

A CONCEPTUAL FRAMEWORK FOR THE ASSESSING RURAL EDUCATION'S ASSETS & STRENGTHS (AREAS) SURVEY



KRISTA M. SORIA AND NADEEKA WEERASEKARA, 2025

PURPOSE

We aim to investigate the programs, policies, and practices that improve rural college students' outcomes in higher education and facilitate their successful transitions to the workforce.

Through a multi-institutional approach, we will collect and analyze data from rural and non-rural students enrolled at two-year and four-year colleges and universities across the U.S.

RESEARCH QUESTIONS

1. What are the effects of institutional programs and practices on low-income rural college students' academic outcomes (e.g., retention, GPA, and degree completion)?
2. What are the effects of institutional programs and practices on low-income rural college students' psychosocial outcomes (e.g., sense of belonging, psychological wellbeing, perceptions of campus climate)?
3. What are the effects of institutional programs and practices on low-income rural college students' workforce-related outcomes (e.g., career decision-making efficacy, employment status, preparedness)?

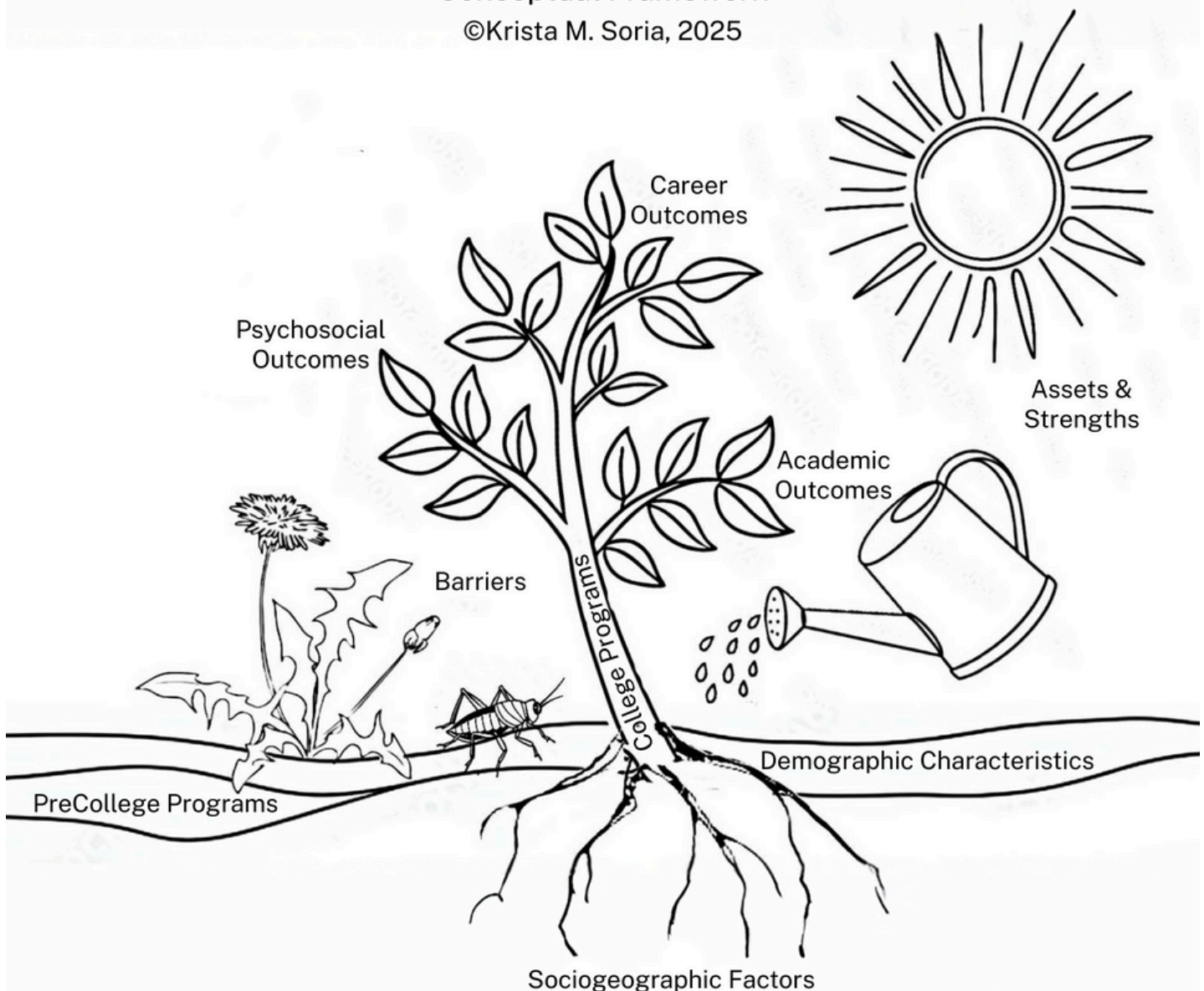


INTRODUCTION

The visual conceptual framework emphasizes the complex, ecosystem-like nature of students' college experiences. College students' development of academic, psychosocial, and career outcomes is nurtured by their assets and strengths (e.g., critical cultural wealth) and hindered by barriers (e.g., basic needs insecurity). Students' demographic characteristics and participation in precollege programs are the foundational "soil" providing support and resources to students' readiness and development. College programs (e.g., mentorship) reinforce and sustain students' development while sociogeographic factors (e.g., rural attachment) are the roots that symbolize deep connections to community, place, and environment.

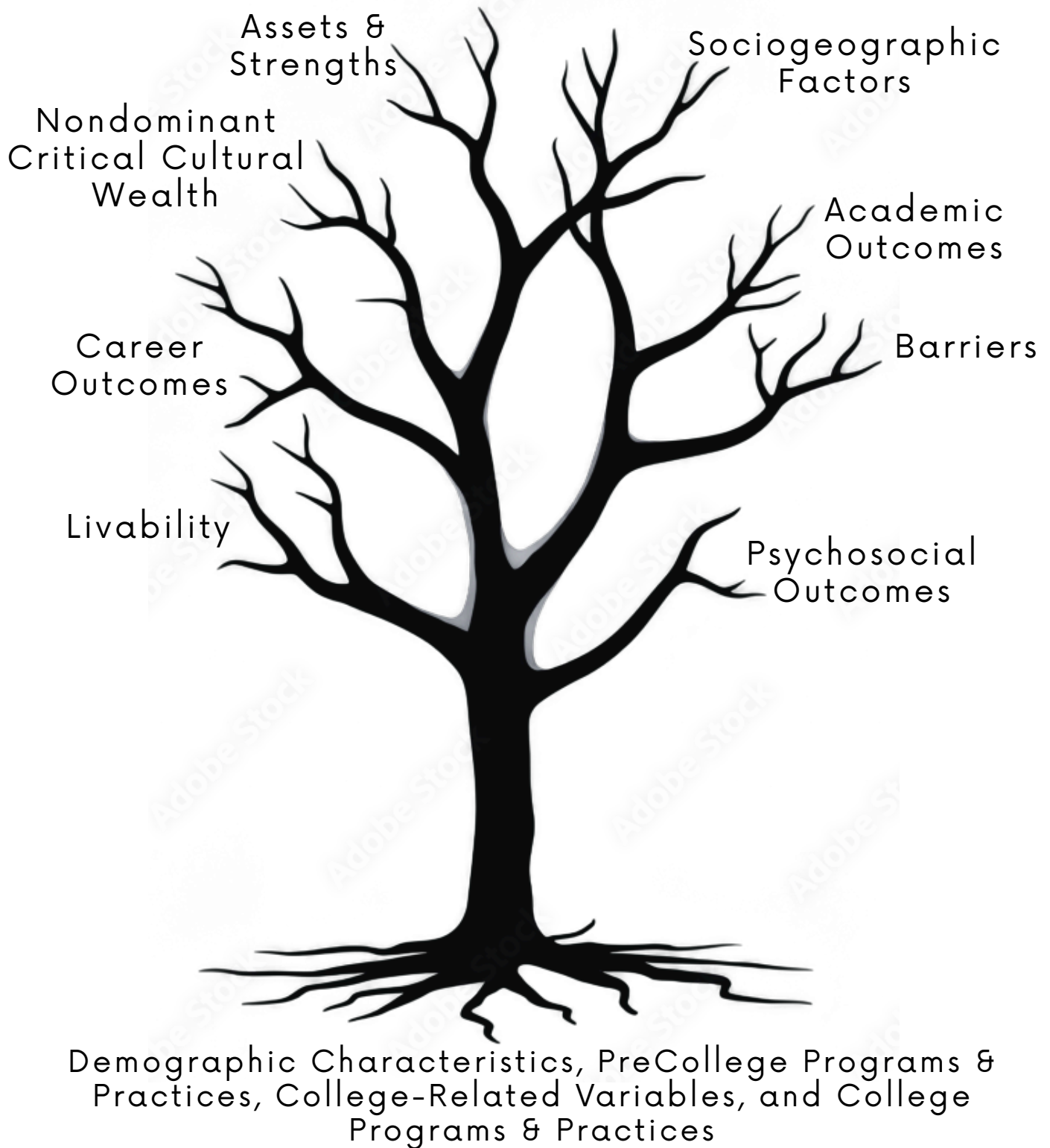
Assessing Rural Education's Assets & Strengths (AREAS) Survey Conceptual Framework

