specific GPA	23%	21%	21%
Milestones	11%	21%	73%
Career	0%	6%	6%
Engagement	34%	30%	49%
Connect w/ faculty	6%	0%	18%

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Prevalence of Personal, Social, and Balance Goals at Each Interview Round

	Fall Yr 1	Spring Yr 1	Fall Yr2
T/M and Indep.	40%	47%	30%
Wellness	20%	27%	55%
Extracurricular	40%	29%	49%
Friendships	74%	38%	42%
Balance	23%	21%	30%

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Consistency of Academic Goals Across the Interview Rounds

	Never	One Time	Two or More
Course Performance	7%	14%	79%
Specific GPA	62%	28%	10%
Milestones	24%	66%	10%
Career	86%	14%	0%
Engagement	31%	34%	35%
Connect w/ faculty	79%	17%	3%

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Consistency of Personal, Social, and Balance Goals Across the Interview Rounds

	Never	One Time	Two or More
T/M and Indep.	28%	41%	31%
Wellness	21%	59%	20%
Extracurricular	35%	38%	27%
Friendships	14%	38%	48%
Balance	41%	38%	21%

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Goals for Individual Students for Each Round

	Fall Yr 1	Spring Yr 1	Fall Yr2
Academic only	6%	12%	6%
Personal only	0%	12%	0%
Social only	9%	3%	0%
Acad. and Personal	3%	18%	30%
Acad. and Social	34%	30%	24%
Social and Personal	9%	9%	0%
Acad., Soc., and Pers.	40%	18%	39%

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- Relationship of students' success goals to actual success
 - Self-rated success of first-year
 - Sophomore GPA

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Self-Perceived Success in First-Year

- Students who had **engagement goals** in the spring of the first year tended to rate the first year as being more successful than students who never talked about their learning or academic interests when asked to define success
- Students who had **wellness goals** in the spring of the first year tended to rate the first year as being more successful than students who never talked about psychological or physical health when asked to define success

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Sophomore GPA

- Students who mentioned **wellness goals** had higher GPAs than students who never talked about psychological and physical health when asked to define success
- Students who mentioned **extracurricular goals** had higher GPAs than students who never talked about joining clubs, making teams, being a proctor, and so on when asked to define success
- Students who mentioned **milestone goals** in the sophomore year had higher GPAs than students who never talked about their academic plans

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Do students, institutions, faculty, and administrators define and/or measure success similarly?

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A More Nuanced Story of Academic Engagement: Profiles of Two Students

- Student #1
 - African-American male
 - Full financial aid
 - Low admissions' rating
 - Attended small, private high school
 - Sophomore year GPA—3.09
 - Talks to faculty outside of class, participates in class discussions, has made friends, participates in extracurricular activities
- Student #2
 - African-American female
 - No financial aid
 - Low admissions' rating
 - Attended prestigious, private K-12 school
 - Sophomore year GPA—2.68
 - Talks to faculty outside of class, participates in class discussions, has made friends, participates in extracurricular activities

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■ View of student #1's academic engagement

- Reports that he has close relationships with faculty and administrators. Talks to faculty during office hours frequently about courses as well as intellectual and personal issues.
- “I love all of my classes. I think that's one reason why I had to take five this semester because I love going so much that once I've found who the professors are who are passionate about what they are teaching, I just want to find more.”
- Says he rarely has found people with whom he can discuss intellectual issues, but does have friends to discuss personal issues
- A successful first semester of sophomore year — “This semester would be successful if I can discover something really groundbreaking about the world around me.”
- A successful sophomore year — “Doing as much as humanly possible as a musician, a scholar, a person, an athlete, a thinker.”

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■ View of student #2's academic engagement

- Thinks her courses are “good” but feels that her greatest accomplishment at college so far has been finding strong friendships.
- Interacts with faculty occasionally, primarily about assignments.
 - “Like if you want to get an A on an essay, the best way to do it is to give it to the professor first, have them mark it up and then turn it in again. I didn't realize that it was that easy to do. And I was kind of intimidated to go and see them, but once I started doing that, the intimidation was gone.”
- Says she usually finds people with whom she can discuss intellectual and personal issues.
- Successful first semester—Finishing with a B average, enjoying her courses, “learning something from them”
- Successful first year— “If things just keep going in the same direction—like a good support system, steady friends, steady social life, steady classes.”
- Do well in classes “in the sense that I feel like I accomplished what I wanted to grade wise as well as that I learned more about the actual subject.”

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Where do we go from here?

Things We Think We Know

- Large majority of students are engaged academically or socially (or both) and are finding ways to balance multiple commitments
- Engagement is positively associated with other academic and social experiences but is not a good predictor of GPA
- Lack of engagement or trouble with coping can derive from diverse sources, and may lead to lower GPAs
- Students' definitions of success are broad and typically include course performance, but include social and personal goals to a lesser extent
- Academic engagement and wellness goals are positively related to students' feelings of success
- Wellness, extracurricular, and milestone goals are positively related to GPA
- Engagement is a complex construct for which we need to develop more sophisticated measures

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Things We Need to Explore

- Is the variation in types of student engagement across schools "real" and, if so, what is its significance?
- Is the variation in types of student engagement across racial groups "real" and, if so, what is its significance?
- How will students' definitions of success change over the next three years?
- Are the relationships between success goals and actual success "real" and, if so, how do we explain them?
- How can our typology of students or our focus on students' definitions of success inform first-year advising, curricular planning, or student-life programming especially around wellness?

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