

# Career Advising as a Tool for Student Success and Educational Equity



**NATIONAL RESOURCE CENTER**

FIRST-YEAR EXPERIENCE® AND STUDENTS IN TRANSITION  
UNIVERSITY OF SOUTH CAROLINA

Chelsea Fountain and Isaac Portillo, Editors  
National Resource Center for The First-Year Experience & Students in Transition  
University of South Carolina

in partnership with the  
Advising Success Network

Cite as:

Fountain, C. and Portillo, I. (Ed.). (2021). *Career advising as a tool for student success and educational equity*. University of South Carolina, National Resource Center for The First-Year Experience & Students in Transition.

Copyright © 2021 University of South Carolina. All rights reserved. No part of this work may be reproduced or copied in any form, by any means, without written permission of the University of South Carolina.

Published by:

National Resource Center for The First-Year Experience® and Students in Transition  
University of South Carolina  
1728 College Street, Columbia, SC 29208  
[www.sc.edu/fye](http://www.sc.edu/fye)

The First-Year Experience® is a service mark of the University of South Carolina. A license may be granted upon written request to use the term “The First-Year Experience.” This license is not transferable without written approval of the University of South Carolina.

Production Staff for the National Resource Center:

Copyediting: Lisa Grundy, Ph.D., Graduate Assistant for Publications  
Design and Production: Krista Larson, Graphic Artist  
Reviewers: Amanda Olmstead, NASPA  
Amy Baldwin, Ph.D., University of Central Arkansas  
Catherine Hartman, Ph.D., National Resource Center for The First-Year Experience & Students in Transitions  
Helen Powers, Ph.D. University of South Carolina  
Jenna Seabold, National Resource Center for The First-Year Experience & Students in Transitions  
Jennifer Keup, Ph.D., National Resource Center for The First-Year Experience & Students in Transitions  
Krystal Reynolds, National Resource Center for The First-Year Experience & Students in Transitions  
Lisa Grundy, National Resource Center for The First-Year Experience & Students in Transitions  
Michelle Foley, NASPA  
Sherri Watkins, State Center Adult Education Consortium  
Traci Freeman, Ph.D., Colorado College  
Wen Zeng, Ph.D., National Resource Center for The First-Year Experience & Students in Transitions

Additional acknowledgements: National Association of Student Personnel Administrators (NASPA), Advising Success Network core partners (AASCU, ATD, NACADA – Wendy Troxel, Chris Hutt, Sean Bridgen, EDUCAUSE), American Association of Colleges & Universities (AAC&U), Council for the Study of Community Colleges (CSCC)



# About the Advising Success Network

The Advising Success Network (ASN) is a dynamic network of five organizations partnering to engage institutions in holistic advising redesign to advance success for Black, Latinx, Indigenous, Asian, and Pacific Islander students and students from low-income backgrounds. The network develops services and resources to guide institutions in implementing evidence-based advising practices to advance a more equitable student experience to achieve our vision of a higher education landscape that has eliminated race and income as predictors of student success. The ASN is coordinated by [NASPA - Student Affairs Administrators in Higher Education](#), and includes [Achieving the Dream](#), the [American Association of State Colleges and Universities](#), [EDUCAUSE](#), [NACADA: The Global Community for Academic Advising](#), and the [National Resource Center for the First-Year Experience and Students in Transition](#).

## *What We Do and How We Do It*

Holistic advising interplays with many other facets of the institution, such as course selection, the student experience, and institutional culture. This means that an effort to redesign these services has broader implications for institutional transformation. This process can quickly become complicated and must therefore be done with intentionality and purpose to achieve the desired improvements in institutional and student outcomes.

The ASN has a deep understanding of the interconnection between advising, broader institutional goals, and student success. As thought leaders and experts in the field of holistic advising, we are able to provide resources on best practices in the field of advising as well as change management services to the institution more broadly. We believe this will result in new and reviewed structures and systems for advising that were designed to address racial and socioeconomic inequities and contribute positively to institutional goals and student outcomes.

We recognize that there is a large amount of variance in organizational structures, advising models, and student needs among higher education institutions. We therefore begin each engagement by aligning on a shared vision for success, including metrics (e.g., equity outcomes, retention & graduation rates, ROI) and reviewing existing advising processes, policies and structures, always with the joint goal of creating more equitable experiences and outcomes for low-income and poor students, as well as African American, Black, Latinx, Indigenous peoples, Alaskan native, Southeast Asian and Pacific Islander students.



# About the Publisher

The National Resource Center for The First-Year Experience and Students in Transition was born out of the success of the University of South Carolina's much-honored University 101 course and a series of annual conferences focused on the First-Year experience. The momentum created by the educators attending these early conferences paved the way for the development of the National Resource Center, which was established at the University of South Carolina in 1986. As the National Resource Center broadened its focus to include other significant student transitions in higher education, it underwent several name changes, adopting the National Resource Center for The First-Year Experience and Students in Transition in 1998.

Today, the Center collaborates with its institutional partner, University 101 Programs, in pursuit of its mission to advance and support efforts to improve student learning and transitions into and through higher education. We achieve this mission by providing opportunities for the exchange of practical and scholarly information as well as the discussion of trends and issues in our field through convening conferences and other professional development events such as institutes, workshops, and online learning opportunities; publishing scholarly practice books, research reports, a peer-reviewed journal, electronic newsletters, and guides; generating, supporting, and disseminating research and scholarship; hosting visiting scholars; and maintaining several online channels for resource sharing and communication, including a dynamic website, listservs, and social media outlets.

The National Resource Center serves as the trusted expert, internationally recognized leader, and clearinghouse for scholarship, policy, and best practice for all postsecondary student transitions.

## Institutional Home

The National Resource Center is located at the University of South Carolina's (UofSC) flagship campus in Columbia. Chartered in 1801, UofSC Columbia's mission is twofold: to establish and maintain excellence in its student population, faculty, academic programs, living and learning environment, technological infrastructure, library resources, research and scholarship, public and private support and endowment; and to enhance the industrial, economic, and cultural potential of the state. The Columbia campus offers 324-degree programs through its 15 degree-granting colleges and schools. In the 2020 fiscal year, faculty generated \$279 million in funding for research, outreach, and training programs. South Carolina is one of only 32 public universities receiving both Research and Community Engagement designations from the Carnegie Foundation.



# Contents

Foreword.....	<a href="#">viii</a>
Omari Burnside, Assistant Vice President for Strategy and Practice, NASPA Amelia Parnell, Vice President for Research and Policy, NASPA	
Introduction.....	<a href="#">ix</a>
Chelsea Fountain	
Glossary of Definitions .....	<a href="#">xii</a>
Augustana University .....	<a href="#">1</a>
Flipped Career Advising First-Year Curriculum Billie Streufert, Willette Capers, Lisa Brunick, and Darcie Rives-East	
Bakersfield College .....	<a href="#">9</a>
High-Tech, High-Touch Career Counseling and Advising Marisa Marquez and Craig Hayward, Ph.D.	
George Mason University .....	<a href="#">15</a>
The Scientific Community of Transfer Researchers: Holistic Career Readiness for STEM Undergraduate Students Who Transfer Kerin Hilker-Balkissoon and Padmanabhan Seshaiyer	
Gustavus Adolphus College .....	<a href="#">23</a>
Design a Future: A Career Exploration Course Cynthia Favre	
Lorain County Community College.....	<a href="#">30</a>
It Takes a (Customized) Village: Holistic Supports 2.0 Marisa Vernon-White, PhD	
Norco College .....	<a href="#">35</a>
Guided Onboarding: Career-Focused Advising and Holistic Student Support David Schlanger, M.A. and Jethro Hathaway Midgett IV, M.S.	
Regis College.....	<a href="#">41</a>
Career Development Capstone Course for Doctoral Candidates Heather N. Maietta, EdD, BCC	
Rice University.....	<a href="#">48</a>
ProfessionOwl Program Raylea Rideau, Ann McAdam Griffin, and Michelle Passo	
SUNY Old Westbury College.....	<a href="#">53</a>
Sophomore Shadow Program Kaitlin Janes	



# Contents Continued...

University of South Carolina ..... Career Champions Program Ashley Byrd-White	59
University of the Fraser Valley ..... Career Success as a Lifelong Journey: A Capstone Course Case Study Candy T. Y. Ho	64
Conclusion..... Isaac Portillo	70

## About the Editors

**Chelsea Fountain** is Program Coordinator for the Advising Success Network, a grant-funded project advancing equity in holistic advising redesign throughout higher education. In 2019, Chelsea earned a Master of Education from the University of South Carolina's Higher Education and Student Affairs program. She was previously a graduate assistant in the Office of Sustainability and an intern for the National Resource Center. Chelsea's passion is advocating on behalf of marginalized populations, which grew from her experiences abroad in Spain and Nicaragua and through her work as a college adviser for the NC State College Advising Corps. Her research interests include access to education for the incarcerated and Latinx students and understanding the barriers which prevent students from postsecondary education.

**Isaac Y. Portillo** is the Graduate Assistant for the Advising Success Network and Research at the National Resource Center for the First-Year Experience and Students in Transition. Isaac is pursuing a Master of Education from UofSC's Higher Education and Student Affairs program with a graduation date of 2022. He previously worked as a fraternity consultant for Pi Kappa Phi, which sparked his interest in bettering the collegiate student experience. His research interests include the relationship between space and sense of belonging on college campuses and the intersections of identity, socioeconomic, and student success for BIPOC students.



# Tables

Table 1.1	Module and Flipped Career Advising Curriculum Overview .....	<a href="#">2</a>	Table 9.2	Enrollment by Gender Fall 2020 .....	<a href="#">54</a>
Table 1.2	Percent of Rating Students Received for Cumulative Module Assignments .....	<a href="#">4</a>	Table 9.3	Sophomore Shadow student demographics ....	<a href="#">54</a>
Table 1.3	Post-Survey Responses.....	<a href="#">5</a>	Table 9.4	Sophomore student retention outcomes by demographic (as of June 2021) .....	<a href="#">57</a>
Table 2.1	Job/Career Placement Rate of Career & Technical Education Programs .....	<a href="#">10</a>	Table 9.5	Sophomore Shadow student retention outcomes by demographic (as of June 2021) .....	<a href="#">57</a>
Table 3.1	Assessment Themes and Outcomes.....	<a href="#">20</a>	Table 10.1	Assessment findings for the initial Level I training survey.....	<a href="#">61</a>
Table 4.1	Authentic Happiness Assessment Class Aggregate Scores.....	<a href="#">24</a>	Table 10.2	Assessment findings for the initial Level II training survey.....	<a href="#">62</a>
Table 4.2	S.T.A.R. Rubric Scores Summary.....	<a href="#">26</a>	Table 10.3	Assessment findings for the initial Level III training survey.....	<a href="#">62</a>
Table 4.3	Career Project Rubric Results Summary.....	<a href="#">26</a>	Table 10.4	Career Center Referrals .....	<a href="#">63</a>
Table 4.4	Key Take-Aways from Pre-Post Test Data.....	<a href="#">27</a>	Table 11.1	PORT 399 end of course survey on student perception on career competencies .....	<a href="#">67</a>
Table 5.1	LCCC Student Population Demographics.....	<a href="#">30</a>	Table 11.2	PORT 399 end of course survey on student perception on career competencies – results for the Winter 2021 semester.....	<a href="#">68</a>
Table 5.2	Early Indicators of Promising Practice .....	<a href="#">33</a>			
Table 7.1	Pre- and Post-Test .....	<a href="#">44</a>			
Table 9.1	Student Demographics – Fall 2020 term (all enrolled students).....	<a href="#">54</a>			



# Figures

Figure 1.1	Pre-Post Assessment Item Comparisons.....	<a href="#">4</a>	Figure 5.2	Percentage of Montana Tech First-Time Freshman Retained .....	<a href="#">30</a>
Figure 2.1	On-Path percentage for the 20 largest ADT programs.....	<a href="#">13</a>	Figure 6.1	Seven-Step Career Decision Making Model.....	<a href="#">37</a>
Figure 2.2	Comparison of on-path percentages between two cohorts .....	<a href="#">13</a>	Figure 6.2	Six-week Summer Intervention.....	<a href="#">38</a>
Figure 3.1	S-CTR Demographics by Race and Ethnicity.....	<a href="#">16</a>	Figure 6.3	Career Planning Course Intervention .....	<a href="#">39</a>
Figure 3.2	S-CTR Demographics by Gender .....	<a href="#">17</a>	Figure 8.1	Fall Cohort Pre-Test Versus Post-Test .....	<a href="#">51</a>
Figure 3.3	S-CTR Demographics by Parenting or Caregiving Status.....	<a href="#">17</a>	Figure 8.2	Spring Cohort Pre-Test Versus Post-Test.....	<a href="#">51</a>
Figure 5.1	Pell Recipient Retention Rate at Montana Technological University .....	<a href="#">30</a>	Figure 9.1	Female, 19 years, Black/African American, Criminology major with Psychology minor, Field of Interest: Forensic Psychology, Student Groups: Clinical Psychology, Forensic Psychology .....	<a href="#">56</a>



# Foreword

**Omari Burnside, Assistant Vice President for Strategy and Practice, NASPA**  
**Amelia Parnell, Vice President for Research and Policy, NASPA**

The higher education community has committed to providing students a high-quality education that enables them to achieve their academic, personal, and career goals, regardless of their starting point, race, income level, or any other social identity. As a result, institutions are working to improve traditional structures, policies, and practices that may have impeded students along their path toward a degree. In this pursuit to become more student-centered, one approach institutions have used is to create a more holistic and integrated suite of support services designed to better address students' diverse needs.

Advising is a critical component to this holistic approach and, if implemented correctly, can be an excellent tool to help more students see the success higher education promises. This notion of student success through holistic advising can be achieved by developing an advising structure that effectively integrates academic, career, financial, and basic needs counseling and encourages strong advisor-advisee relationships, in which students have developmental conversations with advisors throughout their tenure at the institution. Holistic advising also includes nonacademic supports, such as student success courses and one-on-one time with faculty and staff. By implementing these foundational aspects, institutions are more equipped to proactively identify student needs and to provide a more tailored and seamless experience.

This is especially important because, at every juncture of a student's college experience, there is an opportunity to make a decision. Such decisions are often critical and complex. In addition to seeking guidance on how to balance college and other competing priorities, students may look to staff and faculty to guide them through several unfamiliar situations and decisions. For example, a student may explore their options for selecting a major with the intent to understand how a career in that field might lead to certain earnings upon completing a credential. In a similar example, some students may start their decision-making process about whether to apply for a loan to cover college expenses by considering if job prospects after graduation will make repayment

feasible. As students navigate these and other multifaceted decisions, high-quality and holistic advising is more vital to their progress than ever.

Klempin, et al. (2019) states that coordination among student support providers of various types can result in better-aligned services. To recognize the full benefit holistic advising can have on the student experience, institutions need to understand the current state of their advising program, establish greater coordination among student support offerings, and provide the necessary resources for campus staff to effectively perform their roles and responsibilities. This type of holistic advising effort works well when systems and processes are in place that ensure professionals have the technology, training, and knowledge to appropriately advise students across domains. Holistic approaches also require ongoing communication and a consistent feedback cycle from students, faculty, and administrators to address emerging needs. Institutions that commit to providing high-quality advising services will need to invest significant time and resources. However, the return on that investment is worth it, as the efforts will ultimately prepare students to make important college decisions.

Throughout the years, institutions have made progress at achieving this ideal of holistic advising. As institutions reaffirm their commitment and continue in their pursuit to provide a high-quality education, there is an opportunity to accelerate this progress by focusing more on the advising experience. Investing in holistic advising will bring clarity and alignment between advising and other relevant student supports and facilitate a more student-centered institution where all students have a clear path to success.

Klemin, S., Kalamkarian, H.S., Pellegrino, L., & Barnett, E.A. (2019). *A framework for advising reform*. Community College Research Center. <https://ccrc.tc.columbia.edu/media/k2/attachments/framework-advising-reform.pdf>



# Introduction

## Chelsea Fountain

The National Resource Center for The First-Year Experience and Students in Transition is pleased to be a core partner in the Advising Success Network (ASN), a grant-funded initiative aimed to help institutions build a culture of student success, with a focus on students from low-income backgrounds and students of color, by identifying, building, and scaling equitable and holistic advising solutions that support all facets of the student experience. The Network defines equity as a concept grounded in the principles of justice and “do no harm,” equity calls for both the acknowledgment of and commitment to rectifying historical injustices toward minoritized populations. The pursuit of equity is fundamental to the Advising Success Network’s mission and through this collection, we aim to provide examples to the field at large to help institutions better understand and support their students from a wide range of backgrounds and identities through career advising. As part of our thought leadership on this grant, the National Resource Center for The First-Year Experience and Students in Transition took charge in collecting high-quality career advising programs and initiatives that aim to support the success of all students but with a particular emphasis on African American, Black, Latinx, Indigenous Peoples, Alaskan Native, Southeast Asian and Pacific Islander students.

The advisor-advisee relationship traditionally supports students as they identify and attain their academic, career, and personal goals. We expand the consideration of advising to include advising as a student-centered process which assists students in making intentional connections, creating coherence out of the disparate parts of the curriculum, reflecting on the similarities and differences among ways of knowing and how they complement each other. Effective advisors build trusting relationships with advisees to help them recognize and accept responsibility as active participants in their educational and professional journeys (Fox & Martin, 2017).

## Context



Since the mid-1980s, postsecondary education and training has become the most generally accepted pathway to economic opportunity in the United States. And yet, US higher education is highly stratified, with outcomes that vary by socioeconomic status

as well as by race, ethnicity, and gender. As a result, postsecondary education plays a large role in maintaining and expanding economic inequality in society. Economists estimate that 60 to 70 percent of the growth in earnings inequality between 1980 and 2005 was due to increases in the college earnings premium. If nothing changes, earnings inequality that is tied to differences in attainment will continue to grow for the foreseeable future (Postsecondary Value Commission, 2021b).

At the same time, college tuition continues to rise and public funding for higher education diminishes, placing the value of college under a microscope. Likewise, career opportunity after graduation remains one of the top concerns of today’s college students (Lynch & Lungrin, 2018). Therefore, it is important that institutions have a defined set of student learning outcomes for career advising that go beyond just looking at graduation statistics. Robbins and Zarges (2011) suggest that assessment be connected to the values and vision of the institution as well as to the mission of advising at the institution. Not to mention, clearly defining measures of success. Career readiness is defined by the National Association of Colleges and Employers (NACE) as “the attainment and demonstration of competencies that broadly prepare college graduates for a successful transition into the workplace” (n.d., para 3). Because employment opportunities remain a primary objective for students attending college, addressing career readiness needs to become a goal of campus advising units (Lynch & Lungrin, 2018).

Furthermore, graduation and job placement rates are often reported yet “in the shadows” due to varying degrees of perceived institutional success. According to Acker (2006), inequity regimes are invisible systems and structures compromising practice, beliefs, and values which reward ways of being that exist. Equity starts from within an institution or organization, as much as it creates outcomes to seek equitable career-based advising practices (Bates, 2020). To start dismantling fit requires asking questions such as, how do we as an organization define diversity? How do we as an organization define inclusion? And how do we as an organization define equity? O’Banion (1994) states for real

change to occur in educational institutions - change that will expand and increase opportunities for students - systematic change is required. As higher education is forced to rethink its business model, there is opportunity to fully realize the potential of educational equity and recommit to enhancing the public good.

