

Regional Campus College Student Inventory (CSI) and Predictors of Student

Success

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Presentation Overview

- Recent Student Enrollment, Retention and Graduation Rates at the Regional Campuses for Context
- The College Student Inventory
- Analysis and Methodology
- Results
- Implications for Practice
- Questions and feedback



Overall Student Enrollment



Total Student Enrollment

THE OHIO STATE UNIVERSITY Source: 15th Day Enrollment Report, OSEM Analysis and Reporting

Overall Student Enrollment: Regional Campuses

6,000 5,255 5,359 5,000 4,000 3,000 2,263 2,422 2,000 900 886 849 818 828 740 1,000 462 446 0 **Regional Total** Lima Mansfield Marion Newark Wooster Autumn 2022 Autumn 2023

Regional Campus Total Student Enrollment

THE OHIO STATE UNIVERSITY Source: 15th Day Enrollment Report, OSEM Analysis and Reporting

New First-Time Beginner Enrollment



Columbus and Regional Campus Enrollment New Beginners

THE OHIO STATE UNIVERSITY Source: 15th Day Enrollment Report, OSEM Analysis and Reporting

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New First-Time Beginner Enrollment: Regional Campuses

New First-Time Beginners



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THE OHIO STATE UNIVERSITY Source: 15th Day Enrollment Report, OSEM Analysis and Reporting

Newark Retention and Graduation Rates

First-Time, Full-Time Degree Seeking Autumn/Summer Admits



Retained or Graduated at the University

Marion Retention and Graduation Rates

First-Time, Full-Time Degree Seeking Autumn/Summer Admits

Retained or Graduated at the University



Mansfield Retention and Graduation Rates

First-Time, Full-Time Degree Seeking Autumn/Summer Admits



Retained or Graduated at the University

Lima Retention and Graduation Rates

First-Time, Full-Time Degree Seeking Autumn/Summer Admits

80.0% 73.2% 70.3% 69.4% 68.6% 68.2% 67.2% 67.0% 66.7% 70.0% 64.5% 63.8% 60.0% 50.0% 45.1% 44.2% 43.0% 42.3% 39.9% 40.0% 28.7% 26.6% 30.0% 24.8% 23.5% 23.1% 22.4% 21.1% 20.0% 10.0% 0.0% 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 One-Year Retention -Four-Year Graduation Rate Six-Year Graduation Rate

Retained or Graduated at the University

Wooster Retention and Graduation Rates

First-Time, Full-Time Degree Seeking Autumn/Summer Admits



Understanding Students at Regional Campuses

Full-Time, Degree-Seeking, Summer/Autumn New First Year Students, Autumn 2022, Total Students =2,179

40% (876) First Generation (neither parent completed a 4- year college degree)	35% Pell Eligible 39% Autumn 2023	22% (473) Historically Marginalized	13% (279) African American				
5% (110) Latino/a	5% (113) Two or More Races	26% (570) Living in Campus Housing First Term	99% (2,163) Ohio Residents				
49% (1077) female							

Source: The Ten-Year Retention and Graduation Trends, OSEM Analysis and Reporting

THE OHIO STATE UNIVERSITY Historically Marginalized (African American / Black, Asian, Latinx, Native American / Alaskan Native, Native Hawaiian / Other Pacific Islander, Two or more races, when one or more are from the preceding racial and ethnic categories in this list)

College Student Inventory

- Ruffalo Noel Levitz's CSI is a self-assessment survey instrument designed to assess motivational factors that impact student success. The instrument is comprised of 100 questions. The CSI is given to incoming first-year students at OSU and asks students to self-report their academic, social, and personal perceptions and behaviors.
- The CSI identifies at-risk students in the incoming class using cognitive motivational indicators of college student success.
- Leaders and advisors receive detailed information about each student's academic motivations, areas of risk, and receptivity to specific student services.
- The CSI designed to help:
 - Identify which students are at risk and receptive to assistance.
 - Intervene with students earlier, when the chance for success is greater.
 - Make retention strategies more effective and efficient by basing them on reliable student data.