©Krista M. Soria, 2025



SURVEY DESIGN

To reduce the survey length, we administered the primary survey module items (the “trunk” and the “roots” in the image below) to all participants. We separated some of the longer modules to create eight smaller modules and randomly assigned 25% of the participants to each module.



VARIABLES

Demographics

- Gender
- Sexual orientation
- Race/ethnicity
- Disability
- Social class
- Parents' education
- Income
- Age
- Caregiver
- Foster care
- Crime conviction
- Marital status

Pre-College Programs & Practices

- Internship (paid/unpaid)
- Employment (related/not related to career/academic interests)
- Career assessments
- Career fairs/events
- Job shadowing or apprenticeships
- Career discussions
- Academic enrichment programs

Assets & Strengths

- Critical cultural wealth (work volition, career choice and life satisfaction)
- Work capital (economic, human, social, and cultural)
- Nondominant cultural capital (aspirational, familial, navigational, and resistant)

Barriers

- Mental health (MDD and GAD)
- Housing and food insecurity
- Economic constraints
- External barriers to career goals
- Critical cultural wealth (financial stress)

College Programs and Practices

- Internship (paid/unpaid)
- Employment
- Community service
- Service-learning courses
- Living-learning programs
- Learning communities
- Study abroad
- Undergraduate research
- Participation/leadership in student organizations
- Mentorship
- Trauma-informed climate

VARIABLES

Sociogeographic Factors

- Rural identity & attitudes
- Rural attachment
- Community/proximity aspirations
- Livability
- Environmental quality (e.g., amount of public seating amenities)
- Social and cultural elements (e.g., places for informal gatherings)
- Accessibility (e.g., sidewalk condition)
- Safety (e.g., crime rate)
- Amenities and services (e.g., healthcare)
- Housing (e.g., accessibility to residential locations by foot)

Academic Outcomes

- Theory of planned behavior (attitude and self-efficacy to academic major, norms about completion, intention to withdraw)
- College social-emotional crossroads (academic capital)
- Cumulative GPA
- Expected graduation spring/summer 2025
- Continued or expected enrollment in the upcoming academic year
- Postgraduation plans
- Institutional commitment

College-Related Variables

- Residence
- International
- Transfer
- Enrollment intensity
- Degree type
- Academic major
- Academic level
- Year of enrollment
- Educational funding and debt

Psychosocial Outcomes

- College social emotional crossroads (campus cultural fit and school-family integration)
- Critical cultural wealth (campus discrimination and belonging)

Career Outcomes or Behaviors

- Career exploratory behavior
- Perceived employability
- Community/proximity aspirations
- Career aspirations
- Internship (paid/unpaid)
- Employment
- Career assessments
- Career fairs/events
- Job shadowing or apprenticeships
- Occupation type
- Postgraduation plans

ACADEMIC OUTCOMES MEASUREMENTS

Theory of Planned Behavior (Dewberry & Jackson, 2018)

- Attitude to course (e.g., I wish I had chosen a different academic major to study at my college)
- Self-efficacy to course (e.g., I have the ability to complete my studies successfully)
- Norms about course completion (e.g., My family and friends would want me to stay at my college until my studies are completed)
- Intention to withdraw (e.g., I do not expect to leave my college before my studies are completed)