## What is considered ‘good’ advising? And by extension, promising practice in career advising?

Though most theorists have addressed academic and career-related decision making separately, the two bodies of literature converge in the notion that, under ideal circumstances, counseling should help students engage in exploration and decision making that leads to pathways and program selection over a prolonged period of time. Both literatures also emphasize that the purpose of advising is not merely to impart information to students but rather to facilitate a process by which students are aided in learning about themselves, their goals, and how to attain them (Karp, 2013). Shaffer and Zalewski (2011) noted that academic advising in the absence of career advising “builds a bridge to nowhere” (p. 75, Karp, 2013). The “whole student” comes to class, bringing with them their lived and learned experiences, trying to navigate a system of higher education that was not necessarily designed for them. To move the needle on student success for minoritized students, institutions must understand the totality of factors that undermine success for different student populations (ATD, 2021). To be clear: overall, postsecondary education offers individuals the opportunity to earn a better living and build a better life for themselves and their families, while also fostering a healthier, more democratic society. Yet, troubling disparities in access to these opportunities exist by race, ethnicity, socioeconomic status, and gender (Postsecondary Value Commission, 2021c). McNair et al. (2016) posit that there is no single student experience, and the unique combination of every individual’s identity, motivations, and goals is complex and fluid. Institutional leaders who are committed to creating student-ready campuses must deepen, update, and challenge their knowledge about who today’s students are and how to best serve them (Wesley and Newkirk-Kotfila, 2021).

By extension, we operationalize Virginia N. Gordon’s definition of career advising and advance it as a dynamic, interactive process that helps students understand how their personal interests, abilities, and values might predict success in the

academic and career fields they are considering and how to form their academic and career goals accordingly (Gordon, 2007). To effectively call advising ‘good’ implies that it demonstrates strategic, sustained, integrated, proactive, and personalized efforts to ensure that each student receives the information, assistance, and encouragement they need, when they need it, across their [educational] journey (Karp, 2021).

## Purpose of the Case Study Collection

The scope of career advising extends from helping students access career information to the teaching of a career-planning course for academic credit, mentorship, and beyond. Several areas on campus may be involved in providing a comprehensive career-counseling and information service to students such as advising and counseling services, career-planning and placement centers on campus, and even the library system. Therefore, integrating academic and career information is an important part of the advisement process. This volume on Career Advising as a Tool for Student Success and Educational Equity is the second of a three-part series of case studies concerned with demonstrating innovation, institutional transformation, and advising initiatives focused on advancing equity. Case studies were sought from a variety of institutions (e.g., public and private; two-year and four-year; liberal arts, HBCU, Tribal, HSI) and representing a range of advising structures. Both pilot programs and established programs on the campus were considered in the expansion of resources and promising practices for the field. Other considerations in selecting cases for publication included evidence of cross-functional collaboration in the design and delivery of advising and of innovative approaches to student support which position equity at the center.

## References

- Bates, T. (2020). *Dismantling fit in higher education and corporate culture*. National Association of Colleges and Employers. <https://community.nacweb.org/blogs/tierney-bates1/2020/07/27/dismantling-fit-in-higher-education-and-corporate>
- Brown, S. D. (2014). *Career development and counseling: putting theory and research to work*. Hoboken, NJ: John Wiley & Sons.
- Gordon, V. N. (2007). *The undecided college student: an academic and career advising challenge: vol. 3rd ed.* Charles C Thomas.

- Hughey, K. F. (2009). *The handbook of career advising*. San Francisco, CA: Jossey-Bass.
- Ledwith, K. E. (2014). *Academic advising and career services: a collaborative approach*. *New Directions for Student Services*, 2014(148), 49–63. doi: 10.1002/ss.20108
- Karp, M. (2021). *Putting SSIPP into practice at scale: questions to ask as you build campus systems for holistic student support*. Phase Two Advisory. <https://static1.squarespace.com/static/5f5018c7021d6a309f29a28b/t/608976b347e53c49c7bd0726/1619621555644/Phase+Two+-+Putting+SSIPP+Into+Practice.pdf>
- Karp, M. (2013). *Entering a program: helping students make academic and career decisions*. CCRC working paper no. 59. <https://ccrc.tc.columbia.edu/media/k2/attachments/entering-a-program.pdf>.
- Lynch, J., & Lungrin, T. (2018). *Integrating academic and career advising toward student success*. *New Directions for Higher Education*, 2018(184), 69–79. doi: 10.1002/he.20304
- McNair, T. B., Albertine, S. L., Cooper, M. A., McDonald, N. L., & Major, T. (2016). *Becoming a student-ready college: A new culture of leadership for student success*. Jossey-Bass.
- O'Banion, T. (1994). *An academic advising model*. *NACADA Journal*, 14(2), 10-16. <https://doi.org/10.12930/0271-9517-14.2.10>
- Postsecondary Value Commission (2021b). *The monetary value of economic and racial justice in postsecondary education: quantifying the potential for public good (executive summary)*. <https://www.postsecondaryvalue.org/wp-content/uploads/2021/05/PVC-GUCEW-ES-FINAL.pdf>
- Postsecondary Value Commission (2021c). *Equitable value: promoting economic mobility and social justice through postsecondary education (executive summary)*. <https://www.postsecondaryvalue.org/wp-content/uploads/2021/05/PVC-Executive-Summary-FINAL.pdf>
- Robbins, R., & Zarges, K. (2011). *Assessment of academic advising: a summary of the process*. Retrieved from NACADA Clearinghouse of Academic Advising Resources Web Site: <http://www.nacada.ksu.edu/Resources/Clearinghouse/View-Articles/Assessment-of-academic-advising.aspx>
- Strange, C., & Gordon, V. N. (1986). *The undecided college student: an academic and career advising challenge*. *The Journal of Higher Education*, 57(1), 113. doi: 10.2307/1981472
- Wesley, A. and Newkirk-Kotfila, E. (2021). *(Mis)Understanding students: approaches to affirming student identities*. National Association of Student Personnel Administrators (NASPA), Inc. [https://www.advisingsuccessnetwork.org/wp-content/uploads/NASPA\\_MisUnderstanding\\_2021.pdf](https://www.advisingsuccessnetwork.org/wp-content/uploads/NASPA_MisUnderstanding_2021.pdf)



# Glossary of Definitions

**Career advising:** Career advising, in practice, is commonly thought of as a one-on-one counseling experience between a trained career counselor and a student. [We expand the definition of career advising to include] Career education practices can occur anywhere on campus, during one-on-one appointments, in groups, through courses, with technology, and in other mediums (AASCU, 2021).

**Career development:** Proactively develop oneself and one's career through continual personal and professional learning, awareness of one's strengths and weaknesses, navigation of career opportunities, and networking to build relationships within and without one's organization (NACE, 2021).

**Career readiness:** Career readiness is a foundation from which to demonstrate requisite core competencies that broadly prepare the college educated for success in the workplace and lifelong career management. The National Association for Colleges and Employers (NACE) has outlined eight career competencies including career and self-development, communication, critical thinking, equity & inclusion, leadership, professionalism, teamwork, and technology.

**Educational equity:** The Advising Success Network defines racial and socioeconomic equity as centering the lived experiences, talents, and aspirations of students from low-income backgrounds, as well as Black, Latinx, Native American, and Asian/Pacific Islander students. The network seeks to raise awareness from an institutional perspective, focusing on how the institution's design systems, policies, and processes either build healthy inclusive cultures or perpetuate systemic inequities. Moreover, the network seeks to change the institution's understanding of how legacy practices and policies affect student performance, and impact student economic mobility and personal, academic, and career success—to address systems of power, privilege, and race through analysis of advising policies and procedures.

**Equity:** A concept grounded in the principles of justice and “do no harm.”

**Equity gap:** Another alternative to “achievement gap” that evokes the notion that institutions have a responsibility to create equity for students.

**Experiential learning:** Experiential learning describes the ideal process of learning, invites you to understand yourself as a learner, and empowers you to take charge of your own learning and development (Kolb, D., 2020).

**Holistic advising redesign:** The process of identifying, implementing, and refining high-quality, effective institutional practices that support students as they work toward achieving their personal, academic, and career goals. Recognizing that changes in advising will impact other areas of an institution, this type of redesign typically requires cross-functional collaboration with a focus on aligning people, processes and technology. Successful holistic advising redesign promotes an institutional culture of being student ready.

**Opportunity gap:** An alternative to the phrase “achievement gap” that recognizes the inequality of opportunity in education, or “education debt,” characterized by a long history of discriminatory gaps in educational inputs (Ladson-Billings G., 2006).

**Student success:** The outcome of a personal, rigorous, and enriching learning experience that culminates in the achievement of a student's academic goals in a timely manner and fully prepares them to realize their career aspirations (Lawton, 2018).

## Glossary References



American Association of State Colleges and Universities (AASCU) (2021). *Integrating career advising for equitable student success*. The Career Leadership Collective. <https://www.advisingsuccessnetwork.org/wp-content/uploads/Integrating-Career-Advising-for-Equitable-Student-Success-A-Higher-Education-Landscape-Analysis.pdf>.

Kolb, D. (2020). *What is experiential learning?* Institute of Experiential Learning. <https://experientiallearninginstitute.org/resources/what-is-experiential-learning/>

Ladson-Billings G. (2006). *From the achievement gap to the education debt: understanding achievement in U.S. schools*. Educational Researcher. 35(7):3-12.

Lawton, J. (2018), *Academic advising as a catalyst for equity*. New Directions for Higher Education, 2018: 33-43. <https://doi.org/10.1002/he.20301>.

National Association of Colleges and Employers (NACE) (2021). *What is career readiness?* <https://www.naceweb.org/career-readiness/competencies/career-readiness-defined/>

# 1 | Augustana University Flipped Career Advising First-Year Curriculum

Billie Streufert, Willette Capers, Lisa Brunick,  
and Darcie Rives-East

## Institutional Profile

Located in Sioux Falls, South Dakota, Augustana University is a residential comprehensive private institution that offers bachelor's degrees in 50+ majors and advanced degrees in eight fields. Total undergraduate full-time enrollment for Fall 2020 was 1,687. Most recently, 83.7% of first-time, full-time, first-year students returned the following Fall term; 68% reside on campus, 20% are Pell-eligible grant recipients, and only 1.6% are over the age of 25. Finally, 15% are first-generation (defined as the first in their family to earn a four-year degree).

Despite being in a community that is increasingly diverse, Augustana remains a predominantly White institution. While diversity in the Sioux Falls School District in 2019 was 39.2%, this cohort reflected only 16% at Augustana (American Indian/Native Alaskan 0.8%; Asian/Indian 1.6%; Black 2.3%; Hispanic 3.2%; Multi-Racial 1.6%; Non-U.S. Resident/International Students 6.3%; Pacific Islander/Native Hawaiian 0%). Moreover, these students persisted and graduated at rates lower than students who identified as White. Although career outcomes were favorable across student populations each year (98-99%), a recent administration of the National Survey of Student Engagement revealed that only 47%

of first-year respondents reported that their faculty advisors spoke with them about their career decisions, which aligned with the experiences of other college students nationally (Auter, 2018; Center for Postsecondary Research, 2018).

## Flipped Career Advising First-Year Curriculum

To prevent students' career goals from being superficial, Augustana articulated in its Vision 2030 strategic plan a desire for students to integrate vocational engagement and career planning. Given its demographics, the institution also noted that intercultural competency would be embedded within the curriculum and central to students' education. Connected to Vision 2030, was the ethos of Augustana's Diversity, Equity, & Inclusion Plan; intended to reshape, refine, and guide members of the campus community on how to invest in diversity, equity, and inclusion, is rooted in the development of a more diverse culture at Augustana through the increased recruitment of historically underserved populations within each campus community constituency, which includes leadership, employees, and students. Additionally, the institution is commit-

ted to ensuring that students graduate with habits needed to be effective members of a diverse community. Augustana also re-envisioned the vocational component of an existing first-year seminar held during the Spring semester and required as a part of AU's core curriculum. While students were oriented to college in the Fall term, students were introduced to their discipline during the following term. The institution designed these structures for individuals who were unfamiliar with college campuses or had limited access to vocational resources in high school (Dann-Messier et al., 2014; Harrington & Orosz, 2018).

The alternative one-credit course, *FYS 112: Vocation Within and Beyond the Academy*, used a flipped advising curriculum that enhanced students' knowledge of campus resources, experiential learning, and how their degree could advance the common good (Puroway, 2016). Career advisors "flip" the curriculum when they engage students in learning prior to individual conversations. Through learning management systems and formal classroom

activities, students receive critical information and achieve foundational learning objectives. As a result, they arrive at their career advising sessions with more prior knowledge and engagement. Prior to Spring 2021, students only attended three plenary sessions and wrote journals that were embedded in a different writing/communications course. Small group discussions, written assignments, and readings were limited. The institution moved toward an alternative to deepen students' vocational reflection and to incorporate diversity into the course. This curriculum is outlined in Table 1.1 below. As a result, students arrived at formal advising conversations knowing how to best use their time at Augustana (Steele, 2014, 2020). Course activities also leveraged students' cultural knowledge and strengths. Instructors consisted of faculty and staff from across campus (e.g., Student Affairs, Student Success Center), thus preventing vocational development from being siloed in a single office (Castillo-Montoya & Torres-Guzman, 2012; Chan & Derry, 2013; Lawton, 2018).

**Table 1.1 Module and Flipped Career Advising Curriculum Overview**

Module and Problem Statement	Career and Vocational Advising Course Content
<p><b>Module I: Understanding Vocational Discernment</b></p> <p>Given society's emphasis on individual status and achievement, college environments may not affirm the objectives or outcomes that students who value collectivism prescribe to education (Lent et al., 1994). If these students perceive limited opportunities to help their communities, their sense of belonging, academic identities, and confidence are diminished (Diekman et al., 2017). They may also unnecessarily change majors (Brown et al., 2018; Diekman et al., 2011).</p>	<ul style="list-style-type: none"> <li>◦ Instructors situated the class in AU's motto of service. Students considered how their interests intersected with the needs of their communities and their personal values (Brown et al., 2015; Diekman et al., 2017).</li> <li>◦ To aid students' understanding of the core curriculum vocational objectives (Lowenstein 2000, 2005, 2015), instructors connected general education requirements to reciprocity and framed the courses as an enjoyable journey instead of a mandatory checklist.</li> <li>◦ Instead of making independent decisions the hallmark of vocational maturity (Marcia, 1966; Shaffer &amp; Zalewski, 2011), Augustana affirmed that students could consider the input of family members or Indigenous community leaders (Guillory &amp; Wolverson, 2008).</li> <li>◦ Students read a brief description of the Psychology of Working (Duffy et al., 2016). Like other scholars (Evans &amp; Seijuit, 2021; McGee, 2020; Tillapaugh, 2019), these authors dispelled the myth of meritocracy and social mobility.</li> </ul>
<p><b>Module II: Experiential Learning and Community-Based Vocational Service</b></p> <p>Program-specific co-curricular or experiential endeavors are often hidden or complex to navigate. With hundreds of experiential learning activities and student organizations, students may not know where or when to start.</p>	<ul style="list-style-type: none"> <li>◦ Instructors cultivated an early interest in high-impact practices that affect persistence and vocational exploration (Kuh, 2008; Krumboltz, 1998).</li> <li>◦ Students examined when and how to locate experiential learning (e.g., internship, research, volunteer, study away, creative projects). They also connected with a support network during an Experience Expo (i.e., jobs, internship, research, volunteer fair), Majors &amp; Minors Fair, and alumni panels.</li> <li>◦ After attending these events, students drafted an academic plan and a resume feasible for high-impact opportunities in the future.</li> <li>◦ Career advisors worked with academic departments to create handouts called Major Maps. Tailored to each major, the maps' content simplified students' ability to time their vocational engagement and plan for their careers.</li> </ul>

Table 1.1 continues on pg. 3

Table 1.1 continued from pg. 2

Module and Problem Statement	Career and Vocational Advising Course Content
<p><b>Module III: Diversity, Equity, and Inclusion</b></p> <p>Instructors challenged students to consider the ways they currently embodied Augustana’s core value of community and would contribute positively to an inclusive campus climate.</p>	<ul style="list-style-type: none"> <li>▫ Students examined topics such as racism, intersectionality, cultural identity, communication styles, and microaggressions.</li> <li>▫ Students completed the Intercultural Development Inventory (IDI) and used the results to draft an action plan.</li> <li>▫ They also constructed a personal statement that outlined how they would continue to advance justice and inclusion in their majors and broader communities.</li> </ul>
<p><b>Module IV: Future Goals</b></p> <p>Society oversimplifies career decision-making (Gati &amp; Asher, 2001). Instead of relying on standardized career assessments, instructors engaged students in ongoing reflection to emphasize vocational discernment is a process instead of a single decision.</p>	<ul style="list-style-type: none"> <li>▫ Students constructed educational and vocational goals predicated on the cultural connections and vocational awareness they cultivated in the course.</li> <li>▫ Instructors also introduced students to e-portfolios to document learning during future service and to continue the integrative vocational reflection practiced throughout the course (Association of American Colleges &amp; Universities, 2021).</li> </ul>

## Assessment Methods & Design

The curriculum committee used formative and summative assessments with quantitative and qualitative data to assess student learning. Institutional data was also used to measure the extent that the institution changed environmental structures. This included the following methodology:

- **Cumulative Assignment Rubrics:** For each of the cumulative assignments (i.e., vocational personal statement, resume, diversity statement), instructors used rubrics to provide feedback to students. These direct measurements permitted the institution to assess the percent of students who mastered the learning outcomes of each module.
- **Pre-post Survey:** Three instructors administered pre/post questionnaires during the first and last class period to assess students’ perceived learning. Students reported on a six-point Likert scale, with one representing strong disagreement and six representing strong agreement.
- **Student Behavior:** The institution examined the rates that first-year students submitted the change of major form. An observed percentage point difference might indicate that more students were engaged in vocational discernment in part due to FYS 112.

- **Intercultural Development Inventory (IDI):** The institution administered the IDI survey to first-year students and provided a personal report to advance their development. To measure their growth, Augustana also sought to administer the assessment again as students prepared to graduate.

## Assessment Findings

### Cumulative Assignment Rubrics

In all the rating criteria sections, between 82% and 99% demonstrated excellent/high proficiency or good proficiency, as noted in Table 1.2 below.