College Student Inventory™

Shana Doe, ID#12345678 Student Status: Not Applicable Gender: Female, Age: 18 as of Month DD, YYYY

Student Report

Sample University

Shana, this is an interpretive report of your responses to the College Student Inventory. Its purpose is to help you identify your special interests and needs. The percentile ranks show how you compare to a larger sample of college students from across the country. Specifically, they indicate the percentage of students whose scores are equal to or less than yours. Since they are based on questionnaire information alone, they may give only a rough indication of your true attitudes. Your advisor or counselor will help you understand your scores and find the services you desire.

Your Motivational Assessment				About You	
Academic Motivation Study Habits Reading Interests Verbal and Writing Confidence Math and Science Confidence Commitment to College Interactions with Previous Teachers	Perc. Rank 43 85 74 68 52 84	Very Low	Very High	High School Academics Senior Year GPA Family Background Racial/Ethnic Origin Mother's/Guardian's Education Father's/Guardian's Education	B+ Average White/Caucasian Some High School High School Diploma
General Coping Social Engagement Family Support Capacity for Tolerance Career Plans Financial Security	73 25 97 86 9			College Experience Decision to Enroll Degree Sought Plans to Work Grouping Fields	Many Months Before Master's 1-10 Hours per Week
Receptivity to Support Service: Academic Assistance Personal Counseling Social Engagement Career Guidance Financial Guidance	85 85 95 51 96				
Internal Validity Excellent					
Your Personal Success Plan The strength of your recommendations is indicated by its					
priority score(0 to 3.3 = 10w, 3.4 to 6.6 = medium, 6.7 to 10.0 = high):Get help in finding a part-time job9.1Get help in finding a summer job9.1Get help in obtaining a scholarship9.1Get help in obtaining a loan8.7Get advice from an experienced student7.8Get help in meeting new friends7.8Get information about clubs and social organizations7.8Get information about student activities7.4Discuss advantages/disadvantages of careers6.9Get help with basic math skills6.8				Notice Students may request that their your file at anytime.	report be removed from

The Ohio State University

Purpose of CSI Predictor Study

- Identify which CSI variables and scale constructs are most predictive of incoming student success at the regional campuses.
- Allow leaders and advisors to focus on the most predictive factors at the individual student level and at the aggregate level for planning programs, services, interventions and policies.





CSI Survey Administration

• Varies by Campus

• Some regional campuses administer the CSI in their EXP 1100 course, or the equivalent in the Autumn semester. The CSI Survey is required in the first term for NFYS students in EXP 1100.

• Some colleges or regional campuses may allow some students to take it in their second term instead.

- Most colleges do not require the CSI for transfer students, although it's possible some colleges or regional campuses may enroll new transfers in it as well.
- Newark may also administer the survey to summer-bridge or early-arrival students, who take the CSI during a summer experience.
- Based on the data we analyzed, the response rates were high 95%-100%



Analyses Methods

- A forward selection logistic regression in SPSS was conducted to find the best combination of CSI entering factors that significantly predicted first-term academic success (Fall GPA 2.0 or above).
- Fall GPA 2.0 or above was used as an early indicator of student academic success as students are typically considered in academic good standing if their cumulative GPA is 2.0 or higher. Additionally, earning below a 2.0 in the first semester may indicate that the student's academic performance puts them at risk of becoming academically ineligible and unable to return to the institution.
- No covariates were used in this logistic regression analysis. All items reported were significant at the p<0.05 level.
- A separate logistic regression was also performed to find out the effect of four main CSI constructs (Receptivity to Institutional Help, Educational Stress, Predicted Academic Difficulty, and Dropout Proneness) on first-term academic success (Fall GPA 2.0 or above).

Ohio State Lima, Marion, Mansfield, and Wooster Combined College Student Inventory (CSI) Survey Predictors of Student Success

- The Predicted Academic Difficulty Scale. Predictors of academic difficulty include such factors as study habits, verbal and writing confidence, math and science confidence, desire to finish college, interactions with previous teachers, and high school GPA.

+ Safety Net Cash (local item): How likely is it that you could come up with \$400 in cash in the event of a financial emergency during the school year?