College Social-Emotional Crossroads (Garriott et al., 2020)

- Academic capital (e.g., I know where to get help with my academics)

Self-reported measures:

- Cumulative grade point average (GPA)
- Expected graduation in spring/summer 2025
- Continued or expected enrollment in the upcoming academic year
- Postgraduation plans (e.g., continuing education)

Institutional commitment (McEwan, 2013)

- e.g., It is important for me to graduate from this college or university

PSYCHOSOCIAL OUTCOMES MEASUREMENTS

College Social-Emotional Crossroads (Garriott et al., 2020)

- Campus cultural fit (e.g., I feel connected to a community on campus)
- School-family integration (e.g., I feel resentment from my family for being in college)

Critical Cultural Wealth (Duffy et al., 2020)

- Campus discrimination (e.g., I feel there is a general atmosphere of prejudice among students)
- Sense of belonging (e.g., I feel a sense of belonging to this university)

CAREER OUTCOMES MEASUREMENTS

Career Exploratory Behavior (Sheu, 2023)

- e.g., in the past week, I spent more time than usual learning about college majors and careers that I am interested in
-

Community/Proximity Aspirations (Irdam et al., 2023)

- material aspirations (e.g., "having lots of money")
- occupational success aspirations (e.g., "being successful in my line of work")

Career Aspirations (Gray & O'Brien, 2007)

- Educational aspirations (e.g., I think I would like to pursue graduate training in my occupational area of interest)
- Leadership and achievement aspirations (e.g., I hope to become a leader in my career field)

Perceived Employability (Berston & Marklund, 2007)

- e.g., "I know of several organizations or companies where I could get work"

Self-reported measures:

- Internship (paid/unpaid)
- Employment (related/not related to career/academic interests)
- Career assessments
- Career fairs/events
- Job shadowing or apprenticeships
- Occupation type
- Postgraduation plans (e.g., working, seeking employment)

ASSETS & STRENGTHS MEASUREMENTS

Critical Cultural Wealth (Duffy et al., 2020)

- Work volition (e.g., I will be able to choose the jobs I want)
- Career choice satisfaction (e.g., I have a firm sense of what type of work I would like to do for a living)
- Life satisfaction (e.g., In most ways, my life is close to my ideal)

Work Capital (Kim et al., 2024)

- Economic work capital (e.g., I can afford materials that improve my work productivity [e.g., a laptop, books, and software])
- Human work capital (e.g., I have job qualifications that help me excel at work)
- Social work capital (e.g., I can access hidden positions through my connections)
- Cultural work capital (e.g., I know how I'm supposed to behave at work social events, including group meals)

Nondominant Cultural Capital (Sablan, 2019)

- Aspirational: The ability to maintain hopes and dreams for the future
- Familial: Connections to and knowledge of family and networks
- Navigational: The ability to navigate through schooling institutions that were not designed with them in mind
- Resistant: The knowledge and motivation to transform structures

BARRIERS MEASUREMENTS

Mental Health (MDD/GAD; Kroenke et al., 2003; Kroenke et al., 2007)

Housing and Food Insecurity (CDC, 2009; Hager et al., 2010)

Economic Constraints (Duffy et al., 2019)

- e.g., for most of my life, I have not felt financially stable.

External Barriers to Career Goals Measure (Verbruggen & Sels, 2010)

- e.g., lack of time, lack of support

Critical Cultural Wealth (Duffy et al., 2020)

- Financial stress (e.g., I worry about having to pay monthly expenses)

PRECOLLEGE PROGRAMS & PRACTICES

Self-reported measures:

- Internship (paid/unpaid)
- Employment (related/not related to career/academic interests)
- Career assessments
- Career fairs/events
- Job shadowing or apprenticeships
- Career discussions
- Academic enrichment programs

COLLEGE PROGRAMS & PRACTICES

Trauma-Informed Climate Scale (TICS-10; Hales et al., 2019)

- Safety (e.g., when I come to school here, I feel emotionally safe)
- Trust (e.g., I can trust staff, faculty, and administrators to be fair in dealing with all students)
- Choice (e.g., I don't have many choices when it comes to choosing my academic major or careers)
- Collaboration (e.g., The staff, faculty, and administrators listen only to their favorite students)
- Empowerment (e.g., Students are not supported when they try to find new and better ways to do things)