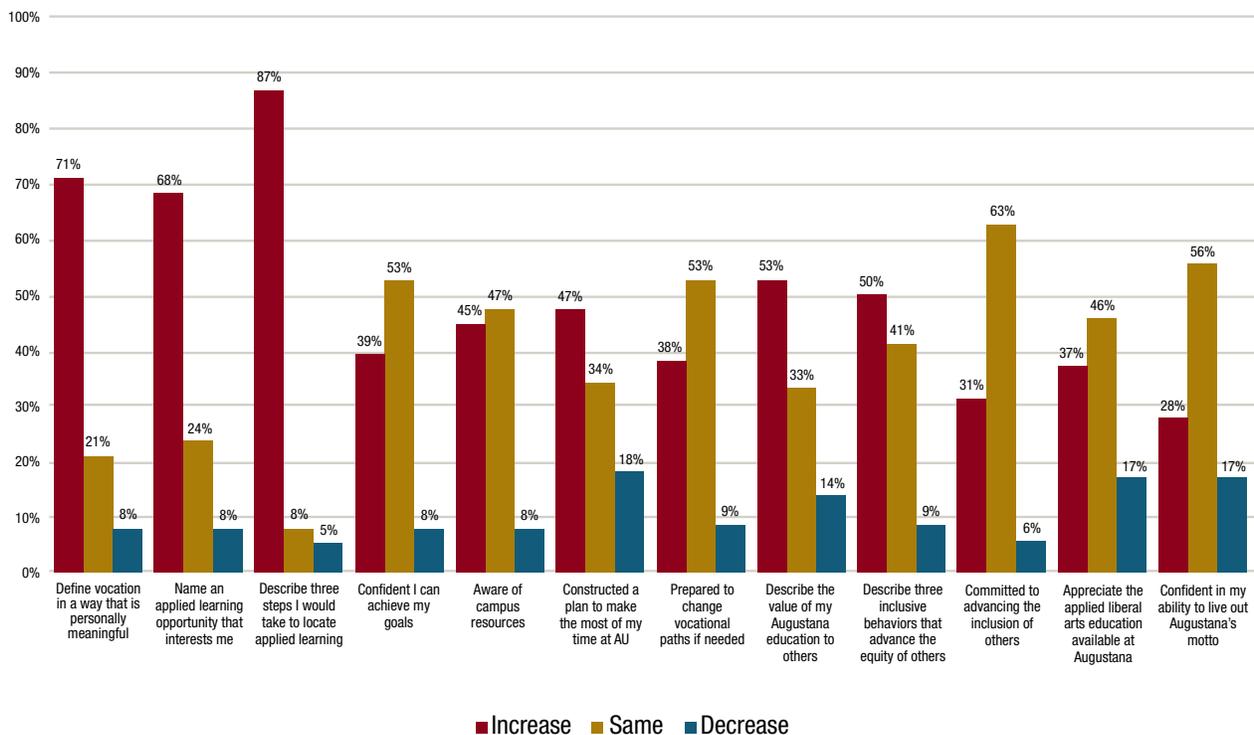
### Student Surveys

Individuals were only included if they provided both pre-and post-survey responses ( $n= 38$ ). The distributions of this self-reported ordinal data are noted in Figure 1.1. The greatest increases in pre/post learning were observed in students’ understanding of vocation as a construct, ability to name specific applied learning opportunities that exist at Augustana, and awareness of action they should take to secure experiential learning.

Table 1.2 Percent of Rating Students Received for Cumulative Module Assignments

<b>Vocational Reflection</b>	<b>Excellent</b>	<b>Good</b>	<b>Developing</b>	<b>Under-Developed</b>
Accuracy	75%	23%	1%	1%
Clarity	67%	28%	4%	1%
Depth	63%	29%	7%	1%
Breadth	64%	33%	3%	1%
<b>Diversity Statement</b>	<b>High Proficiency</b>	<b>Good Proficiency</b>	<b>Minimal Proficiency</b>	<b>Non-Proiciency</b>
Creation of Content	94%	5%	1%	0%
Development	85%	13%	1%	0%
Organization	91%	7%	2%	0%
Style	93%	7%	1%	0%
Grammar, Format, Mechanics	89%	10%	2%	0%
<b>Resume</b>	<b>Full Marks</b>	<b>Moderate Evidence</b>	<b>Some Evidence</b>	<b>Weak Evidence</b>
Written Communication Skills	57%	27%	14%	2%
Career Management Skills	63%	28%	8%	1%
Clarity of Purpose & Professionalism	70%	21%	7%	1%
Technology Fluence	60%	29%	6%	5%
<b>e-Portfolios</b>	<b>Advanced</b>	<b>Accomplished</b>	<b>Developing</b>	<b>No Marks</b>
Describes experience in an objective & detailed manner	90%	7%	3%	1%
Examines experience specific learning goals or objectives	88%	9%	3%	1%
Articulates learning including goals for future action that can be taken forward into the next experience	86%	12%	4%	0%

Figure 1.1 Pre-Post Assessment Item Comparisons



If the institution elected to assume an equal distance between the Likert scale response options and treated the data as continuous, it could examine the probability of pre-post differences occurring due to sampling errors. A Wilcoxon Signed-Ranks Test indicated that participants' post-survey responses (mean rank = 19.61) were higher than pre-survey responses (mean rank = 18.17),  $T = 686.5$ ,  $z = -4.85$ ,  $p < .001$ . In the future, all instructors will administer the pre-survey to further validate these findings.

In addition to capturing students' experiences in the three pre/post sections, students in all sections were invited to complete the same post-course survey. In total, 66% (184) responded. Their responses are noted in Table 1.3 below. Overall, at least 90% of students reported they agreed to some degree with the learning outcome statements. The highest agreement was observed regarding their ability to advance the inclusion of others, describe the value of their AU degree, awareness of campus resources, and ability to name specific applied-learning endeavors that interested them.

**Table 1.3 Post-Survey Responses**

Statements	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Define vocation in a way that is personally meaningful	1.6%	0.0%	1.1%	14.2%	53.0%	30.1%
Name an applied learning opportunity that interests me	0.0%	1.7%	3.3%	17.7%	47.5%	29.8%
Describe three steps I would take to locate applied learning	0.5%	1.6%	7.7%	27.5%	42.9%	19.8%
Confident I can achieve my goals during my time at AU	0.0%	1.6%	1.6%	8.2%	43.7%	44.8%
Aware of campus resources	0.5%	0.5%	1.1%	7.7%	49.2%	41.0%
Constructed a plan to make the most of my time at AU	0.0%	4.4%	4.4%	20.2%	49.2%	21.9%
Prepared to change vocational paths if needed at any point in my life	0.6%	2.2%	6.7%	21.8%	41.9%	26.8%
Describe the value of my Augustana education to others	0.0%	1.7%	2.2%	18.9%	45.6%	31.7%
Describe three inclusive behaviors that advance the equity of others	0.0%	2.8%	2.2%	12.8%	48.6%	33.5%
Describe action that advances the inclusion of others	0.0%	0.6%	1.1%	12.8%	41.9%	43.6%
Appreciate the applied liberal arts education available at Augustana	0.6%	1.7%	4.5%	12.3%	41.9%	39.1%
Confident in my ability to live out Augustana's motto	0.0%	0.6%	0.6%	8.9%	41.1%	48.9%

## Change of Major Requests, Retention Rates, and Campus Climate Data

While 24% (2020) and 27% (2019) of students submitted a change of major/minor/concentration request during the prior Spring terms, 32.6% of FYS 112 students did so during the current Spring 2021 semester.

## IDI Survey Results

The IDI Developmental Orientation Score indicated that the group's primary orientation toward cultural differences fell within minimization, reflecting a tendency to highlight commonalities across cultures that can mask significant cultural differences in values, perceptions, and behaviors. Students in the FYS 112 cohort substantially overestimated its level of intercultural competence and may be surprised their score was not higher. To develop a deeper

understanding of their cultural self-awareness and increase their understanding of culture frameworks for making sense of cultural differences, each student received a personal profile report and review. With 47% in minimization and 38 % in polarization, Augustana also plans to offer future events to deepen students' cultural competency.

## Implications for Practice

In the future, the institution will also examine retention rates and campus climate survey results given classmates' understanding of their role in the creation of inclusive communities. Given the course's emphasis on high-impact practices, Augustana also plans to use the Spring 2020 National Survey of Student Engagement as baseline engagement levels and assess the degree to which students' experiences were enhanced as the result of FYS 112 in Spring 2021 and beyond.

In summary, Augustana offered distinctive career advising because it paired its existing Fall orientation course with a first-year seminar Spring class that specifically introduced students to their academic programs. Inclusive career advisors fostered transformational change by situating the course in the context of students' identities so they could transition into their chosen degree programs and persist without surrendering their cultural values (Minthorn & Shotton, 2018). Instructors framed the desire to advance the common good or reciprocity as a cultural strength and valid form of leadership (Brayboy, 2015; Byars-Winston et al., 2010; Salis Reyes, 2019; Wright, 2018). Students also discovered additional support and networks through plenary sessions with employers, faculty, upper-class students, and alumni in their chosen fields. Career advisors demystified the complexities of co-curricular activities and ensured consistent participation in high-impact practices by publishing integrated major maps for their respective degree programs. If advisors at other institutions flip the curriculum in first-year seminars and include cultural competency as a central learning outcome, they can advance the inclusive culture of their campus communities and the early experiential engagement of students.

## References

- Association of American Colleges and Universities. (2021, April). Building a culture of reflection and integrative learning through ePortfolios. <https://www.aacu.org/aacu-news/campus-model/building-culture-reflection-and-integrative-learning-through-eportfolios>
- Auter, Z. (2018). Half of college students say their major leads to a good job. <https://www.gallup.com/education/231731/half-college-students-say-major-leads-good-job.aspx>
- Brayboy, B. M. J. (2015). Views on indigenous leadership. In R. S. Minthorn and A. F. Chavez (Eds.), *Indigenous leadership in higher education* (pp.49-58). New York, NY: Taylor and Francis Group.
- Brayboy, B. M. J., Fann, A. J., Castagno, A. E., & Solyom, J. A. (2012). *Postsecondary education for American Indian and Alaska Natives: Higher education for nation-building and self-determination*. Association for the Study of Higher Education (ASHE) Higher Education Report, 37(5), Jossey-Bass Publishing.
- Brown, E. R., Smith, J. L., Thoman, D. B., Allen, J. M., & Muragishi, G. (2015). From bench to bedside: A communal utility value intervention to enhance students' biomedical science motivation. *Journal of Educational Psychology, 107*(4), 1116-1135. <https://dx.doi.org/10.1037%2Fedu0000033>
- Brown, E. R., Steinberg, M., Lu, Y., & Diekman, A. B. (2018). Is the lone scientist an American dream? Perceived communal opportunities in STEM offer a pathway to closing U.S.-Asia gaps in interest and positivity. *Social Psychological and Personality Science, 9*(1), 11-23. <https://journals.sagepub.com/doi/10.1177/1948550617703173>
- Byars-Winston, A., Estrada, Y., Howard, C., Davis, D., & Xalapa, J. (2010). Influence of social cognitive and ethnic variables on academic goals of underrepresented students in science and engineering: A multiple-groups analysis. *Journal of Counseling Psychology, 57*(2), 205–218. <http://www.doi.org/10.1037/a0018608>
- Castillo-Montoya, M., & Torres-Guzman, M. E. (2012). Thriving in our identity and in the academy: Latina epistemology as a core resource. *The Harvard Educational Review, 82*(4), 540–559.

- Chan, A., & Derry, T. (2013). *A roadmap for transforming the college-to-career experience: Rethinking success from the liberal arts to careers in the 21st century*. <https://prod.wp.cdn.aws.wfu.edu/sites/74/2013/05/A-Roadmap-for-Transforming-The-College-to-Career-Experience.pdf>
- Dann-Messier, B., Wu, P., & Greenburg, M. (2014, May 30). Dear colleagues. <https://www2.ed.gov/about/offices/list/ovae/pi/cte/may-30-2014-dear-colleague-letter-career-counseling.pdf>
- Diekman, A. B., Clark, E. K., Johnston, A. M., Brown, E. R., & Steinberg, M. (2011). Malleability in communal goals and beliefs influences attraction to stem careers: Evidence for a goal congruity perspective. *Journal of Personality and Social Psychology*, 101(5), 902–918. <https://doi.org/10.1037/a0025199>
- Diekman, A. B., Steinberg, M., Brown, E. R., Belanger, A. L., & Clark, E. K. (2017). A goal congruity model of role entry, engagement, and exit: Understanding communal goal processes in STEM gender gaps. *Personality and Social Psychology Review*, 21(2), 142-175. <https://journals.sagepub.com/doi/10.1177/1088868316642141>
- Evans, K. M., & Sejuitt, A. L. (2021). *Gaining cultural competence in career counseling*. National Career Development Association.
- Gati, I., & Asher, I. (2001). The PIC model for career decision making: Prescreening, in-depth exploration, and choice. In F. T. L. Leong & A. Barak (Eds.), *Contemporary models in vocational psychology: A Vol. in honor of Samuel H. Osipow* (pp. 7–54). Lawrence Erlbaum Associates Publishers.
- Guillory, R. M., & Wolverson, M. (2008). It is about family: Native American student persistence in higher education. *The Journal of Higher Education*, 79(1), 58-87. <https://doi.org/10.1353/jhe.2008.00010>
- Harrington, C., & Orosz, T. (2018). *Why the first-year seminar matters: Helping students choose and stay on a career path*. Rowman & Littlefield.
- Krumboltz, J. D. (1998). Serendipity is not serendipitous. *Journal of Counseling Psychology*, 45(4), 390–392. <https://doi.org/10.1037/0022-0167.45.4.390>
- Kuh, G. D. (2008). High-impact educational practices: What they are, who has access to them, and why they matter. Association of American Colleges and Universities. <https://secure.aacu.org/imis/ItemDetail?iProductCode=E-HIGHIMP&Category=>
- Lawton, J. (2018, Winter). Academic advising as a catalyst for equity. *New Directions for Higher Education*, 184, 33-43. <https://doi.org/10.1002/he.2030>
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance [Monograph]. *Journal of Vocational Behavior*, 45, 79–122. <https://doi.org/10.1006/jvbe.1994.1027>
- Lowenstein, M. (2000). Academic advising and the logic of the curriculum. *The Mentor: Innovative Scholarship on Academic Advising*, 2. <https://journals.psu.edu/mentor/article/view/61732/61377>
- Lowenstein, M. (2005). If advising is teaching, what do advisors teach? *NACADA Journal*, 25(2), 65-73. <http://www.doi.org/10.12930/0271-9517-25.2.65>
- Lowenstein, M. (2015). General education, advising, and integrative learning. *The Journal of General Education*, 64(2), 117-130. <http://www.jstor.org/stable/10.5325/jgeneeduc.64.2.0117>
- McGee, E. O. (2020). *Black, brown, bruised: How racialized STEM education stifles innovation*. Harvard Education Press.
- Minthorn, R. S. Z., & Shotton, H. J. (2018). Introduction: The roots of reclamation. In R. S. Minthorn & H. J. Shotton (Eds.), *Reclaiming indigenous research in higher education* (pp. 1-6). Rutgers University Press.
- Reynolds, M. M. (2013). Learning-centered advising. In Jayne K. Drake, Peggy Jordan, and Marsha A. Miller (Eds.) *Academic advising approaches* (pp. 33-43). Jossey-Bass.
- Ponterotto, J. G., Rivera, L., & Sueyoshi, L. A. (2000). The career-in-culture interview: A semi-structured protocol for the cross-cultural intake interview. *The Career Development Quarterly*, 49(1), 85-94.
- Puoway, A. W. (2016) Critical advising: A Freirean-inspired approach. *NACADA Journal*, 36(2), 4-10. <http://www.doi.org/10.12930/NACADA-15-015>

## Contact



Billie Streufert  
Assistant Vice Provost for Student Success  
Augustana University  
Email: [billie.streufert@augie.edu](mailto:billie.streufert@augie.edu)

Willette Capers  
Assistant Dean for Diversity, Equity & Inclusion  
Augustana University  
Email: [willete.capers@augie.edu](mailto:willete.capers@augie.edu)

Lisa Brunick  
Public Services Librarian  
Augustana University  
Email: [lisa.brunick@augie.edu](mailto:lisa.brunick@augie.edu)

Darcie Rives-East  
Associate Professor  
Augustana University  
Email: [darcie.rives-east@augie.edu](mailto:darcie.rives-east@augie.edu)

Salis Reyes, N. A. (2019). "What am I doing to be a good ancestor?": An Indigenized phenomenology of giving back among Native college graduates. *American Educational Research Journal*, 56(3), 603–637. <https://doi.org/10.3102/0002831218807180>

Sioux Falls School District. (2019). District demographic report: Executive summary. [https://www.sf.k12.sd.us/images/docs/school\\_board/school\\_board\\_reports/2019/10B-2019DistrictDemographicsRpt.pdf](https://www.sf.k12.sd.us/images/docs/school_board/school_board_reports/2019/10B-2019DistrictDemographicsRpt.pdf)

Steele, G. (2014). Intentional use of technology for academic advising. *NACADA Clearinghouse Resource*. <http://www.nacada.ksu.edu/Resources/Clearinghouse/View-Articles/Intentional-use-of-technolo>

Tillapaugh, D. (2019). Student involvement and engagement. In E.S. Abes, S. R. Jones, & D. L. Stewart

Steele, G. (2020, September). Creating a flipped advising approach: A model and five videos. *Academic Advising Today*, 43(3). <https://nacada.ksu.edu/Resources/Academic-Advising-Today/View-Articles/Creating-a-Flipped-Advising-Approach-A-Model-and-Five-Videos.aspx>(Eds.), *Rethinking college student development using critical frameworks* (pp. 191-205). Stylus Publishing.

Wright, E. K. (2018). "It was a process of decolonization and that's about as clear as I can put it": Kuleana-centered higher education and the meanings of Hawaiianness. In R. S. Minthorn & H. J. Shotton (Eds.). *Reclaiming indigenous research in higher education* (pp. 18-35). Rutgers University Press.

Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race Ethnicity and Education*, 8(1), 69-91. <http://doi.org/10.1080/1361332052000341006>

# 2 Bakersfield College High-Tech, High-Touch Career Counseling and Advising

Marisa Marquez and Craig Hayward, Ph.D.

## Institutional Profile

Bakersfield College (BC) is primarily a two-year public college (with one bachelor's degree) located in Bakersfield, California. BC is 100% commuter/non-residential. In 2019-2020, BC served 37,198 students, and the annual FTES was approximately 18,900. BC's graduation rate is 25% with an additional 28% transferring to a four-year school without first obtaining an associate degree, for an overall completion rate of 53%. The number of FTE undergraduate students is 18,907 with 54.2% female, 44.1% male, and 1.7% unknown/declined to state. In terms of ethnicity, Bakersfield College is a Hispanic-Serving Institution (HSI) with 68.7% of the student population is Latino, 16.6% White, 4.4% African American, 3% Multi-Ethnic, 2.3% Asian and Filipino, 2.2% Unknown, 0.4% American Indian, and 0.1% Pacific Islander. Additionally, first-generation college students comprise nearly half of the overall student population (47.8%), Pell Grant recipients represent 29.6% of students and 29.5% of students are over age 25. BC defines "first-generation" as students whose parents/guardians did not attend any college. If neither parent/guardian has at least "some college," then they are first-generation.

Table 2.1 below represents BC's job placement rate for the 2019-2020 academic year. Job placement rate is one of Perkins CTE core indicators of performance gathered by California Community Colleges Chancellor's Office. This key performance indicator can be assessed and utilized for program analysis and improvement planning in community colleges.

## The Evolution of Program Pathways Mapper

In 2014, Bakersfield College embarked on an institution-wide approach to student success based on intentionally designed, clear, coherent, and structured educational experiences, informed by evidence that guides each student effectively and efficiently from their point of entry through to the attainment of high-quality postsecondary credentials and careers in the labor market. Guided Pathways approach is used to deliver highly structured student experiences that guide students on their pathway to completion. The Guided Pathways framework described by its four pillars of success requires the College to: clarify the path, enter the path,

**Table 2.1 Job/Career Placement Rate of Career & Technical Education Programs**

<b>Program</b>	<b>Job Placement Rate</b>
LVN Nursing	100%
Registered Nurse (NCLEX)	98%
Drafting	93%
Radiologic Technology	91%
Electronics/Elec. Tech	85%
Emergency Medical Tech	85%
Admin. of Justice	84%
Human Services	84%
Accounting	77%
Welding and Cutting	77%
CNA	76%
Child Development	75%
Automotive Technology	73%
Fire Technology	68%
Business & Commerce	56%
Machine Tool/ Shop	40%

stay on the path, and ensure learning (Bailey et al., 2015). Through the Guided Pathways framework, Bakersfield College developed ten Learning and Career Pathways to group similar programs, including occupations that share common courses, skills, knowledge, and interests. Through Learning and Career Pathways, a cross-functional completion community, consisting of faculty, staff, and administrators, is responsible for the oversight and engagement of a Pathway. Each completion community member is known as a “completion coach.” It is also important to note, students are grouped by membership in an affinity group. An affinity group is a population of students who have specific needs or have demonstrated disproportionate impact. Organizing students into cohorts by affinity group enables the college, through an equity lens, to focus the workaround students who are disproportionately impacted, such as Umoja, Veterans, previously incarcerated, Foster Youth, etc., Extended Opportunity Programs and Services (EOPS), Cooperative Agencies Resources for Education (CARE), California Work Opportunity and Responsibility to Children (CaWORKS), Finish In 4, MDRC Success Project, NextUp, Foster and Kinship Care, probation, and undocumented students.