- **Parent Money Management** (local item): Have your parents told you what you needed to know about money management?

+ Study Habits Percentile: This scale measures the student's willingness to make the sacrifices needed to achieve academic success. It focuses on a student's effort, rather than interest in intellectual matters or the desire for a degree

+ Senior year average GPA: ('D Average'=1; 'D+ Average'=1.3; 'C Average'=2; 'C+ Average'=2.3; 'B Average'=3; 'B+ Average'=3.3; 'A Average'=4)

+ Sex: (Female=1; Male=0)

- **Degree sought**: a professional degree (medicine, dentistry, law, philosophy, or other similar degrees)



Predicted Academic Difficulty

100% 80% Fall GPA 2.0 or Above 60% 94% 40% 79% % 57% 20% 0% Low (1, 2, or 3) Medium (4, 5, or 6) High (7, 8, or 9) (n=310) (n=466) (n=93)

Predicted Academic Difficulty

This scale was developed by RNL by correlating CSI questions with first-term college grade point average (GPA). It is designed to predict who is most likely to have low grades in college. The caution that applies to the dropout scale also applies to this scale. The scale will identify some, but not all, of the students who will encounter academic difficulty during their college careers. Predictors of academic difficulty include such factors as study habits, verbal and writing confidence, math and science confidence, desire to finish college, interactions with previous teachers, and high school GPA.

High School Senior Year Grades

Self Reported Average HS Senior Year Grades





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Possible Implications for Practice: Academic Support

- Students who reported that their average senior GPA was below a B and/or who had high scores on Predicted Academic Difficulty scale were less likely to attain academic success during their first semester at OSU.
- These students could be provided referrals to various academic support services early on and be encouraged with growth mindset messages from advisors, peer mentors, and success coaches.
- The students could be encouraged to reach their academic performance goals through effort, commitment, hard work, and goal setting.
- Consider conducting tailored outreach to students who self-report a GPA below a B (perhaps to set up an appointment to discuss opportunities for the students to define their goals and improve their study skills).

Possible Implications for Practice: Study Habit Support

- Measures the amount of time and effort that students plan to devote to studies.
- Students could be referred to appropriate academic support early on.
- Students could also benefit from tips on the following: developing a clear daily routine, setting aside certain periods of time to study, learning to focus attention and to pace themselves, effective notetaking and reviewing, and more.
- This variable may also be an indicator that students have limited time to studies in addition to work, family, and commuting commitments.

Safety Net Cash

How likely is it that you could come up with \$400 in cash in the event of a financial emergency during the school year?



Possible Implications for Practice: Financial Aid Support

- Students who perceive that they may struggle to produce \$400 in cash in the event of a financial emergency during the school year may have substantive financial barriers to attaining academic success.
- They may have a high degree of concern and stress related to their ability to finance college. As such, a small set-back may result in considerable stain on them financially and psychologically.
- It may be ideal to let students know that there is *Emergency Financial Assistance* available through the *Student Advocacy Center*. The Ohio State University provides emergency financial assistance to students who may otherwise be at risk of dropping out of the university due to an unexpected, unplanned, financial emergency. Applications are accepted and eligible students may be awarded up to \$1,000.

Parent Advice Money Management



Possible Implications for Practice: Family Education and Outreach

- The item related to Parent Money Management may be an indicator of the types of informational support students have received directly from their parents and families.
- Many higher education institutions recognize the importance role that families play in student success. More family outreach may be necessary to ensure that families are prepared to inform students about what they need to know about money management and provide accurate information.
- The fact that this was a negative predictor of student success in the first semester may be a proxy for students being concerned about finances meaning that those who are most concerned about finances may be the students most likely to ask parents for advice about money management.
- More research may be necessary to understand this finding.

Professional Degree Sought

Self reported degree sought



Female Students Tend to Have Higher Levels of Academic Success than Males



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Ohio State Newark College Student Inventory (CSI) Survey Predictors of Student Success

- The Predicted Academic Difficulty

- The Dropout Proneness Scale This scale measures the student's overall inclination to drop out of school before finishing a degree. The scale was developed empirically by comparing students who stayed in school after their first term with those who did not.

