Research Brief:
Non-Cognitive Findings and Factors Impacting English 101 and UNIV 101 Performance for the LEAP 2012 Cohort
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As part of LEAP 2012, 142 student participants completed the Sedlacek (2004) Non-cognitive Questionnaire[1] on day two of their experience. The 36 item instrument[2] is designed to explore factors that have been shown in previous research to impact student success in college in one of 8 domains:

Positive Self-Concept or Confidence
Realistic Self-Appraisal
Understands and Deals with Racism
Prefers Long-Range Goals to Short-Term or Intermediate Needs
Availability of a Strong Support Person
Successful Leadership Experience
Demonstrated Community Service
Knowledge Acquired in a filed

Descriptive Findings

Among the noted descriptive findings, the top three most frequently selected lifetime educational goals were a bachelor's degree (61%), master's degree (20%), and M.D. or Ph.D (12%). In regards to what might lead them to leave prior to bachelor's completion, the top three selections were to accept a good job (68%), because they could no longer afford it (8%), and insufficient reading or study skills (6%).

In regards to the rating scale items, key findings include the following:

A strong majority (1) want a chance to prove themselves academically (*mean*=1.20; *S.D.*=.61); (2) believe everyone must work toward improving social conditions (*mean*=1.62; *S.D.*=.79); (3) don't expect to be picked on by other students and faculty because of their background (*mean*=4.51; *S.D.*=.66); and (4) believe they won't easily change their mind on a subject when their mind is already made up about it (*mean*=4.18; *S.D.*=.94).

In addition, there was noted variability of opinion in regards to:

Their expectation around having contact with students from other races (*mean*=4.03; *S.D.*=1.43);
The degree to which they keep to themselves (*mean*=3.17; *S.D.*=1.26);
The degree to which they already know something about their proposed major field (*mean*=2.5; *S.D.*=1.25);
Their experience doing community projects (*mean*=2.77; *S.D.*=1.15)
The strength of their belief in not doing things for others because they take advantage of you (*mean*=3.8; *S.D.*=1.14); and
The degree to which they anticipate experiencing racism at ISU (*mean*=3.51; *S.D.*=1.13).

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[1] Alternate Form A in Appendix 4 of Sedlacek, W. E. (2004). *Beyond the Big Test: Non-cognitive assessment in higher education*. San Francisco: Jossey-Bass.
[2] Five-point rating scale from 1= Strongly Agree to 5=Strongly Disagree.

Inferential Findings

Following appropriate tests of the data for collinearity and skewness, a series of step-wise regression analyses were run using the 30 scale items from the instrument as well as a set of pre-LEAP student related factors to investigate their effect on English 101 grade and Univ 101 grade[3]. The significant findings are presented in the tables below.

Model 1: English 101 Grade

Significant Factors	Standardized Beta
SAT/ACT	.36***
Race (1=White, 0=African American or multiethnic)	.21**
I sometimes need help from others.	.25**
The best way to avoid problems is to take things one day at a time.	-.20*
Adjusted R2	.21

**p<.01; ***p<.001

Model 2: Univ 101 Grade

Significant Factors	Standardized Beta
Race	.26**
My friends and relatives don't feel I should go to college.	.20*
HSGPA	.18*
Adjusted R2	.11

*p<.05; **p<.01

In regards to the English 101 findings, the results suggest that SAT/ACT score, race, and the recognition of needing to ask for help/assistance are positively associated with English 101 performance while having a short, versus a long term perspective is negatively associated with English 101 performance. In regards to the Univ 101 findings, race, having close family members who value college, and high school GPA were positively associated with performance.

Implications

The collective findings suggest that the LEAP students come to ISU wanting to prove themselves but may be particularly prone to difficulty when confronting a mismatch between expectations and reality. There may also be a particularly strong opportunity for community engagement with these students when linked to course experience and learning. Furthermore, based on their pre-college experiences, they may struggle with when or how to ask for help, suffer when they don't have long term goals that necessitate postponed gratification, and underperform if they do not experience campus-based support mechanisms that compensate for what may be lacking in this arena in their home environment. Enhancing the skill sets of faculty and staff in working with minority students may also be of particular benefit to their unique transition and acclimation needs. Finally, it is important to point out that the regression models at best explain about 20% of the variance, inferring that 80% of what impacts LEAP student academic performance in the program comes from other sources.

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[3] The pre-LEAP factors investigated included HS GPA, HS Class Rank, ACT/SAT, Race, 21st Century Scholar, state domicile (IN or IL), and Indianapolis domicile. Collinearity was well within acceptable ranges. The dependent variable *UNIV101 grade* was log transformed to address skewness in the variable. No other transformations were needed.