## Creating Clusters for Learning and Career Pathways

As a result of adopting Guided Pathways, Bakersfield College decided to categorize degree and certificate programs to better support students. Each learning and career pathway empower students to access resources to keep them on track with their educational journey. Additionally, each pathway contains a list of programs, contacts for support, and career exploration information. With the implementation of learning and career pathways, Bakersfield College restructured its counseling and advising to integrate academic advising, career counseling, and technology to create a holistic approach to student services, by design. By way of learning and career pathways, we created an interaction between programs of study and activities such as occupational panels, developing education plans aligning with career plans, discussions related to career goals and life roles, and encouraging exploratory research. Bakersfield College focuses on student onboarding and support efforts by organizing students into the following ten cohorts of learning and career pathways:

1. Agriculture, Culinary Arts, & Nutrition
2. Arts, Communication, Humanities

3. Business
4. Education
5. Health Sciences
6. Industrial Technology & Transportation
7. Public Safety Training
8. Social and Behavioral Sciences
9. Science, Technology, Engineering, Math
10. Personal and Career Exploration

Gainful Employment Disclosures accompany each learning and career pathway to introduce students to careers, salary, and employment projections. The Pathways Program Mapper (PPM) provides detailed, current and local information about occupations and careers commonly associated with each program, including typical wages and the labor market demand for California. Such disclosures encourage students to develop their goals further and conduct further research to commit themselves to attainment. Each pathway offers another learning tool, "Career Explorer". This online tool informs students about careers, job growth, and required education level, based on data from the U.S. Bureau of Labor Statistics.

## Technology-enhanced Advising Techniques

Another facet of the PPM strategy is the integration of technology which facilitates efficiency and scalability. The Pathways Program Mapper (PPM) introduces and assists students in navigating the curriculum required for completion. It is a descriptive and easy-to-use guide, detailing the course sequence required to complete a two-year degree at Bakersfield College, transfer to a university, and continue their path to baccalaureate degree completion. Included in the PPM is the route a student takes to connect with, enter, progress through, and complete their program of study, and the skills they need to acquire, for the labor market they will enter after their certificate or associate or baccalaureate degree.

Starfish Degree Planner allows students and staff to explore and build academic plans for straight-forward completion of any certificate or degree. Working with advisors, plans can be reviewed and approved. At Bakersfield, Starfish is used to monitor cohort group progress and provide effective case management and degree planning. Coaches schedule all student appointments through the system, monitor student progress, receive, and make

student referrals to other supports in coordination with other coaches. Coaches keep case notes and access student data for communication campaigns and to identify when students are at-risk of going off path and intervene to keep them on path and in the correct courses. The system's degree planning feature allows student self-directed, counselor, and educational advisor supported academic and career planning. Consistent contacts and nudges help guide student exploration and decision-making while preserving their freedom of choice.

The ultimate objective is to develop and provide a high-tech, high touch advising model for students is rooted in the college's initiatives to increase the number and percentage of completion and success within minoritized student populations. Multiple college campus sites and programs exist within Kern County (BC main, Delano Campus, BC SouthWest, Weill Institute, Early College/Dual Enrollment, Shafter Learning Center, Job Spot, Wasco Adult Education Center, and Fire Training), thus advising needed to advance by offering consistent and current learning and career pathway information to each student and serve them holistically: academic, personal, social and career. Not to mention, non-academic and co-curricular support for students including financial assistance, financial literacy, and intervention for students of concern as identified by BC faculty and staff on completion coaching communities.

## Assessment Methods and Design

The research questions for this study included:

- How is Program Mapper improving the student experience?
- How is PPM helping students enter and stay efficiently on the path toward completion?
- In what ways can BC grow students' use of this tool?
- What can be learned from early implementation to inform adoption at other colleges?

In the mixed methods study described, the primary qualitative method was structured focus groups. BC conducted a series of focus groups with: a) PPM users; b) PPM non-users; and c) Welcome Center student workers. A group of 1261 spring 2020

students were sent an email with a “mini-survey” via Qualtrics to ascertain their status as PPM users or non-users and to invite their participation in a focus group. Students were offered a \$30 Amazon gift card for participation in a 90-minute virtual focus group. Respondents could click directly on a schedule of focus group times. Students were sent a reminder email 24 hours before and a text 30 minutes before the start of the session. Ultimately, 50 students registered, and 32 participated, including six Welcome Center student workers.

BC’s Office of Institutional Effectiveness also conducted a cross-sectional analysis of the course-taking behavior of four cohorts of incoming students. Two of the cohorts were pre-PPM (2016-17; 2017-18), one was transitional (2018-19), and the last was fully post-launch of the PPM (2019-20). OIE staff developed a measure (on-path percentage) to assess the degree to which students’ actual course-taking behavior corresponded with the course choices represented in the PPM’s exemplar program maps. We evaluated the on-path percentage of all incoming students from the college’s top 20 most popular Associate Degree for Transfer programs (approximately 35% of all incoming students or between 1,200 and 2,400 students per cohort). These programs had course requirements that were stable over the period covered by the study.

## Assessment Findings

Shown in Figure 2.1 below, the on-path percentage generally increased over the period of this study, but there were particularly sharp increases in both the PPM’s transitional year (2018-19) and then again for the full implementation year (2019-20). Full roll-out of the PPM was associated with a 15-percentage point increase in incoming students’ on-path percentage from 63% in 2016-17 to 78% in 2019-20.

The study’s qualitative results help explain how the PPM helped students to make more informed and effective course-taking decisions. The major themes that emerged from the student focus groups included:

- Students universally expressed that Program Mapper can help all students make informed decisions about both their educational and career options and know needed steps to reach their goals—regardless of their stage of community college journey or level of clarity about their academic and employment aspirations. One Welcome

Center student worker shared: *[Program Mapper] has value no matter where you are in your journey. . . [Whether students are] just starting out or if they’re continuing, whether they have no idea or some more specific direction, it has value.*

- Program Mapper’s user-friendly visual representations of program options had the effect of making programs appear more approachable and doable, as stated by one participant: *[Program Mapper] puts you at ease as a college student, like, okay, this is what I need to do. This is what has to happen next. . . [I like] just how simple it is and how organized it is. I think that’s my favorite part.*
- Students emphasized that Program Mapper empowers students to independently get direction on how to complete program requirements in a timely way, as one student explained: *If you follow Program Mapper or the pathways, you probably could have gotten everything out of the way and then been done on time. . . So it helps you with efficiency and being clear about how to get out as quickly as possible.*
- Students valued the way the PPM allows them to do just-in-time “self-service” educational planning, without needing to see a counselor, especially during “crunch” times when counseling is particularly busy: *[It] kind of gives them the ability to map out exactly what they want to do and how they want to do it. And if they want to change it, they don’t have to worry about asking a counselor what classes that they need to take for their new route.*
- Program Mapper allows for self-advocacy and direction when navigating student services and meeting with counselors: *I eventually went . . . on [Program Mapper] myself, and I started looking at what I needed. And then I went back . . . and checked with a different counselor, and she said, no, I didn’t need all of that stuff that [the first counselor] had me in.*

Participants additionally described using Program Mapper in tandem with other education and career planning tools adopted by BC, such as Starfish. We recognize that though the PPM is an important component of BC’s overall Guided Pathways work; it does not stand alone but works jointly with other related programs, such as completion coaching, data coaching, intrusive advising, and early alert, to clarify the path to completion as well as to help students get on—and remain on—that path.

Figure 2.1 On-Path percentage for the 20 largest ADT programs

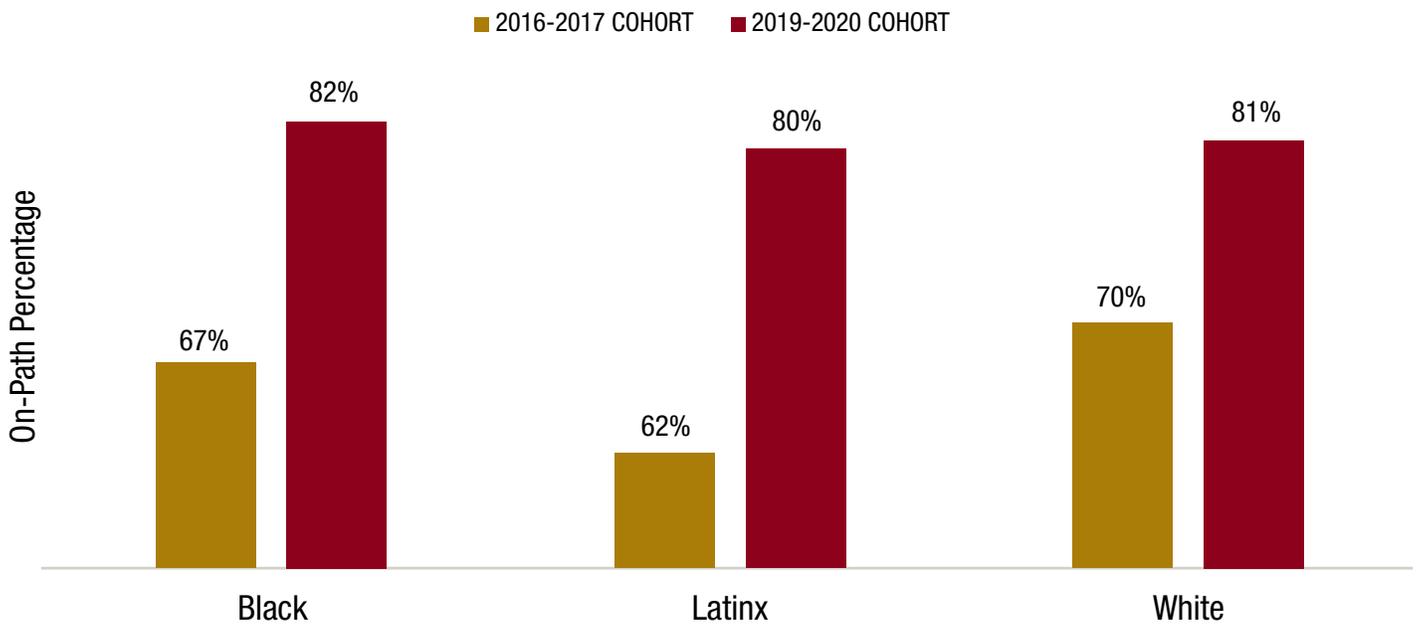
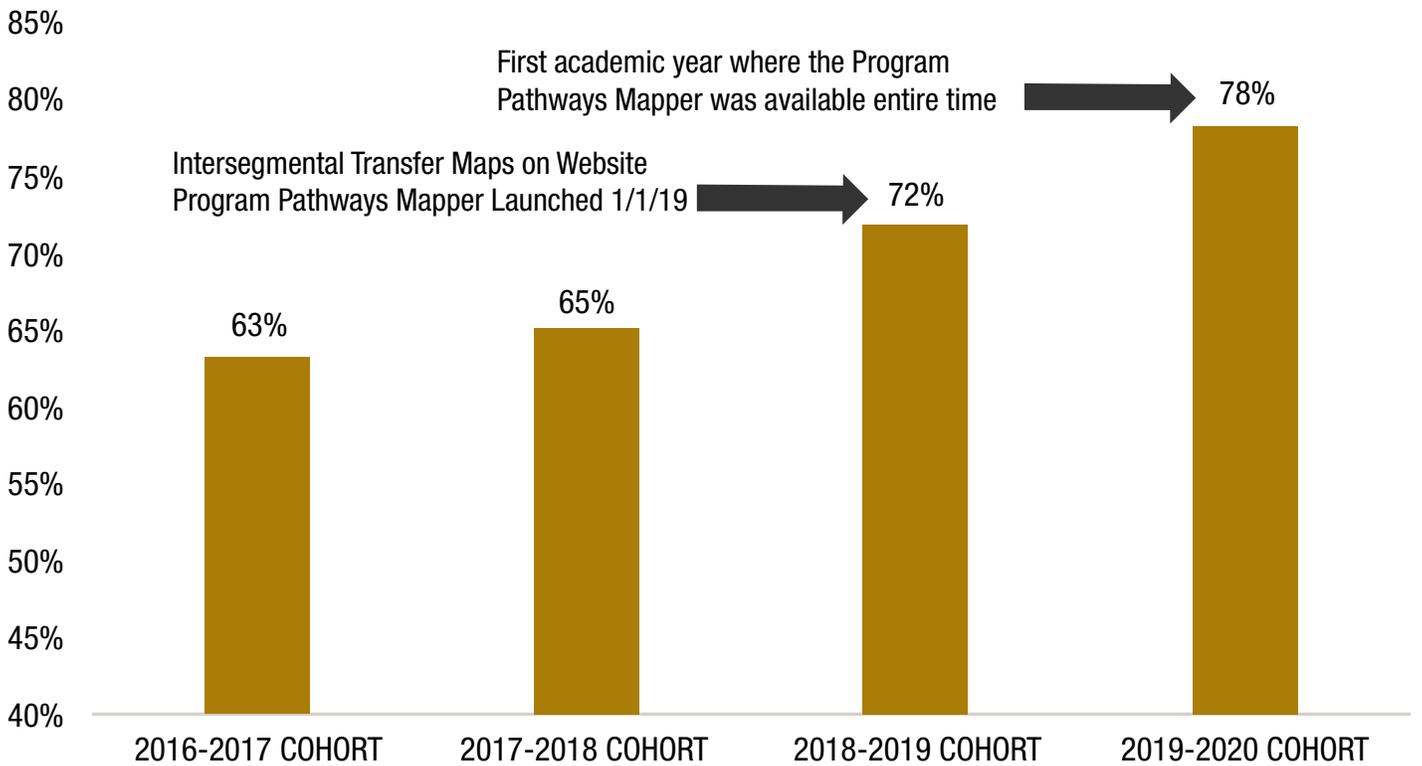


Figure 2.2 Comparison of on-path percentages between two cohorts



## Implications for Practice

The Program Pathways Mapper design is what makes it an effective equity strategy. It does not require students to have any particular social capital or “college knowledge”; it is easily accessible and usable from a PC to a cell phone (mobile adaptive design). It is designed for accessibility and compatibility with screen readers, and it does not require a login to access (no barrier to entry). Because of these design features, Bakersfield College has seen an elimination of the equity gap in on-path percentage for student cohorts who had access to the PPM relative to those earlier cohorts who did not have access. On-path percentage is a measure of how well aligned a student’s course taking is with their program of study. The Program Pathways Mapper (PPM) has shown to be beneficial for students, as it supports multiple needs throughout a student’s educational journey, from goal setting and academic planning, to career exploration and preparation.

The integration of technology, academic counseling, and advising has resulted in a high-tech, high-touch approach to the development of student learning and experiences for increased success. Advancing the online, public accessibility for students to discover occupations and explore labor market demand in relation to the chosen learning and career pathway has helped students to make informed and course-taking decisions, leading to the completion of their goals. This has also served as the mechanism leading to the expansion of pathways to certificates and degrees through the Bakersfield College Early College program, in collaboration with feeder high schools. With a particular focus on rural communities and high school sites with large numbers and percentages of minoritized student populations, the high-tech, high-touch method of advising can ensure timely completion. Working in tandem with the education and career planning tool, Starfish, counselors, and advisors efficiently track and monitor student progress, including early identification and intervention for student success.

The Program Pathways Mapper has not been in use long enough to demonstrate a substantial impact on graduation or transfer rates. Since it was implemented in 2019, we expect to assess and measure its impact on the entering fall 2019 cohort at the close of this academic year (i.e., 2021-22) when we will evaluate three-year graduation rates. In the meantime, we do see equity impacts and increases in on-path percentage, which is a leading indicator of graduation.

## References

Bailey, T. R., Jaggars, S. S., & Jenkins, D. (2015). *Redesigning America's community colleges: A clearer path to student success*. Harvard University Press.

## Contact

Marisa Marquez  
Director of Counseling and Student Success  
Bakersfield College  
Email: [marimarq@bakersfieldcollege.edu](mailto:marimarq@bakersfieldcollege.edu)

Craig Hayward, Ph.D.  
Dean, Institutional Effectiveness  
Bakersfield College  
Email: [craig.hayward@bakersfieldcollege.edu](mailto:craig.hayward@bakersfieldcollege.edu)

# 3 | George Mason University The Scientific Community of Transfer Researchers: Holistic Career Readiness for STEM Undergraduate Students Who Transfer

Kerin Hilker-Balkissoon and Padmanabhan Seshaiyer

## Institutional Profile

George Mason University (Mason) is a public, tier 1 research university (Carnegie, 2019) in Fairfax, Virginia, USA. Data from Mason's Office of Institutional Assessment indicate that Mason has 39,032 enrolled with a race distribution of 41.7% White, 10.7% Black, 17.6% Asian, 13% Hispanic/Latino, 0.1% Native American, 13.2% Other. Mason's undergraduate gender distribution is 50% male and 50% female, and 38% of undergraduates are post-traditional (over age 25). The university supports a residential population of approximately 6000; approximately 85% of the student population are commuter students.

Mason defines first-generation students as those who are the first in their immediate family to complete a baccalaureate degree in the United States, with 26% of our undergraduate population meeting this definition. Approximately 61% of undergraduates receive financial aid, including 29% of students awarded Pell Grants.