- First-generation college student: Neither parent earned a 4-year college degree or above.

- **Transportation Issues:** How often have you missed classes due to transportation issues this semester? (recoded 'Never'=0; 'Rarely/once a semester'=1; 'Once a month'=1; 'Once a week'=1; 'Daily'=1)

+ Study Habits percentile: This scale measures the student's willingness to make the sacrifices needed to achieve academic success. It focuses on a student's effort, rather than interest in intellectual matters or the desire for a degree. It can therefore be used to make referrals to services that assist students in developing better study habits. (Percentile score ranges from 0 to 100)

- Verbal Confidence percentile: This scale measures the degree to which the student feels capable of doing well in courses that heavily emphasize reading, writing, and public speaking. (Percentile score ranges from 0 to 100)

- Discuss emotional tensions with counselor: "I would like to talk with a counselor about some feelings of discouragement or unhappy thoughts that keep bothering me." One of the 25 potential action items in the survey. (A seven-point rating scale converted by RNL to 0-10 continuous scale)

+ Senior year average GPA: ('D Average'=1; 'D+ Average'=1.3; 'C Average'=2; 'C+ Average'=2.3; 'B Average'=3; 'B+ Average'=3.3; 'A Average'=4)



Results are based on 2022 Beginner Cohort CSI Survey (n=1092)



Dropout Proneness

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First-Generation Students





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Possible Implications for Practice: First-Generation Students

- First-generation students are often one the most vulnerable populations at risk of stopping out or leaving early without a degree. It is important to provide early outreach and intervention support to help students with their transition students through the first year and beyond.
- This may entail more intrusive advising strategies and other interventions to foster students' sense of belonging.
- Scholars tend to argue that first-generation college students lack the social capital, or access to resource rich networks that can provide information about the kinds of knowledge, and behaviors valued within the higher education environment.
- First generation students may need assistance in cultivating peer networks and other networks of support. They may also benefit with referrals to various college resources to help them navigate college.



Transportation Issues





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Possible Implications for Practice: Transportation Issues

- Students could be contacted early on and provided information about different transportation options and even emergency financial aid programs for car repairs.
- Consider setting up a carpool matching program for students with transportation issues (e.g., UW-Bothell uses this carpool matching system:

https://www.rideshareonline.com/Commuters/carpool.html and UNC-Chapel Hill uses this one:

https://move.unc.edu/rideshare/carpool/).

Possible Implications For Practice: Mental Health Support

- Students who report that they would like to talk with a counselor about some feelings of discouragement or unhappy thoughts that keep bothering me were less likely to be successful academically.
- Students could be referred to mental health services early on and reminded that many students have mental health issues when they begin college and end up being successful (normalizing so they don't feel isolated and loss of hope).

Possible Implications for Practice: Study Habit Support

- Study Habits measures the amount of time and effort that students plan to devote to studies.
- Students could be referred to appropriate academic support early on.
- Students could also benefit from tips on the following: developing a clear daily routine, setting aside certain periods of time to study, learning to focus attention and to pace themselves, effective notetaking and reviewing, and more. This variable may also be an indicator that students have limited time to studies in addition to work, family, and commuting commitments.

Interpreting the Verbal Confidence Scale

- It may seem counterintuitive that the more capable students' felt about doing well in courses that heavily emphasize reading, writing, and public speaking, the less successful they are academically in their first term.
- However, these students may have *overconfidence bias* meaning that people tend to wrongly overestimate their knowledge or ability in a specific area, sometimes in comparison to others.
- First-year students are often prone to this bias in terms of overestimating their ability to do well in certain college subjects because they have little experience with particular subjects like writing at the college level (e.g., they don't know what they don't know!), Students could be given referrals to the writing centers or other academic supports such as peer mentoring or tutoring so they know where to go when they face difficulties.

Ohio State Marion (CSI) Survey Predictors of Student Success

- The Predicted Academic Difficulty

- Get help in meeting new friends: "I would like to attend an informal gathering where I can meet some new friends."