Self-reported measures:

- Internship (paid/unpaid)
- Employment (related/not related to career/academic interests)
- Community service
- Service-learning courses
- Living-learning programs
- Learning communities
- Study abroad
- Undergraduate research
- Participation/leadership in student organizations
- Mentorship

COLLEGE-RELATED VARIABLES

Self-reported measures:

- Residence
- International
- Transfer
- Enrollment intensity
- Degree type
- Academic major
- Academic level
- Year of enrollment at present school
- Educational funding
- Educational debt

DEMOGRAPHIC CHARACTERISTICS

Self-reported measures:

- Gender
- Sexual orientation
- Race/ethnicity
- Disability
- Social class
- Parents' education
- Income
- Age
- Caregiver
- Foster care
- Crime conviction
- Marital status

SOCIOGEOGRAPHIC FACTORS

Rural Identity & Attitudes (Tatum et al., 2024)

- Attitudes (e.g., rural communities provide few opportunities for new experiences)
- Identity (e.g., you are typical of people who live in rural communities)

Livability (Almashhour & Samara, 2022)

- Environmental quality (e.g., amount of public seating amenities)
- Social and cultural elements (e.g., places for informal gatherings)
- Accessibility (e.g., sidewalk physical condition)
- Safety (e.g., crime rate)
- Amenities and services (e.g., healthcare services)
- Housing (e.g., accessibility to residential locations by foot)
- "Other" services (e.g., banking services)

Community/Proximity Aspirations and Rural Attachment (Irdam et al., 2023)

- Proximity aspirations
 - community aspirations (e.g., "to help make my community a better place")
 - proximity aspirations (e.g., "living in or close to my community where I grew up")
 - land aspirations (e.g., "living near open land and natural landscapes/views")
- Rural attachment (e.g., I have a lot of pride in my rural background)

REFERENCES

Almashhour, R., & Samara, F. (2022). Evaluating livability perceptions: Indicators to evaluate livability of a university campus. *Sustainability*, 14, Article 11872. <https://doi.org/10.3390/su141911872>

Bernston, E., & Marklund, S. (2007). The relationship between perceived employability and subsequent health. *Work & Stress: An International Journal of Work, Health & Organisations*, 21(3), 279–292. <https://doi.org/10.1080/02678370701659215>

Centers for Disease Control and Prevention (CDC). (2009). *Behavioral Risk Factor Surveillance System Survey Questionnaire*. U.S. Department of Health and Human Services.

Dewberry, C., & Jackson, D. J. R. (2018). An application of the theory of planned behavior to student retention. *Journal of Vocational Behavior*, 118, 100–110. <https://doi.org/10.1016/j.jvb.2018.03.005>

Duffy, R. D., Kim, H. J., Gensmer, N. P., Pendleton, L. H., Boren, S., & Garriott, P. O. (2020). Testing a critical cultural wealth model of well-being among first-generation students. *Journal of Counseling Psychology*, 67(2), 171–183. <https://doi.org/10.1037/cou0000388>

Garriott, P. O., Chao, H., Jessen, M., Jordan, R. A., Galluzzo, J., Hadjeasgari, C., Son, Y., Garza, C., Faris, E., & Allan, B. A. (2020). Development and validation of the College Social–Emotional Crossroads Inventory. *Journal of Career Assessment*, 28(3), 496–511. <https://doi.org/10.1177/1069072719894271>

Gray, M. P., & O'Brien, K. M. (2007). Advancing the assessment of women's career choices: The Career Aspiration Scale. *Journal of Career Assessment*, 15(3), 317–337. <https://doi.org/10.1177/1069072707301211>

Hager, E. R., Quigg, A. M., Black, M. M., Coleman, S. M., Heeren, R., Rose-Jacobs, R., Cook, J. T., Ettinger de Cuba, S. A., Casey, P. H., Chilton, M., Cutts, D. B., Meyers, A. F., & Frank, D. A. (2010). Development and validity of a 2-item screen to identify families at risk for food insecurity. *Pediatrics*, 126(1), e26–e32. <https://doi.org/10.1542/peds.2009-3146>