## The Scientific Community of Transfer Researchers

The Scientific Community of Transfer Researchers (S-CTR) is an intrusive, developmental career advising model supporting first-year university transfer students in Mason's College of

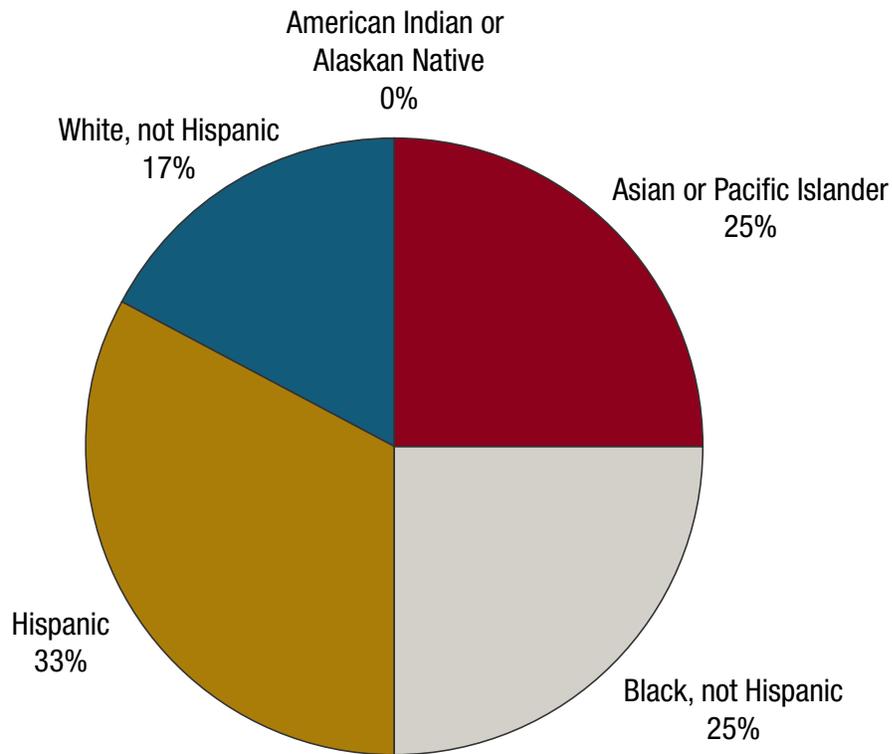
Science (COS). The S-CTR pilot was launched in the Fall of 2018 to more effectively support the sector-specific career development of COS students who transferred, who comprise over 35% of our undergraduate population. S-CTR program participants reflect the diversity of the university's overall transfer population, with 33% of participants identifying as Hispanic, 25% as Black/African American, 25% as Asian/Asian American, and 17% as White. 61% of participants self-identify as female, 31% as male, and 8% undisclosed/other, and 25% are student-parents or caregivers. Aside from baseline demographics, it is important to note other key characteristics of the community such as the gender makeup (61% female, 31% male, 8% undisclosed/other/non-binary) and number of students who are parents/caregiving (25%) in addition to their commitment to academics (see figures 3.2 and 3.3). *Note: the race and ethnicity terminology utilized is reflective of historical demographic data points collected by the Commonwealth of Virginia's Department of Education, which have since been updated.*

S-CTR goals were developed to align emerging research and promising practices in STEM career development with feedback from industry experts. In comparison to national and institutional metrics, S-CTR scholars will demonstrate measurable increases in:

- Participation in STEM (Science, Technology, Engineering, Mathematics) experiential learning.
- Social, cultural, and career capital.
- Student success and minor credential completion.
- National Association of Colleges and Employers (NACE) career competencies

In Spring 2018, COS engaged internal and external stakeholders to identify gaps and barriers in the transfer experience. A recurring theme was difficulty among COS students who transferred in accessing undergraduate research. A Design Thinking (DT) approach was subsequently utilized in a more comprehensive needs-assessment and intervention design. DT is widely used in

Figure 3.1 S-CTR Demographics by Race and Ethnicity



■ American Indian or Alaskan Native   ■ Asian or Pacific Islander   ■ Black, not Hispanic   ■ Hispanic   ■ White, not Hispanic

Figure 3.2 S-CTR Demographics by Gender

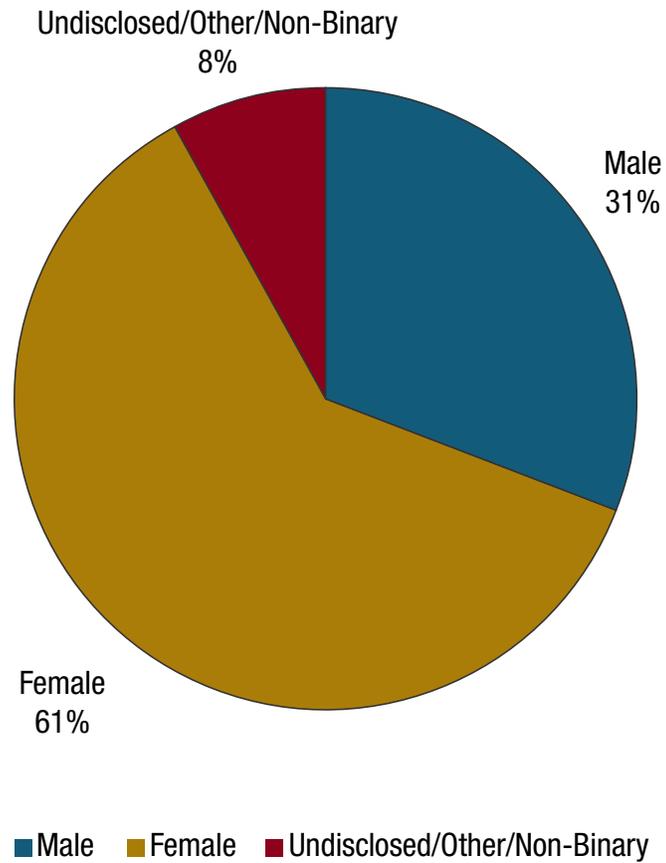
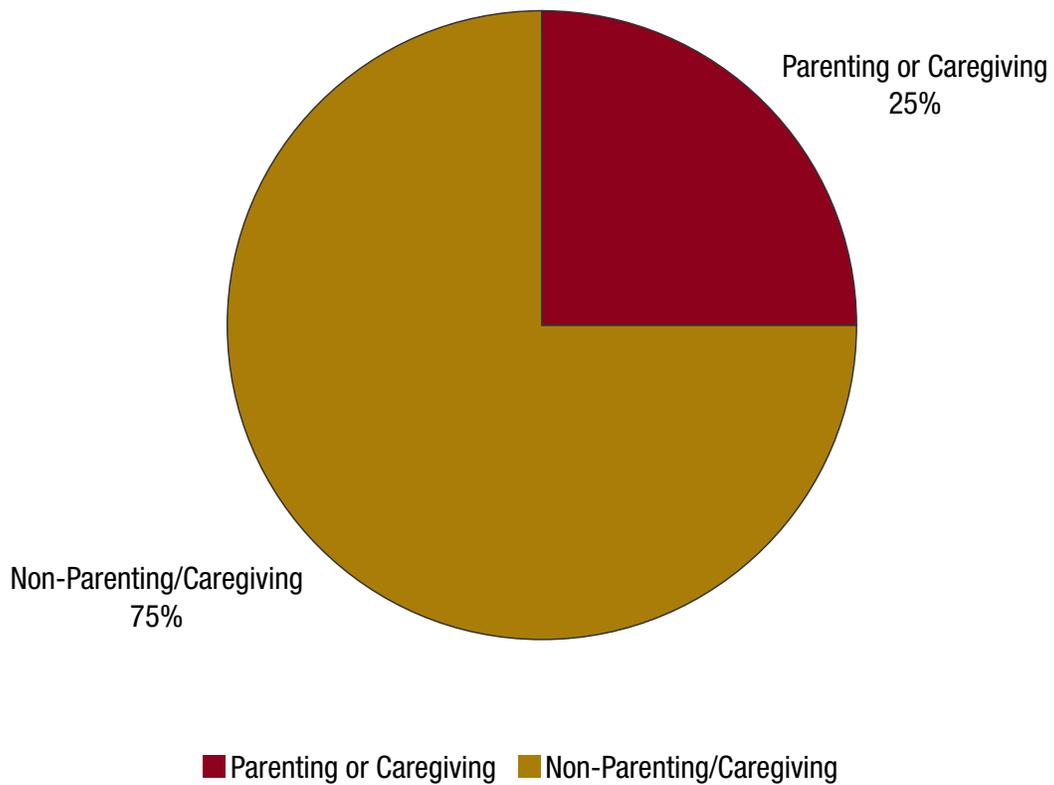


Figure 3.3 S-CTR Demographics by Parenting or Caregiving Status



STEM research, leveraging a five-stage model (Empathy, Define, Ideate, Prototype, and Test) to develop solutions for complex issues.

Our DT Empathy needs assessment defined multiple barriers to undergraduate research for transfer students:

- Limited social and cultural capital.
- Limited awareness of research as key to STEM graduate admission and career attainment.
- Financial and structural barriers, including employment and caregiving.
- Institutional barriers, including access to opportunities and identifying research mentors.
- Implicit and explicit bias.

The S-CTR program, our DT Prototype, utilizes a holistic, five-pronged approach to career development: Informational and Navigational Supports, Mentoring and Community-Building, Course-Based Research, STEM Identity and Networking, and Global Problem-Solving. To address the lack of social and cultural capital among students who transfer, S-CTR proactively engages scholars in network and community-building while simultaneously fostering active engagement in Mason's research community.

## Informational and Navigational Supports

---

Program outreach for S-CTR is embedded into existing COS programming for current community college students. Transfer applicants to COS are invited to join in fall and spring semesters. The S-CTR model incorporates multiple high impact practices, including micro-scholarship awards; S-CTR seminars; mentoring and networking; learning community course work with embedded research; STEM identity development; and sector-focused career planning. This design proactively addresses the risk of “transfer shock” by rapidly establishing a multi-layered support network.

S-CTR scholars attend seminars twice per month during the first semester, and once monthly thereafter. Seminars support navigation of institutional and career resources, guiding students through a “hidden curriculum” that our native university students have long since mastered. This includes scheduling appointments with faculty and career advisors, and course registration. Students also access and verify the accuracy of their transfer credit evaluations, proactively addressing transfer credit errors that could otherwise affect timely baccalaureate completion.

S-CTR seminars often include guest speakers, including faculty and industry representatives, who share expertise and resources. S-CTR scholars are strongly encouraged to participate in formal STEM industry mentoring, pursue leadership in student organizations, and attend conferences and symposia in their disciplines. Scholars also meet individually with faculty mentors to explore STEM career pathways, and map academic and career plans in their first semester. S-CTR faculty mentors individually advise scholars on sector-specific resources and career-formative experiences that maximize professional readiness in each scholar's chosen STEM career.

## STEM Identity and Networking

---

S-CTR seminars also incorporate programming on career readiness and STEM identity development. Scholars self-assess skills, strengths and areas requiring growth, and develop sector-specific career competencies through micro-credentials and supplemental training. STEM identity development further incorporates lessons on impostor syndrome and connections with professional organizations serving underserved and minoritized STEM practitioners. Scholars strategically build their professional networks and e-Portfolios, and draft targeted application materials to support graduate school admission and STEM workforce entry.

## Mentoring and Community Building

---

S-CTR also incorporates near-peer mentoring and advising. COS Transfer Ambassadors (S-CTR alumni) support cohort and community-building, and guide scholar-led discussions. These open, peer-to-peer discussions have supported the formation of study groups, identification of common research interests, and navigation of academic challenges. Engaging students as experts in addressing fellow peers' concerns empowers scholars to engage in collaborative problem-solving while further developing their academic support networks.

## Course-Based Research and Global Problem-Solving

---

S-CTR scholars enroll in two, 3 credit learning community courses in their first year at Mason: College of Science (COS) 300: Professional Preparation for STEM Disciplines, and COS 400: Problem-Solving and Leadership in STEAM. These courses provide an in-depth introduction to STEM career readiness, as well as practical training in science communication, leadership,

and entrepreneurship. Scholars complete full-semester, course-embedded STEAM research projects utilizing the United Nations Sustainable Development Goals (UN-SDG) as a paradigm for global problem-solving.

COS 300 and 400 comprise the six-credit scientific literacy core for the interdisciplinary Scientific Leadership and Practice (SLP) minor. This minor further includes a capstone internship or research course, facilitating access to financial aid-eligible experiential learning. As minor completion among COS students who transferred is under 20%, S-CTR supports access to minor credential attainment.

S-CTR is strongly aligned to university efforts to enhance post-secondary access, success, and completion for underserved students. Mason has been a leader in strategic transfer initiatives for over two decades, and students who transfer are a key demographic in our university-wide Anti-Racism and Inclusive Excellence (ARIE) work. The Director who oversees COS transfer equity and success programs serves on the university's ARIE committee for programs and partnerships, the COS Inclusive Excellence Team, is a tri-chair of the university's First-Generation Task Force and serves on multiple university and college working groups charged with enhancing student success for underserved populations.

## Assessment Methods & Design

S-CTR was launched as a pilot (DT test intervention) beginning in Fall 2018. This project incorporated a variety of assessment methods, including process (formative) as well as outcome (impact) on the participants, systems, and communities S-CTR helped to serve. The formative and summative evaluation was guided by a set of qualitative questions and focus interviews, S-CTR participant survey, and pre-/post-assessment of eight career readiness competencies identified by NACE. Evaluation data collection included student attitudes toward research and career to gauge participants' perceptions and readiness to pursue STEM-related careers. Data was assessed at an aggregated level, as well as a disaggregated level, to ensure identification of within and between differences, if any. Specific changes were analyzed including attitudes across STEM learning interest, motivation and careers; changes in course taking habits and GPAs; assessment of students' perception of quality of mentoring through S-CTR; quality and quantity of S-CTR

enrichment, and additional research opportunities provided. These questions leveraged existing research and reporting to identify comparative data, both national and institutional metrics, for STEM students who transfer. Specifically, it helped to understand to what extent are components of S-CTR consistent with expectations set forth by the mentors and aligned with the institution. The questions also helped to understand the broader impact of the program. The completed pre-/post self-assessment of NACE career competencies helped to identify increases across eight competency areas.

## Assessment Findings

Our assessment supported the identification of coded themes: Impostor syndrome, connections to industry and faculty mentors, near-peer mentorship, and self-identification as "researcher." Specific themes and outcomes are summarized in the table below.

These outcomes indicated an increase in the interest of participants in applied research, including the integration of sustainability through use of the UN-SDG framework. Growth was also in STEM professional development domains: working in multidisciplinary teams, engaging in team problem-solving, communicating science effectively, and disseminating results. Finally, all participants were exposed to design thinking applied to a local context, introducing social entrepreneurship.

Participants also demonstrated development of knowledge in STEM-specific upskilling, including awareness of 21st Century STEM professional expectations, minors and microcredentials, growth in NACE career competencies, and leveraging strengths by completing Gallup Strengthsfinder.

The S-CTR program is currently in pilot status. While the pilot has been extended due to the pandemic, data on cohort 1 are promising.

- 100% of cohort participants obtained and completed a degree-related research or internship experience within one year of transfer matriculation.
- 100% of S-CTR were in good academic standing after one year.
- 78% of S-CTR participants declared a minor credential.
- 92% of S-CTR scholars returned to serve as near-peer mentors.

Table 3.1 *Assessment Themes and Outcomes*

Target Areas of Learning	Actions	Measurable Growth/Knowledge Outcomes
<ul style="list-style-type: none"> <li>o Awareness</li> <li>o Knowledge</li> <li>o Attitudes</li> <li>o Identity</li> <li>o Aspirations</li> <li>o Motivations</li> <li>o Certifications</li> <li>o Career Ready Skills</li> <li>o Life-long learning skills</li> <li>o Research abilities</li> </ul>	<ul style="list-style-type: none"> <li>o Engagement</li> <li>o Persistence</li> <li>o Seeking Experiential Learning</li> <li>o STEM &amp; allied credential-seeking</li> <li>o Practice</li> <li>o Research Project</li> <li>o Networking</li> <li>o Career decision-making</li> </ul>	<ul style="list-style-type: none"> <li>o STEM Course and Credential Completion</li> <li>o Graduate Education</li> <li>o STEM Careers</li> <li>o Health and Social</li> <li>o Certifications</li> <li>o Economic</li> <li>o Community Engaged</li> <li>o Career Management</li> </ul>

Multiple qualitative measures were also collected.

- 100% of participants agreed or strongly agreed that S-CTR improved their access to a STEM experiential learning opportunity.
- 100% of participants reported an increase in the size of their academic and professional networks.
- 100% of participants agreed or strongly agreed that S-CTR had enhanced their faculty and peer connections.
- 100% of participants self-reported engagement in one or more Registered Student Organizations, with 72% serving in a leadership role.
- 100% of participants demonstrated growth in all NACE Career Competency areas (pre-test/post-test)
- 92% of participants felt confident or very confident in articulating their professional skills and strengths.

One S-CTR student, who recently graduated with a Mathematics major and minor in SLP, quoted “S-CTR helped me become a successful undergraduate researcher. I gained very important skills like leadership, and now I am confident about my ability to market myself professionally.” A current S-CTR Biology and SLP student added “Without this program there is no way that I would have navigated through the system and been able to participate in research over my first summer at GMU.”

Services and mentoring pivoted to virtual in March 2020, and we have maintained a virtual service platform for S-CTR scholars. However, fully virtual services have limited the depth and breadth of programming and peer engagement. Cohorts 2 and 3 are being evaluated independently from Cohort 1, as we are delayed in cohort comparison studies due to pandemic-related disruptions

of the S-CTR service model. Results will be available in a study expected in Spring 2022.

## Implications for Practice

The S-CTR program provides a holistic, developmental approach to career advising attaining their post-baccalaureate educational and career goals. S-CTR offers an innovative model to support first-year, university transfer students from community colleges. Students who transfer intersect with target populations prioritized in institutional diversity and equity efforts, to include those who are first generation, immigrant, student-parents, and populations who are racially and ethnically minoritized. Recent research and intervention models for transfer populations have primarily focused on community college-based innovations, such as guided pathways and meta-majors. Transfer success has thus been largely framed as a community college issue, with university-based interventions rarely extending beyond Transfer Shock prevention. Our internal needs-assessment aligns with existing research, strongly suggesting that the impacts of limited social and cultural capital among students who transfer extend far beyond the first year of university matriculation.

Limited awareness of, and access to, sector-specific career pathways and career-formative experiences, such as undergraduate research, can significantly delay career readiness for students who transfer when compared to their native university peers. This lack of “Transfer Career Capital” is particularly evident in career clusters with highly specific, specialized competencies, such as STEM. Prevalent impostor syndrome and more limited supportive and professional networks augment structural and institutional barriers

faced by students who transfer in meeting these professional competencies, with implications for entry-level employment and graduate and health professions admissions. Our pilot outcomes strongly support the charge for universities, particularly those who support large transfer populations, to proactively develop holistic, sector-focused interventions that inform, engage and support career outcomes for their students who transfer.