+ Senior year average GPA: ('D Average'=1; 'D+ Average'=1.3; 'C Average'=2; 'C+ Average'=2.3; 'B Average'=3; 'B+ Average'=3.3; 'A Average'=4)

+ Sex: (Female=1; Male=0)

- **Study Space**: Consider where you will be living when classes start. To what extent do you agree with this statement: I have a space where I can do my work that is free of distractions.(Strongly Disagree=1; Disagree=2; Agree=3; Strongly Agree=4)

- Food Insecurity: During the last 30 days, how frequently have you experienced food insecurity (lack of access to healthy food)? ('Never'=1; 'Occasionally'=2; 'Frequently'=3; 'Very frequently'=4)



Results are based on 2022 Beginner Cohort CSI Survey (n=278)



Food Insecurity

Food Insecurity/Lack of access to healthy food





Possible Implications for Practice: Addressing Food Insecurity

- Students who reported high frequency levels regarding "during the last 30 days, how frequently have you experienced food insecurity (lack of access to healthy food)?" could receive targeted outreach and referrals to food pantries and low-cost alternatives for healthy food.
- This item is also a good indicator that students may face other financial obstacles in affording college and meeting the demands of college.

Living Space



Possible Implications for Practice: Study Space

- Students who were more likely to report that "I have a space where I can do my work that is free of distractions" tended to have <u>lower</u> levels of academic success.
- While this seems counterintuitive it could be an indicator of where a student is living. Research suggests that students who live with other students attending the same institution have built in networks of peer support and can build norms around being successful in college. These same students may also lack a dedicated study spaces as they may have to share spaces with other students.
- This finding may require more research.

Possible Implications for Practice: Meeting Friends and Developing Social Networks

• Students who report high scores on "I would like to attend an informal gathering where I can meet some new friends" could be given information about various campus activities, events, and student organizations/clubs early on.



Ohio State Mansfield College Student Inventory (CSI) Survey Predictors of Student Success

- Predicted Academic Difficulty

- Interview Process: When searching for a job, I know what to expect in the Interview Process. (Strongly Disagree=1; Disagree=2; Agree=3; Strongly Agree=4)

+ **Study Habits percentile**: This scale measures the student's willingness to make the sacrifices needed to achieve academic success. It focuses on a student's effort, rather than interest in intellectual matters or the desire for a degree. It can therefore be used to make referrals to services that assist students in developing better study habits.

+ Senior year average GPA: ('D Average'=1; 'D+ Average'=1.3; 'C Average'=2; 'C+ Average'=2.3; 'B Average'=3; 'B+ Average'=3.3; 'A Average'=4)

+ Sex: (Female=1; Male=0)

- Racial ethnic origin categories: Black/African American

Results are based on 2022 Beginner Cohort CSI Survey (n=303).



Know What To Expect Job Interview



Interview Process Confidence

- It may seem counterintuitive that the higher agreement students reported that they understood the job interview process, the less successful they were academically in their first term.
- However, these students may have *overconfidence bias* meaning that people tend to wrongly overestimate their knowledge or ability in a specific area, sometimes in comparison to others.
- First-year students are often prone to this bias in terms of overestimating their ability to do well in certain tasks because they have little experience with tasks like interviewing for a job (e.g., they don't know what they don't know).
- Could be an indicator that job searching is salient in the student's mind.
- More research may be necessary to understand this finding.

African American Students





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Possible Implications for Practice: Support for African American Students

- It may be important to provide early outreach and intervention support to help African American students with their transition through the first year and beyond.
- This may entail more intrusive advising strategies and other interventions to foster students' sense of belonging.
- Referrals to engage in high-impact practices (service learning, undergraduate research, internships, and more).
- African American students may also benefit from referrals to various college resources to help them navigate college and develop peer networks of support (student organizations/clubs).

Ohio State Wooster College Student Inventory (CSI) Predictors of Student Success

- Predicted Academic Difficulty
- + Safety Net Cash
- + Senior year average GPA

Results are based on 2022 Beginner Cohort CSI Survey (n=212).







Questions/Feedback/Discussion