Hales, T., Kusmaul, N., Sundborg, S., & Nochajski, T. (2019). The Trauma-Informed Climate Scale-10 (TICS-10): A reduced measure of staff perceptions of the service environment. *Human Service Organizations: Management, Leadership & Governance*, 43(5), 443–453. <https://doi.org/10.1080/23303131.2019.1671928>

REFERENCES

- Irdam, G., Starrett, A., Irvin, M. J., Lotter, C., Yow, J. A. (2023). Examining the relationship of teacher and peer belonging to rural attachment and community aspirations among diverse rural youth. *The Rural Educator*, 44(4), Article 4. <https://doi.org/10.55533/2643-9662.1345>
- Kim, T., & Allan, B. A. (2024). Development and validation of the Work Capital Scale. *Journal of Counseling Psychology*, 71(4), 278–290. <https://doi.org/10.1037/cou0000730>
- Kroenke, K., Spitzer, R. L., & Williams, J. B. (2003). The Patient Health Questionnaire-2: Validity of a two-item depression screener. *Medical Care*, 41(11), 1284–1292. <https://doi.org/10.1097/01.mlr.0000093487.78664.3c>
- Kroenke, K., Spitzer, R. L., Williams, J. B., Monahan, P. O., & Löwe, B. (2007). Anxiety disorders in primary care: Prevalence, impairment, comorbidity, and detection. *Annals of Internal Medicine*, 146(5), 317–325. <https://doi.org/10.7326/0003-4819-146-5-200703060-00004>
- McEwan, B. (2013). Retention and resources: An exploration of how social network resources related to university commitment. *Journal of College Student Retention: Research, Theory and Practice*, 15(1), 113–128. <https://doi.org/10.2190/CS.15.1.g>
- Sablan, J. R. (2019). Can you really measure that? Combining critical race theory and quantitative methods. *American Educational Research Journal*, 56(1), 178–203. <https://doi.org/10.3102/0002831218798325>
- Sheu, H.-B. (2023). Temporal precedence between and mediating effects of career decision self-efficacy and career exploratory behavior among first-year college students: Within-person and between-person analyses by race/ethnicity and gender. *Journal of Vocational Behavior*, 144, 1–17. doi: <https://doi.org/10.1016/j.jvb.2023.103882>
- Tatum, K. L., Morris, B. B., Glasgow, T. E., Lee, S. M., Barsell, D. J., Fugate-Laus, K., & Fuemmeler, B. F. (2024). Rural-specific identity and associations with lifestyle behaviors and well-being among rural cancer survivors. *The Journal of Rural Health*, 40(4), 623–633. <https://doi.org/10.1111/jrh.12835>
- Verbruggen, M., & Sels, L. (2010). Social-cognitive factors affecting clients' career and life satisfaction after counseling. *Journal of Career Assessment*, 18(1), 3–15. <https://doi.org/10.1177/1069072709340516>

SURVEY INFORMATION

The AREAS survey will be administered beginning spring 2025 to rural and nonrural college students attending both rural and nonrural two-year and four-year colleges and universities across the United States. If you are interested in having your college or university students participate in the AREAS survey at no cost to you, please contact Dr. Krista Soria (PI):

Krista Soria
Associate Professor
Leadership & Organization Development
University of Idaho
1031 N. Academic Way
Coeur d'Alene, ID 83814
ksoria@uidaho.edu

RECOMMENDED CITATION

Soria, K. M., & Weerasekara, N. (2025). *A conceptual framework for the Assessing Rural Education's Assets & Strengths (AREAS) survey*. AREAS Consortium.

FUNDING INFORMATION

Our research is funded by the Ascendium Education Group and the University of Idaho. Ascendium Education Group is a 501(c)(3) nonprofit organization committed to helping people reach the education and career goals that matter to them. Ascendium invests in initiatives designed to increase the number of students from low-income backgrounds who complete postsecondary degrees, certificates and workforce training programs, with an emphasis on first-generation students, incarcerated adults, rural community members, students of color and veterans. Ascendium's work identifies, validates and expands best practices to promote large-scale change at the institutional, system and state levels, with the intention of elevating opportunity for all. For more information, visit <https://www.ascendiumphilanthropy.org>.