## References

- Belser, C. T., Prescod, D. J., Daire, A. P., Dagley, M. A., & Young, C. Y. (2017). Predicting undergraduate student retention in STEM majors based on career development factors. *The Career Development Quarterly*, 65(1), 88-93. <https://doi.org/10.1002/cdq.12082>
- Cejda, B. D. (1997). An examination of transfer shock in academic disciplines. *Community College Journal of Research and Practice*, 21(3), 279-288.
- Chakraverty, D. (2019). Impostor phenomenon in STEM: Occurrence, attribution, and identity. *Studies in Graduate and Postdoctoral Education*. <https://doi.org/10.1108/SGPE-D-18-00014>
- Coker, J. S., Heiser, E., Taylor, L., & Book, C. (2017). Impacts of experiential learning depth and breadth on student outcomes. *Journal of Experiential Education*, 40(1), 5-23. <https://doi.org/10.1177/1053825916678265>
- Dobrow, S. R., Chandler, D. E., Murphy, W. M., & Kram, K. E. (2012). A review of developmental networks: Incorporating a mutuality perspective. *Journal of Management*, 38(1), 210-242. <https://doi.org/10.1177/0149206311415858>
- Eismann, L. (2016, November 1). *First-generation students and job success*. National Association of Colleges and Employers. <https://www.nacweb.org/job-market/special-populations/first-generation-students-and-job-success/>. <https://www.nacweb.org/job-market/special-populations/first-generation-students-and-job-success/>
- Garoutte, L., & McCarthy-Gilmore, K. (2014). Preparing Students for Community-Based Learning Using an Asset-Based Approach. *Journal of the Scholarship of Teaching and Learning*, 14(5), 48-61. doi: 10.14434/josotlv14i5.5060
- Griffin, P., McGaw, B., & Care, E. (2012). Assessment and teaching of 21st century skills. (Vol. 9789400723245, pp. 1–345). Springer Netherlands. doi:10.1007/978-94-007-2324-5
- Jackson, D. L., & Laanan, F. S. (2015). Desiring to fit: Fostering the success of community college transfer students in STEM. *Community College Journal of Research and Practice*, 39(2), 132-149. <https://doi.org/10.1080/10668926.2012.762565>
- Jang, H. (2016). Identifying 21st century STEM competencies using workplace data. *Journal of science education and technology*, 25(2), 284-301. <https://doi.org/10.1007/s10956-015-9593-1>
- Kuh, G. D. (2008). Excerpt from high-impact educational practices: What they are, who has access to them, and why they matter. *Association of American Colleges and Universities*, 14(3), 28-29. [https://qubeshub.org/community/groups/jan2020/File:/uploads/High-Impact\\_Educational\\_Practices\\_What\\_They\\_Are\\_Who\\_Has\\_Access\\_to\\_Them\\_and\\_Why\\_They\\_Matter.pdf](https://qubeshub.org/community/groups/jan2020/File:/uploads/High-Impact_Educational_Practices_What_They_Are_Who_Has_Access_to_Them_and_Why_They_Matter.pdf)
- Laanan, F. S., Starobin, S. S., & Eggleston, L. E. (2010). Adjustment of community college students at a four-year university: Role and relevance of transfer student capital for student retention. *Journal of College Student Retention: Research, Theory & Practice*, 12(2), 175-209. <https://doi.org/10.2190/CS.12.2.d>
- Lee, H., Anderson, C. B., Yates, M. S., Chang, S., & Chakraverty, D. (2020). Insights into the complexity of the impostor phenomenon among trainees and professionals in STEM and medicine. *Current Psychology*, 1-12. <https://doi.org/10.1007/s12144-020-01089-1>
- Maietta, H. (2016). Unfamiliar Territory: Meeting the career development needs of first-generation college students. *NACE Journal*, 77(2), 19-25. <https://careerinprogress.com/wp-content/uploads/2016/11/2016-nace-journal-november-1.pdf>
- McDonald, S., & Mair, C. A. (2010, June). Social capital across the life course: Age and gendered patterns of network resources 1. In *Sociological Forum* (Vol. 25, No. 2, pp. 335-359). Blackwell Publishing Ltd. <https://doi.org/10.1111/j.1573-7861.2010.01179.x>
- Maliszewski Lukszo, C., & Hayes, S. (2020). Facilitating transfer student success: Exploring sources of transfer student capital. *Community College Review*, 48(1), 31-54. <https://doi.org/10.1177/0091552119876017>

National Association of Colleges and Employers. (2020). NACE 2019–2020 career services benchmark survey for four-year colleges and universities. <https://www.nacweb.org/store/2020/nace-career-services-benchmark-report/>

Nicholson, B. A., Pollock, M., Ketcham, C. J., Fitz Gibbon, H. M., Bradley, E. D., & Bata, M. (2017). Beyond the mentor-mentee model: A case for multi-mentoring in undergraduate research. *PURM*. <https://openworks.wooster.edu/facpub/373>

Packard, B. W. L., Gagnon, J. L., & Senas, A. J. (2012). Navigating community college transfer in science, technical, engineering, and mathematics fields. *Community College Journal of Research and Practice*, 36(9), 670-683. <https://doi.org/10.1080/10668926.2010.495570>

Rieske, L. J., & Benjamin, M. (2015). Utilizing peer mentor roles in learning communities. *New Directions for Student Services*, 2015(149), 67-77. <https://doi.org/10.1002/ss.20118>

Rodriguez, S. L., Hensen, K. A., & Espino, M. L. (2019). Promoting STEM Identity Development in Community Colleges & Across the Transfer Process. *Journal of Applied Research in the Community College*, 26(2), 11-22. <https://www.ingentaconnect.com/content/montezuma/jarcc/2019/00000026/00000002/art00002>

Saw, G., Chang, C. N., & Chan, H. Y. (2018). Cross-sectional and longitudinal disparities in STEM career aspirations at the intersection of gender, race/ethnicity, and socioeconomic status. *Educational Researcher*, 47(8), 525-531. <https://doi.org/10.3102/0013189X18787818>

Starobin, S. S., Smith, D. J., & Santos Laanan, F. (2016). Deconstructing the transfer student capital: Intersect between cultural and social capital among female transfer students in STEM fields. *Community College Journal of Research and Practice*, 40(12), 1040-1057. <https://doi.org/10.1080/10668926.2016.1204964>

Van Noy, M., & Zeidenberg, M. (2017). Community college pathways to the STEM workforce: What are they, who follows them, and how?. *New Directions for Community Colleges*, 2017(178), 9-21. <https://doi.org/10.1002/cc.20249>

Wang, X. (2021). On my own: the challenge and promise of building equitable STEM transfer pathways. Harvard Education Press. <https://books.google.com/books?hl=en&>

[lr=&id=UX4fEAAAQBAJ&oi=fnd&pg=PT5&dq=on+my+own+stem+pathways+wang&ots=QbPEvP8Krk&sig=0M1n-giA1W2V5M1x7ITdnUvOwYs#v=onepage&q=on%20my%-20own%20stem%20pathways%20wang&f=false](https://books.google.com/books?hl=en&lr=&id=UX4fEAAAQBAJ&oi=fnd&pg=PT5&dq=on+my+own+stem+pathways+wang&ots=QbPEvP8Krk&sig=0M1n-giA1W2V5M1x7ITdnUvOwYs#v=onepage&q=on%20my%-20own%20stem%20pathways%20wang&f=false)

Ward, T. (2020). Design Thinking: Classroom Integration to Increase Critical Thinking, Communication, Collaboration, and Creativity (Doctoral dissertation, Lamar University-Beaumont). <https://search.proquest.com/docview/2454098481?pq-origsite=gscholar&fromopenview=true>

## Contact



Kerin Hiller-Balkissoon  
Director of Educational and Career Pathways  
George Mason University  
Email: [khilkerb@gmu.edu](mailto:khilkerb@gmu.edu)

Padmanabhan Seshaiyer  
Professor, Department of Mathematical Sciences  
Associate Dean for Academic Affairs  
Director, Center for Outreach in Mathematics Professional Learning and Educational Technology  
George Mason University  
Email: [pseshaiy@gmu.edu](mailto:pseshaiy@gmu.edu)

# 4 | Gustavus Adolphus College Design a Future: A Career Exploration Course

Cynthia Favre

## Institutional Profile

Gustavus Adolphus College in St. Peter, Minnesota is a four-year, private, liberal arts college with 90% of its 2,218 full-time undergraduate students living on campus. Approximately 89% of students graduate with a degree within four years. While Gustavus does not “place” any graduates, within nine months of graduation in 2019: 89.3% were situated in work, school, or service (response rate of 97.7%). The student body is comprised of 54% women and 46% men with less than 1% of students over the age of 25. The ethnicity make-up of the student body is: 78.3% White; 5.7% Hispanic; 5.1% Asian; 4.2% two or more ethnicities; 3.6% Black; 3.1% International; .32% Native/Pacific Islander/Other. Additionally, 24% of students are first generation, defined as neither parent attended college and 26% of students are Pell grant eligible.

## Design a Future: A Career Exploration Course

At Gustavus Adolphus College, the faculty undertook a revision of the general education requirements for graduation that was approved and implemented starting in Fall 2020. The new curriculum requires students to complete at least two January term courses and includes a graduation requirement of one wellbeing course – defined as “strategies for enhanced health, happiness, and functioning across the lifespan from multiple dimensions: emotional, relational, physical, financial, intellectual, environmental, vocational, career, spiritual” (Gustavus Faculty Handbook). This new curriculum was an opportunity to create Design Your Future, a full credit career development course taught in January, designated as a wellbeing course and graded for inclusion in grade point averages. Students in the course are actively interested in career success, they are a ready audience to present the relevance of diversity and equity issues in the workplace and the importance of personal commitment to increasing self-awareness and continual

learning on these topics. The course was designed for students to explore career ideas and opportunities aligned with the NACE competencies of:

- developing the diversity and equity career readiness competency (NACE, 2021) to a high level, and
- considering the strong connections between social justice issues and career success.

The course includes guest speakers who address diversity and inclusion issues and participation in campus-wide diversity and equity training. However, greater intentionality in identifying learning outcomes, strategies, and assessments to move students forward on the diversity and inclusion career readiness competency and social justice awareness would benefit individual students and support the campus-wide efforts required to achieve the first goal of the College's *ACTS 2.0 Strategic Plan*: "Diversify and Expand the Gustavus Community" (Gustavus, 2021).

Design Your Future was taught in January 2020 and 2021 by staff from the [Gustavus Center for Career Development](#). The January 2021 class was fully remote and provides the data in this case study. Thirty-seven (37) students took the course: 22 freshmen, 9 sophomores, 5 juniors and 1 senior. Academic majors included: No Declared Major (26), Biology (5), Environmental Studies (2), Computer Science (1), Elementary Education (1), English (1), Exercise Physiology (1), Sociology/Anthropology (1). 22% (8 of 37) students were identified as BIPOC. The course met synchronically two hours daily Monday – Friday for 17 days in January and used various learning methods (self-assessments, reflection, resources, tools, guest speakers, alumni speakers, campus events, on-line courses, research and presentations). A teaching assistant supported the course by recording assignment completion in an on-line course management system and managing course logistics.

This course supports the [Gustavus ACTS 2.0 strategic plan](#) goals to deliver a distinctive and integrated liberal arts education; and, specifically, the following key performance indicators:

- Increase the number of students participating in engaged learning (internships, career exploration, job shadowing,

etc.) by the time of graduation by 10% a year to reach a goal of 90% of graduating seniors in Spring 2023; and

- Increase the number of students engaging with career development by 5% a year through 2023.

## Six Strings to Design a Future

This career exploration course focused on the self-awareness and exploration of careers and wove 'six strings' important to the career development process: self-care, self-awareness, vocation discernment, career knowledge, career tools, and practice.

1. **Self-Care:** The course drew connections between self-care and career success. This string included the class taking the [Authentic Happiness](#) assessment developed by the University of Pennsylvania on the first day of the class, followed by an assignment to select and implement a self-care practice (i.e.: exercise, sleep, meditation, gratitude) over the month. The assessment was repeated on the last day of the class showing an aggregate score increase of .31 on a 5.0 scale (Table 4.1).
2. **Self-Assessment:** Students were assigned 13 self-assessments including [Focus2](#), [VIA Character Strengths](#), [TRUMOTIVATE](#), [Clifton Strengths](#)). Additional assignments included listing: personal peak experiences, skills and qualities, and evidence of [career readiness competencies \(National Association of Colleges and Employers\)](#). The [GRIT](#) assessment (Duckworth, 2013) was assigned as an avenue to include Carol Dweck's concept of growth mindset (Dweck, 2007). Considering concerns of the possible unhelpful messages this assessment may send to marginalized populations, this assessment may not be included in future courses (Z. Nicolazzo and Riss Carter, 2019).
3. **Vocation Discernment:** Alumni guest speakers sharing their personal vocational discernment and career journeys were a course highlight. These speakers were invited based on their personal career journeys, their career field, their gender and BIPOC status. Additional assessments,

Table 4.1 *Authentic Happiness Assessment Class Aggregate Scores*

First Day Aggregate Score	Last Day Aggregate Score	Increase/Decrease
2.92 (5.0 scale)	3.23 (5.0 scale)	Increase of .31

guest speakers and activities were provided so that students ended the course with: a personal mission statement, a personal motivations statement (developed from [TRUMOTIVATE](#) assessment data), and a calling statement (developed from [Clifton Strengths](#) assessment).

4. **Career Knowledge:** Students were assigned 25 career information videos on [Candid Career](#) (with quizzes submitted for accountability). Students also completed "scavenger hunts" of online resources ([Handshake](#), [GoinGlobal](#), [Big Interview](#), [LinkedIn](#)). Students were required to attend a campus training by [Team Dynamics](#) (Martin Luther King Jr. Day event) to find shared meaning and understanding of core concepts of diversity, equity, inclusion, and culture and explore ways identities impact lived experiences. The class discussed ways in which diversity, equity, inclusion, and culture exist in workplaces and the importance of self-awareness and continued learning on these topics.
5. **Career Tools:** The course required submission of resumes and cover letters for review and creation of profiles on [Handshake](#), [LinkedIn](#) and [Gusties Connect \(PeopleGrove\)](#). They were referred to [Big Interview](#) for interview training and assigned [S.T.A.R. stories](#) articulating experiences demonstrating their skills and qualities. These stories were assessed against a [rubric](#).
6. **Practice:** The course encouraged students to take personal responsibility for their careers by engaging in independent professional development: completing an online [Hoonuit](#) course, expressing gratitude to speakers through a class gratitude journal, and a [One Career Project](#) assignment to research a career and compare it to their self-assessments; this was to practice the process of collecting and analyzing data to come to a conclusion or decision. This project was also assessed against a [rubric](#). Students presented their project to the class to practice public speaking skills.

## Assessment Methods & Design

---

The following student learning outcomes were outlined to measure course effectiveness:

- Reflect on how the college's mission and their education influenced their personal values, plans for life after college, and the role they see for themselves in the world.
- Identify strategies for developing at least one dimension of wellbeing (career).
- Analyze enduring and contemporary challenges that stem from at least one dimension of wellbeing.
- Explore individual wellbeing using a multidimensional perspective.
- Use their own language to describe and analyze key concepts or course materials, and write to explore ideas, assimilate new knowledge, and reflect on the purpose of their learning.
- Draft, revise, and edit work with feedback from others.
- Articulate their career interests.
- Effectively present their qualifications for careers.

Assessment strategies for the course addressed the needs of the course instructor and the College's learning assessment strategy. An [assessment report page](#) was created to record the results of assessments of the course which was shared with the college's Academic Assessment Committee: the Assistant Provost responsible for academic assessment, the Assistant Vice President in Student Affairs responsible for assessment and the Executive Director of the Center for Career Development. Two students who completed the course were hired as student employee [micro-interns](#) to analyze the quantitative and quantitative results from the pre/post-test results. Both prepared and presented their results to Career Development professional staff. The course [assessment page](#) data includes:

1. Course pre/post-test with 54 questions collected on [Qualtrics](#)
2. [Authentic Happiness](#) pre/post test
3. [Student Reflection on Instruction](#) (anonymous responses; instrument provided by college)

- Class observation with written assessment of course construction and instruction by College Associate Provost, Dean of Sciences and Education, and Director of January Term
- Rubric Results for S.T.A.R. stories and Career Project: data from rubrics will be used to pinpoint improvements needed for future assignments.

- Support for development of additional career development courses; and
- Satisfaction to the instructor that students benefit from the course.

## Assessment Findings

The most common feedback from course students was: "I'm surprised at how much I got done!"

Assessment findings from the course have already supported a course proposal for a half-semester career readiness course which was approved and will be taught for the first time in Fall 2021. Design Your Future will be a template for assessing this and future career education courses and programs. Although embedding assessment into the course required time and effort, it also provided:

- Evidence of the effectiveness of teaching strategies;
- A strategy to increase student awareness of what they gain from the course;
- Evidence that the course does contribute to college strategic plan strategies;

## Rubric for S.T.A.R. Assignment

To assess the effectiveness of the course in meeting the College's learning outcome of: "Use their own language to describe and analyze key concepts or course materials, and write to explore ideas, assimilate new knowledge, and reflect on the purpose of their learning", a rubric was created for the assignment of students to write two examples of past experiences including Situation, Task, Action, Result (S.T.A.R.) scoring on relevance, clarity, and conciseness (Table 4.2).

## One Career Project Rubric

A rubric (Table 4.3) was also created to assess the effectiveness of the course in addressing students' abilities to:

- Research career information. (Number of Sources)
- Use relevant resources of various types to gain data and insights. (Variety of Sources)
- Include self-awareness assessments with career information research. (Relevance of Sources)

Table 4.2 S.T.A.R. Rubric Scores Summary

% of Total Points Scored	Number of Students	% of Students
100%	7	20.6%
93.75% or more	14	41.18%
78.12%	22	64.71%
Less than 75%	9	26.47%
59.37%	1	2.94%

Table 4.3 Career Project Rubric Results Summary

Rubric Criteria	Average Rubric Score (4-point scale)	Full Points Criteria
Number of Sources	3.44	10+ data sources
Variety of Sources	2.31	Used networking to collect data
Relevance of Sources	2.89	Direct communication with people in career
Integrate Data with Self Knowledge	3.89	Reported personal response to data
Informing Actions	3.86	Action plan based on data

- Analyze data and draw conclusions about personal fit/ interest in a career field. (Integrate Data with Self-Knowledge)
- Use data and conclusions to make appropriate career decisions and plans. (Inform Actions)

- Students were empowered by what they can accomplish in a relatively short period of time.

The data from the January 2021 course indicates that a graded course, meeting graduation requirements, is an effective strategy to scale career education and increase the career readiness of students. Assessments indicate that in only 17 class days, the course moved students forward on:

1. Knowledge of the career development process
2. Awareness of career resources
3. Development of career tools
4. Capacity to make career decisions
5. Confidence in networking skills

Course assessment data will also be used to refine assessment items to those most relevant and to inform adjustments to instruction. For example, more data on the identities of students in the course is needed to provide information regarding the teaching strategies that are and are not helpful to marginalized populations. Additionally, the S.T.A.R. and One Career Project rubrics indicate that more specific direction and practice would be helpful to increasing students' mastery of these tools. Overall, the assessment of the Design Your Future indicates that this course moves past aspirational to empowering students with information, opportunity and support and to giving them time and space to prepare and practice for personal and professional success. Sample student comments from our post-test survey also revealed:

- *"This class is so helpful and informative; I would highly recommend it to any and all Gustavus students. Led with grace, understanding, and humility this class is absolutely wonderful!"*

## Pre/Post Test Survey

Some of the key findings from the 54 question pre/post test data collected on [Qualtrics](#) on the first and last days of class included the findings in Table 4.4.

## Post-Test Survey Key Findings

- 100% of students would recommend the class to other students.
- 97.14% said the class was what they expected or more than they expected (45.71%).

## Assessment Findings

Career development offices are increasingly concerned about supporting marginalized students knowing that they may not have the knowledge, time, and ability to engage with the activities that would support career success. The qualitative feedback from students in Design Your Future indicates that:

- Students did not realize how much they didn't know about career resources and opportunities;
- Students greatly appreciated dedicated time to focusing on, learning about, and engaging in career development activities; and

Table 4.4 FYS Core Survey Responses

Question	Pre-Test	Post-Test	Increase/Decrease
Do you have a Handshake Profile?	20.51%	97.14%	Increase of 70.63%
Do you have a LinkedIn Profile?	10.00%	97.14%	Increase of 87.14%
Do you have a Gusties Connect (People Grove) Profile?	7.50%	100.00%	Increase of 92.50%
Do you have a Big Interview Profile?	2.50%	82.86%	Increase of 80.36%
What is your Level of Clarity of Career Direction? (clarity, some clarity, high clarity)	37.50%	91.43%	Increase of 53.93%
What is your Level of Confidence in Making Career Decisions? (confident, some confidence, high confidence)	30.00%	97.14%	Increase of 67.14%
What is your Level of Confidence in your Networking Skills? (confident, some confidence, high confidence)	29.55	82.855	Increase of 53.35%

- “I didn’t realize how much fun writing resumes, cover letters, and making profiles for networking would be!”
- “Just completing the amount of things in the three weeks of class was surprising and impressive.”
- “I was surprised at how much I didn’t know about career development processes and how many resources are available at Gustavus.”

## Implications for Practice

The assessments for the Design Your Future course confirm that naming specific learning outcomes increases the likelihood that students will progress toward those outcomes, which makes the course an ideal place to insert equity and inclusion learning outcomes, instruction, and practice. Recognizing the benefit both to individual students expanding their diversity and inclusion career readiness competencies and the value of contributing to the College’s strategic goals, the course instructor has begun to work with the College’s consultant on diversity, equity, and inclusion to create diversity and inclusion learning outcomes, strategies, and assessments for the course. The consultant provides the course the benefit of implementing strategies that complement campus-wide diversity and inclusion initiatives and actions. The Gustavus President’s Council on Diversity, Equity, and Inclusion oversee the many pieces involved in achieving the goal to diversify and expand the community. The College is taking visible actions to make progress including the College’s first Vice President of Diversity and Inclusion joining the campus community in August 2021, the creation of a Racial Justice and Inclusion Plan, upgrading and enhancing the Center for Inclusive Excellence, adding new positions to the Counseling Center to specifically be filled by applicants from historically excluded groups, requiring all faculty and staff to complete diversity and inclusion training.

The Design Your Future course can contribute to these college-wide efforts to ensure that students graduate prepared for personal and professional success including being prepared to engage with the complexities of diversity and inclusion issues. As students in the course are actively interested in career success, they are a ready audience to consider the importance of continual learning and professional development on diversity and equity topics. To build on this opportunity, the course instructor will work with the College’s consultant (who is also a former member of Gustavus’ Board of Trustees) to create appropriate learning

outcomes and assessments around the equity and inclusion career readiness competence (NACE, 2021). The long-term goal of this course is to be an effective strategy supporting Gustavus’s college-wide efforts to graduate students prepared for personal and professional success by helping them be aware and ready to engage in the complexities of diversity and inclusion.

## References

- Chan, A. (May 2013). *Career Services Must Die*. Ted Conferences. <http://www.tedxlawrenceu.com/speakers/andy-chan/>
- Contomanolis, E.; Cruzvergara, C.; Dey, F.; Steinfeld, T. (November 2015). *The Future of Career Services in Now*. NACE Website. <https://www.naceweb.org/career-development/trends-and-predictions/the-future-of-career-services-is-now/>
- Cruzvergara, C. and Dey, F. (October 2020). *Vision Chats: Five Future Direction in College Career Services*. YouTube. <https://www.youtube.com/watch?v=xEfoHTHgUw>
- Cruzvergara, C. (September 2020). ASU=GSV: *Democratizing access to opportunity*. YouTube. <https://www.youtube.com/watch?v=TwS7gZX967Q>
- Dey, F. (February 2018). *Life purpose reconsidered*. TED Conferences. [https://www.ted.com/talks/farouk\\_dey\\_life\\_purpose\\_reconsidered?language=en](https://www.ted.com/talks/farouk_dey_life_purpose_reconsidered?language=en) (Transcript: [https://www.ted.com/talks/farouk\\_dey\\_life\\_purpose\\_reconsidered/transcript](https://www.ted.com/talks/farouk_dey_life_purpose_reconsidered/transcript))
- Duckworth, A. (April 2013). *Grit: The power of passion and perseverance*. TED Conferences. [https://www.ted.com/talks/angela\\_lee\\_duckworth\\_grit\\_the\\_power\\_of\\_passion\\_and\\_perseverance?language=en](https://www.ted.com/talks/angela_lee_duckworth_grit_the_power_of_passion_and_perseverance?language=en)
- Dweck, Carol S., *Mindset: The New Psychology of Success*, December 26, 2007
- National Association of Colleges and Employers (NACE) (April, 2021), *Competencies for a Career-Ready Workforce*. National Association of Colleges and Employers (NACE) website. <https://www.naceweb.org/uploadedfiles/files/2021/resources/nace-career-readiness-competencies-revised-apr-2021.pdf>

## Contact



Cynthia Favre  
Director of Vocation and Career Readiness Programs  
Gustavus Adolphus College  
Email: [cfavre@gustavus.edu](mailto:cfavre@gustavus.edu)

Nicolazzo, Z. and Carter, R. (2019) *Resilience in Rethinking College Student Development Theory Using Critical Frameworks*, editors Abes, E.; Jones, S.; Stewart, D-L

Podany, Jeremy, *Social Innovation for the Future of College Career Education (Part 1 of 3)*: The Big Problem, May, 2018

Podany, Jeremy, *Social Innovation for the Future of College Career Education (Part 2 of 3)*: Lessons from Early Social Innovators, June, 2018

The Career Leadership Collective, (June, 2020). Brief: *The Impact of Career Advice on the Value of a College Education*. The Career Leadership Collective website. [https://ff5c3263-c3b4-4e75-8960-7b5994195822.filesusr.com/ugd/76c932\\_ad686db927c34c1f9b3d3bafdc07e891.pdf](https://ff5c3263-c3b4-4e75-8960-7b5994195822.filesusr.com/ugd/76c932_ad686db927c34c1f9b3d3bafdc07e891.pdf)

The Career Leadership Collective, (August 2020). *The High Impact Career Mobility Campus*. The Career Leadership Collective website. [Microsoft Word - NACM 2019 Annual Report FINAL.docx \(filesusr.com\)](#)

The Career Leadership Collective, (2021), *Integrating Career Advising for Equitable Student Success*. The Career Leadership Collective website. <https://www.advisingsuccessnetwork.org/wp-content/uploads/Integrating-Career-Advising-for-Equitable-Student-Success-A-Higher-Education-Landscape-Analysis.pdf>

The Career Leadership Collective (November, 2018). *What do career services leaders today believe will help them succeed in the Emerging Career Services Landscape?*, The Career Leadership Collective website. [Microsoft Word - Backup of EVOLVE Report.docx \(filesusr.com\)](#)

Tillapaugh, D. (2019). *Student Involvement and Engagement. Rethinking College Student Development Theory Using Critical Frameworks*, editors Abes, E.; Susan R. Jones, S.; Stewart, D-L

Yellow Pages, [Gustavus Faculty Handbook](#), 2020-2021

# 5 | Lorain County Community College

## It Takes a (Customized) Village: Holistic Supports 2.0

Marisa Vernon-White, PhD

### Institutional Profile

Lorain County Community College (LCCC), located in Elyria Ohio, has a combined undergraduate enrollment of 10,000+ students. LCCC's University Partnership provides local access to 50+ bachelor's and master's degree programs, serving an additional 1,000 students. LCCC is among the first community colleges in Ohio to offer an applied bachelor's degree.

LCCC is non-residential, and nationally known for its holistic supports, informed by a deep understanding of its students' needs. Recognized as a bold institution committed to student success, LCCC has transformed to increase its 3-year completion rate (full time students) by 26% (from 10.1% to 36.2%) since 2011. LCCC's 6-year completion rate, including part-time, full-time and transfer completion, is 33% overall. Data collected following completion indicate over 85% of LCC graduates are employed, and the overwhelming majority remain within the Northeast Ohio region.

Table 5.1 *LCCC Student Population Demographics*

	Lorain County Community College (LCCC) <sup>2</sup>	Community colleges nationally (AACC) <sup>1</sup>
Pell recipient	40%	34%
Full-time enrollment	27%	35%
Part-time enrollment	73%	65%
Hispanic/ Latino	11%	27%
Black/ African American	9%	13%
White	72%	44%
Two or more races	4%	4%
Male	39%	43%
Female	61%	57%

<sup>1</sup>American Association of Community Colleges (2021)

<sup>2</sup>NCES (2021), Lorain County Community College

Community colleges have historically leveraged deep understanding of their localized roots to broaden access to higher education. A commitment to its local community's needs and demographics drives much of what LCCC provides to its students and their families. LCCC's adult enrollment, classified as age 24+, is 27%, and the college estimates over one third of its undergraduate students are first generation, as identified through the parent education status question on the FAFSA. Of particular interest related to this case study, 11% of LCCC's student population is Hispanic/ Latino, and the city of Lorain, is home to Ohio's largest Hispanic/ Latino population (28.3%).

## Avanzando through College: Customizing Holistic Supports through Partnership

LCCC's transformational culture is rooted in promise to the community it serves, especially the cities of Elyria and Lorain, which have significantly higher concentrations of poverty (22% and 25%, respectively). LCCC emphasizes achieving socio-economic mobility for underserved populations in its strategic plan. A shared definition of equity is publicly posted and integrated into institutional dialogue, and data disaggregated by race, socio-economic status, and other factors is fully accessible and broadly discussed. LCCC's Equity by Design Team serves as the change agent and professional development hub that guides continuous evolution as a student-centered college, providing a platform to process data reports and incorporating a student in each meeting to share their story.

Advising redesign was among LCCC's earliest efforts to reimagine the student experience and provide clear pathways to completion. All students receive long-term, individualized advising from an assigned advisor who facilitates regular outreach, meetings, and monitors their progress to completion under a holistic caseload model grouped by academic pathways (or metamajor). While this advising structure is foundational to the college's overall student success efforts, it has evolved to provide customized support for specific student cohorts, such as high school dual enrollment, short-term certificate students, and

full-time Pell eligible students. While assigned pathway advisors remain a central point of navigation, increasing student cohorts are also served by collaborative, team-based communities that include individuals from functional units across the college.

### Avanzando Through College Program

One such example is the Avanzando through College program, a structured learning community experience for Hispanic/ Latino students offered in partnership with UnidosUS, a national Latino advocacy and civic engagement organization, and a local community partner, El Centro. LCCC is the first community college to offer the program, using curriculum from UnidosUS for specialized sections of its first-year experience course. Avanzando serves 30 students annually on a first come, first serve basis, and will welcome a third cohort in Fall 2021. While relatively new to LCCC, the Avanzando program is a promising model that weaves key elements of the college's existing holistic supports that are culturally relevant, encourages identity exploration, and builds community through shared experience.

### Students Accelerated in Learning (SAIL) Model

In addition to its advising redesign, LCCC moved to independently sustain and scale SAIL (Students Accelerated in Learning) beyond Ohio's demonstration of the CUNY ASAP model replication, fully integrated its basic needs access points into a centralized hub known as the Advocacy and Resource Center (ARC), and begun a redesign of its 1-credit, mandatory first year experience (FYE) course support academic advising functions and deeper career exploration experiences. While SAIL, the ARC, and a supportive FYE course had already been brought to scale and fully implemented, the opportunity to further link these efforts together, embed mentors who shared students' lived experiences, and provide guided exploration of cultural and self-identity was a welcome next step in boosting equitable access to transition support.

Incoming SAIL students, scholarship recipients, recent GED graduates, ESL students, former high school dual enrollment, and community referrals from El Centro were quickly identified as recruitment channels to connect incoming Hispanic/ Latino students to the inaugural cohort. The Fall 2019 cohort was coordinated and led by two staff members, a SAIL Advisor and Outreach Coordinator, both with extensive professional knowledge,

passion, and personal connection to the communities the program was designed to serve. Both individuals received grant support to attend a 3-day training to adopt the Avanzando program's curriculum and implement it in the form of a credit-based course and learning community at LCCC.

## The Avanzando Through College Student Experience

LCCC's Avanzando students build community throughout a full academic year, including an orientation, customized first year experience course, and followed by sustained meetings in Spring. Aligned with UnidosUS's program model, students who engage fully in the program receive a stipend at the conclusion of each semester. These resources are more than an incentive to participate; rather, the stipends provide an important benefit that can help low income and/or first-generation students fully engage in a meaningful college transition program instead of working additional hours or seeking loans to alleviate financial strains. The stipends, braided with other resources provided through institutional scholarships, SAIL, financial aid, and the ARC's streamlined connection to basic needs provide a truly holistic support service for Hispanic/Latino students during their first semester at LCCC.

By using UnidosUS's culturally relevant curriculum, students experience college transition guidance that is grounded in the familiar traditions, values, and community structures connected to Hispanic/Latino self-identity. Students also engage in self-exploration projects and storytelling that celebrate cultural identity, explore future civic leadership in advancing equity for Hispanic and Latino communities, focus on networking inside and outside of their community of origin, receive financial guidance aligned with their individual family needs, and develop personal plans for overall physical and emotional wellness. A true asset to the Avanzando program is the ability to connect with the instructors, who themselves identify as Hispanic/ Latino and serve as navigators that construct environments for rich personal growth and exploration to occur. Serving as leads for their students, the coordinators also serve as collaborative and trusted connection points to institutional services such as career and academic advising, financial aid, ARC, tutoring, and academic support services. In such an integrative advising and support model, Avanzando students benefit from the carefully designed and holistic supports already in place at LCCC, but also receive navigational help that is familiar in terms of cultural identity.

## Assessment Methods and Design

Participation in Avanzando through College is self-selected. LCCC applies a loss/momentum framework to identify and track leading indicators of student success across disaggregated factors such as socioeconomic status, race/ ethnicity, and age. Known as the What Matters Most (WMM) metrics, this institutional dashboard provides transparent data that informs continual efforts to narrow equity gaps among groups. An internal, in-depth research study identified the three first-year indicators most predictive of success: completion of college-level math, college level English, and the accumulation of 15 college credits in year one.

While LCCC has produced significant gains across all three indicators since 2011, closing equity gaps across race and ethnicity has been of primary focus. For this reason, WMMM analysis of Avanzando through College's early impact compares cohort data against all first-year students ( $n = 1,436$ ), as well as first year Hispanic/ Latino students ( $n = 214$ ). While cohort students may be benefitting from layered services across multiple programs, tracking their progress across the WMMM indicators can provide beneficial insight into high impact practices that may address the gap between white and Hispanic/ Latino student completion.

Student persistence (defined as movement from semester to semester) is also an indicator of the impact of LCCC's fully integrated caseload advising model and holistic student supports.

A developed sense of connection is a hallmark of LCCC's Avanzando through College first year program and is best measured by qualitative student feedback. Throughout the learning community experience, Avanzando students were also asked to periodically reflect upon the program's influence on their transition to college.

## Assessment Findings

LCCC's inaugural Avanzando cohort began in Fall 2019, quickly meeting and exceeding recruitment goal of 30 students. Of the cohort of 31, 28 (90.3%) were considered first year students for data comparison purposes.

At the conclusion of their first year at LCCC, the Avanzando cohort outperformed both the overall first year student cohort ( $n = 1,436$ ) and other first year Hispanic/Latino students ( $n = 214$ ) in two of the three leading indicators of college success as defined by WMM metrics: completion of college level English and completion of 15 or more college credits during their first year.

While not identified as one of three key WMM metrics, successful (C or better) completion of courses taken within their first semester also support Avanzando as an emerging promising practice at LCCC.

Interestingly, the Avanzando program students enrolled in first year math at lower rates than the overall LCCC student body (41% vs 51%). Of those who did enroll in college level math in their first year, however, 54% successfully completed this milestone (compared to 41.7% of the overall first year student cohort, and 33.2% of first year Hispanic/ Latino students).

Among its first cohort, persistence from Fall 2019 to Spring 2020 also outpaced the overall LCCC student population (96.6% compared to 72%). Student feedback about the program included highlights about strengthened cultural identity, trusted mentorship, and individualized empowerment. Below are excerpts from two participants' reflections on their first semester in college:

- *"My most important aspect was the emotional part of me. For me, I was attending college not only to get a degree, but to honor my family and race. This was one of the best classes/ programs I have ever been a part of."*
- *"Something that sets me apart from others is my confidence in my culture and the way I represent it including the amount of sacrifice I put into my education no matter what obstacles I have to go through on my own. As a college student I can say I am proud of being Latina and furthering my education to prove to others 'we' can do it."*

Despite COVID-19's impact on higher education, LCCC's Avanzando through College program sustained its progress and welcomed a cohort of 25 students in Fall 2020. Another indicator of the program's emerging impact is the inaugural cohort's interest in serving as peer mentors to the second cohort, which was embraced in full by the program's coordinators. Avanzando through College's second cohort of 25 students was supported by three trained mentors who had recently completed the program just months before. Plans to further enhance the program and customize it for LCCC include incorporating additional instructors from the local Hispanic/ Latino community, as well as establishing a teaching assistant program to continue students' involvement in program delivery beyond their own first year experience.

## Implications for Practice

As an institution making steady progress towards narrowing gaps in student success, LCCC continues to evolve its foundational student services to better meet the needs of the diverse communities it serves. LCCC students represent a wide range of socioeconomic stability, future goals, parental status, employment status, and lived experiences. Yet as a student-centered institution with a strong focus on equitable access to the opportunities higher education can provide, LCCC has become skilled at taking established practices such as a caseload advising model, Advocacy and Resource Center (ARC), first year experience course, and SAIL and further adapting them to truly individualize the student experience. This willingness to continually evolve, deepen, and customize student experiences led to the launch of the Avanzando through College program, an emerging high impact practice that shows early promise in supporting Hispanic/ Latino students transitioning into the LCCC community.

**Table 5.2 Early Indicators of Promising Practice**

	All First Year LCCC Students	All LCCC Hispanic and Latino Students	Avanzando through College Participants
College-level English (completed in first year)	65.7%	61.7%	78.6%
15 credit hours earned in first year of college	48.2%	44.9%	50.0%
Successful completion (C or better) of courses in first semester	68.7%	62.6%	74.1%

As higher education continues to focus on equity while also recovering from COVID-19's disruption, partnership programs that weave the strengths of multiple organizations may provide a viable alternative to designing new curriculum or experiences. Partnerships such as the one between LCCC, El Centro, and UnidosUS can help institutions gain critical capacity to better align existing first year experience practices with the needs of specific student groups.

While the implementation of strong advising models and other first year supports can fundamentally remap the overall student experience, achieving truly equitable access to support may mean boldly and continually reshaping these practices in responsive ways. At LCCC, the launch of an intentional learning community, in conjunction with an external partner, shows early promise in facilitating a strong, culturally responsive transition to college.

## References



- American Association of Community Colleges (2021, June). *Community College Fast Facts*. [AACC Fact Sheet](http://www.aacc.nche.edu/research-trends/fast-facts/). [www.aacc.nche.edu/research-trends/fast-facts/](http://www.aacc.nche.edu/research-trends/fast-facts/).
- Lorain County Community College (2021). *Equity Progress Update 2019-2020*. Lorain County Community College.
- National Center for Education Statistics (2021, June). *Lorain County Community College*. NCES College Navigator. [www.nces.ed.gov](http://www.nces.ed.gov).

## Contact



Marisa Vernon-White, PhD  
Vice President, Enrollment Management and Student Services  
Lorain County Community College  
Email: [mvernonwhite@loraincc.edu](mailto:mvernonwhite@loraincc.edu)

# 6 | Norco College Guided Onboarding: Career-Focused Advising and Holistic Student Support

David Schlanger, M.A. and Jethro Hathaway Midgett IV, M.S.

## Institutional Profile

Norco College (NC) is a public, open-access, two-year community college located in Norco, California, and is one of three colleges within the historic Riverside Community College District (RCCD). Designated as a Hispanic Serving Institution (HSI), 57% of NC's students are Hispanic, and the remaining population is 20% white, 8% Asian, 6% black, 2.5% Filipino, and 6.5% "other". Approximately 54% of students are female, 45% male, and 1% are reported as unknown or non-binary; 30% of students are over age 25; and as of spring 2020, 31% were first-generation college students (defined as a student for whom no parent or guardian has earned more than a high school diploma and who has no college experience).

NC serves over 16,000 students annually, which represents an FTE of about 8,000. For the 2016 cohort of full-time, first-

time students, 27% graduated within three years. In 2020, 79% of surveyed former career education students reported being employed for pay (and 9.2% were unemployed, but not seeking work). Low-income Pell Grant recipients make up 16% of students and 57% receive a tuition fee-waiver (the California College Promise Grant). With no on-campus housing, all of NC's students commute or take classes online.

## Guided Onboarding

Like many community colleges, NC has been working to implement a variety of Guided Pathways reforms for several years. According to Brock and Jenkins (2021), Guided Pathways research is clear that colleges should:

- Organize program development and improvement, student recruitment, onboarding, and advising by field or "meta-major";

- Redesign the new student onboarding process to help all students explore interests and choose and plan a program of study;
- Help every student develop an individualized full-program education plan by the end of their first term; and
- Provide case management advising for all students within their field of study.

However, these mission-critical reforms are extremely challenging when community college students enter without a focused career goal or knowledge of what type of program they want to pursue (Grubb, 2006). Grouping students by field-specific “meta-majors”, helping them choose a program of study, developing a comprehensive education plan, and providing case management by field of study all require that students first have a narrowed sense of career direction. Therefore, as recommended by Karp (2013), academic advising should be driven by career counseling and focused on helping students make important decisions *prior* to program enrollment. In response to these realities, NC developed “Guided Onboarding” – a matriculation process based on career-focused development advising and holistic student supports.

In early 2018, a team from the Career Center began to explore different approaches to career development and onboarding. Historically, most advising services were transactional and focused on providing education plans (incentivized by contact-based state funding). Career counseling was considered a separate service needed by some but not all, and the few referred to the Career Center experienced the typical intervention of a personality assessment followed by an interpretation. That summer, the Career Center team completed the [Certified Career Services Provider \(CCSP\)](#) training provided by the National Career Development Association (NCDA) and learned about several career development models beyond the classic trait-and-factor theory. At the same time, the team began to outline a new onboarding process that followed the four principles for restructuring guidance and counseling outlined by Karp (2013):

- Pathways should balance structure with exploration;
- Career counseling should drive an integrated approach to advising;
- Colleges should strategically deploy resources to allow for developmental advising; and
- Colleges should provide services to students based on their level of need.

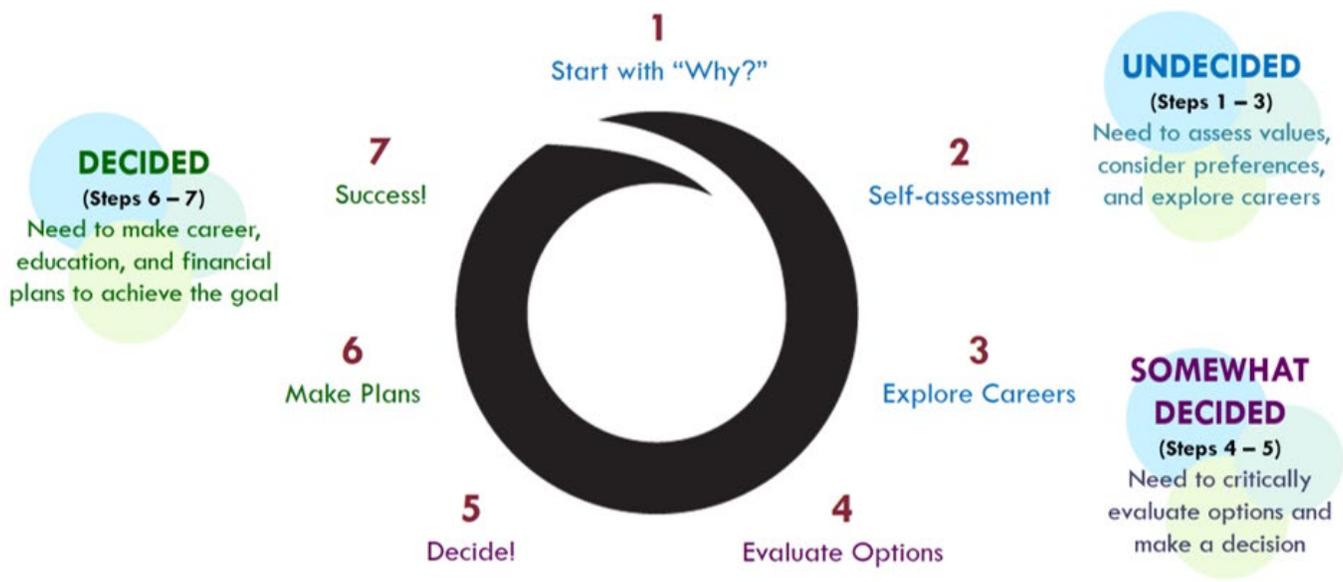
Based on the NCDA training, the team felt that one of the best approaches to career counseling was through a developmental advising approach, so they targeted two of the principles through one initiative called career-focused developmental advising. The other principles were addressed by building around [Achieving the Dream’s Holistic Student Support Redesign toolkit](#), following [Completion by Design’s Loss-Momentum Framework](#), and designing pathways in accordance with Guided Pathways recommendations, but the details of this case study are focused on the career advising component.

The NC Educational Master Plan has an ambitious goal of eliminating all student equity gaps by 2030 and is aiming for a 40% reduction in all equity gaps by 2025. To align with this goal, the team designed program elements in consideration of the following definition of equity, which was also cited by the National Association of Colleges and Employers (NACE): the guarantee of fair treatment, access, opportunity, and advancement for all while striving to identify and eliminate barriers that have prevented the full participation of some groups (Armstrong, 2019). According to Bailey (2018), reforms such as program redesign, clarifying educational and career pathways, reorganizing developmental education, and enhancing student supports “address major obstacles to student success and have the potential to help close equity gaps in college completion.” As the new Guided Onboarding process is rolled out to all new incoming students, regular assessment is being conducted to monitor a variety of metrics for disproportionate impacts and to avoid any unintended consequences.

## Career-Focused Developmental Advising

The NCDA’s training manual, *Facilitating Career Development*, recommends a seven-step career planning process (Brown & Marinaccio, 2017) that closely aligns with the structure recommended by the Cognitive Information Processing (CIP) theory of career development. Within the theory’s core principles are the Pyramid of Information Processing Domains, the CASVE cycle, and the Differentiated Service Delivery model. NC adapted these ideas to create its own seven-step [career decision-making model](#) as shown in Figure 6.1 and embedded it into the onboarding process so that every incoming student can receive proactive, individualized career advisement that assesses their values and leads to the creation of an education plan, career plan, and financial plan. Training on the process was provided to new student advisors as

Figure 6.1 Seven-Step Career Decision Making Model



well as full-time and part-time academic counselors so that students at any entry point receive career development services. Broadly, the career decision-making model contains the following general components:

1. **Start with "Why?"** – Identify motivations and values; address barriers (if needed)
2. **Self-assessment** – Assess skills; assess interests; assess abilities (if needed)
3. **Explore Careers** – Guided exploration; identify 3-7 good options
4. **Evaluate Options** – Multi-factor analysis; personality assessment (if needed)
5. **Decide!** – Make a formal decision; discuss with others (consider cultural obligations)
6. **Make Plans** – Education plan; career plan; financial plan
7. **Success!** – Reflect on values; gather data; prepare for life transitions

Students enter at different phases of the decision-making process and are supported with tools and resources to help them progress, such as a Life Map Exercise that helps them identify their motivations and values, online career assessments to build self-knowledge, a career exploration guide to log career information, and an evaluation grid that uses a form of multi-attribute utility theory to help students weigh their options and select the best

choice. At each step, students may be referred to specialized assistance if needed, such as help with reframing negative career thoughts, the administration of an abilities assessment, and interpretation of a personality assessment to discover their likely work environment preferences based on type.

## Assessment Methods & Design

Before piloting NC's new career decision-making model, some questions needed to be answered first: (1) what types of questions can be asked of students to accurately determine what career development supports they need, and (2) what percentage of students will need services at the three differentiated service levels? In summer 2019, a pilot project sought to answer these questions and a first round of assessment focused on measuring the individual effectiveness of specific career development interventions. A group of 434 students in a summer bridge program were taught about the different career development stages and asked to complete a career development survey that simply asked them to identify with one of three options:

1. **Undecided** – I have not spent much time thinking about my career goals or deciding what I want to do in the future.

2. **Somewhat Decided** – I have an idea of which career field I want to enter, but I am unsure what job would suit me best.
3. **Decided** – I know what career field I want to enter and which job(s) interest me in that field.

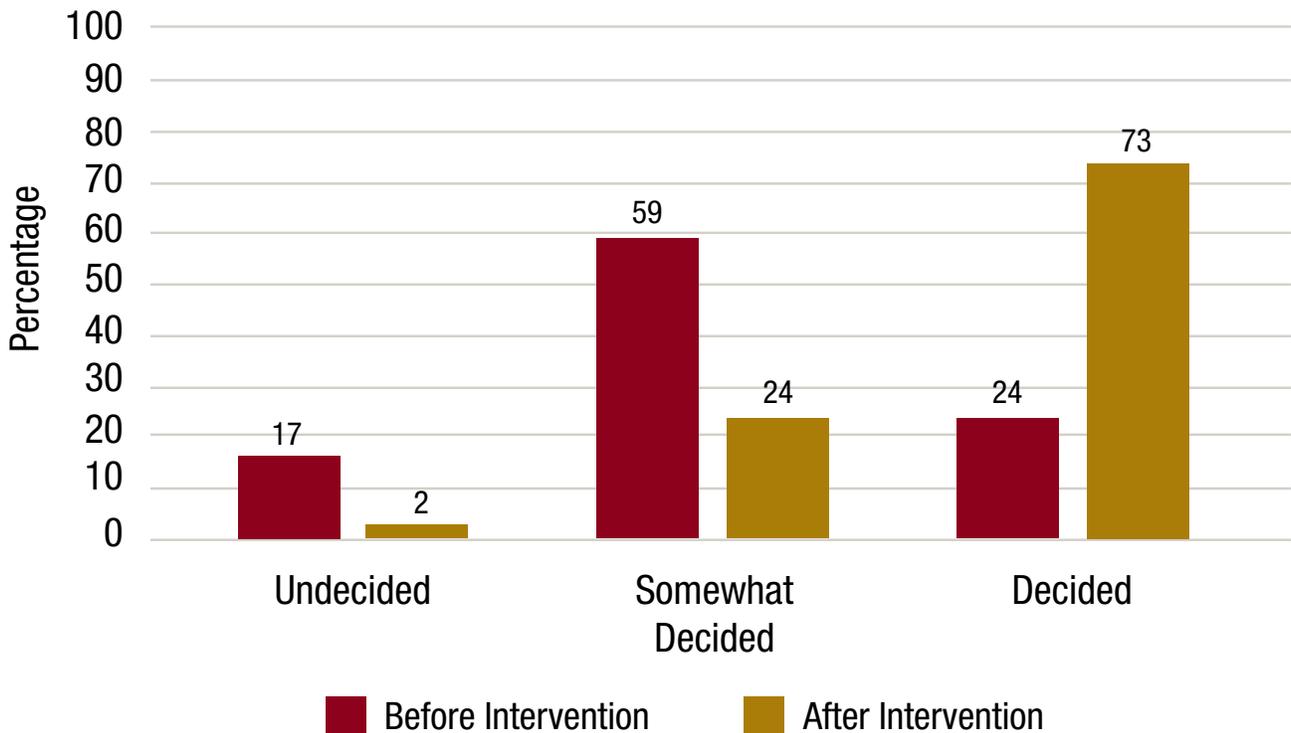
Based on their selections, students received a single intervention workshop to help them take one step forward in the career decision-making process. The questions seemed to accurately determine each student's level of career decidedness, so this brief survey was used as a pre/post question for baseline and end-line surveys during future intervention studies. Subsequently, more intensive, full-model intervention pilots were conducted in both a 41-student Upward Bound summer program and a 31-student online career exploration and life-planning course. The purpose of the pilot programs was to determine if the new decision-making process can effectively help students quickly reach the "decided" phase of career decision-making.

## Assessment Findings

### Six-Week Summer Intervention

The goal of the summer intervention was to determine if significant career development progress could be achieved in a short six-week pre-enrollment period facilitated by appropriately trained staff. As expected, the majority of the 41 students (76%) responded to the pre-assessment indicating that they had not yet made a career decision, with 17% *undecided*, 59% *somewhat decided*, and only 24% *decided* (see Figure 6.2). Students then worked through the first six steps of the model over six weeks receiving one-hour of live group time with a facilitator and one to two hours of independent time to complete the assessment, research, and evaluation tasks associated with each step of the process. At the end of six weeks the students were re-assessed to determine the change in their career decidedness. As a result of the career intervention, there were significant reductions in career indecision for undecided students and a major increase in the number of students feeling decided about their career goals, with only 2% still *undecided* (86% decrease), 24% *somewhat decided* (58% decrease), and 73% *decided* (300% increase).

Figure 6.2 Six-week Summer Intervention



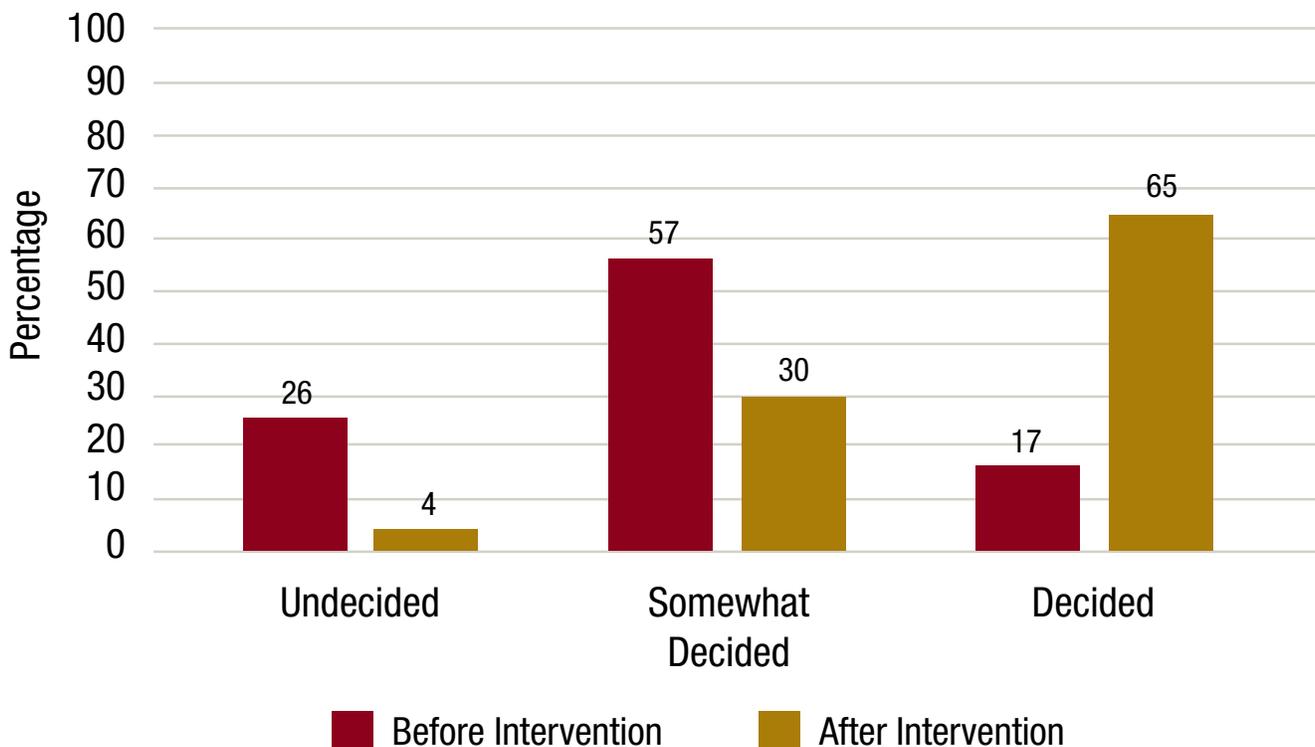
## Career Planning Course Intervention

The goal of the career course intervention was to determine if significant career development progress could be achieved during a single term facilitated by counseling faculty in a group setting; particularly, during an undecided student's first term so that they can develop a full-program education plan by the end of term one as recommended by Guided Pathways literature. For this group of 31 students, 23 responded to both surveys and those identifying as *undecided* was larger than observed in the general summer program, which one might expect given the conventional approach of referring undecided students to career planning courses. The career decision levels at the beginning of the course were 26% *undecided*, 57% *somewhat decided*, and just 17% *decided* (see Figure 6.3). In this case, the first six steps of the model were embedded into the course's regular lectures with support tools and resources completed as homework assignments. The results of this intervention were like those of the summer program in that there were both significant reductions in career indecision for the undecided students and even greater gains in the number of

students reaching a decided level of career development. For survey respondents who completed the course, 4% finished *undecided* (83% decrease), 30% *somewhat decided* (46% decrease), and 65% were fully *decided* (375% increase).

The pilot program's success demonstrates most students can make moderate advancement through the career development process with a short series of staff-assisted services, and positive outcomes can be achieved in group settings (which are more efficient than one-on-one services). It is believed that students who were "stuck" in their decision making after these interventions would benefit from referrals to specialized services that were not available to the pilot group students. Such additional services may include help with reframing negative career thoughts (a common approach in cognitive behavior therapy and CIP) and the administration and interpretation of a personality assessment (such as the MBTI® Career Report) that can be used to propel the student's evaluation of career options to a career decision that incorporates their confirmed type.

Figure 6.3 Career Planning Course Intervention



# Implications for Practice

## Aiming Beyond Meta-majors with Career Advising

Much of the work to date on meta-major configuration addresses the reality that most students arrive unsure of their career and academic goals. In such a situation, aiming for enrollment in meta-majors is a worthy target and should be the minimum expectation. However, we must not lose sight of the real goal of Guided Pathways onboarding reform – each student declaring an informed, career-focused major and developing a comprehensive full-program plan no later than the end of their first term. If having a clear career goal is a prerequisite to declaring an informed major, and declaring a major is necessary to build a full-program plan, then career advising plays the starring role in the onboarding process.

The ratio of career decidedness can be flipped, as demonstrated above using career-focused developmental advising, where instead of having ~75% of students entering *undecided* we see ~75% of students entering *fully decided* about their career goals. Then, the primary onboarding focus can shift from enrolling in meta-majors to enrolling directly into specific majors, with only 25% or fewer students being guided toward meta-majors. A student with an informed major is ready to create a full-program plan with an academic advisor, select lower division courses based on articulation agreements, and can develop a thorough financial plan that accurately estimates their total cost of college attendance. Since career development decisions give purpose to academic planning, colleges should provide this service early in the student experience, ideally during the pre-enrollment period. Only then can we achieve the degree of holistic student support that leads to improved access, completion, equity, and success.

## References

Armstrong, K. (2019, June 25). What exactly is diversity, equity, and inclusion? NACE Blog. <https://community.nacweb.org/blogs/karen-armstrong1/2019/06/25/what-exactly-is-diversity-equity-and-inclusion>.

Bailey, T. R. (2018, March). *Equity and Guided Pathways: which practices help, which hurt, and what we don't know*. Community College Research Center. <https://ccrc.tc.columbia.edu/easyblog/equity-guided-pathways-directors-column.html>.

Brock, T., & Jenkins, D. (2021, April 5). *Investing in student success at community colleges: Lessons from research on Guided Pathways*. Community College Research Center. <https://ccrc.tc.columbia.edu/publications/policy-brief-guided-pathways.html>.

Brown, A. L., & Marinaccio, J. N. (2017). *Facilitating career development: an instructional program for career services providers and other career development providers* (4th ed.). (pp. 128–130). National Career Development Association.

Grubb, W. N. (2006). "Like, what do I do now?": The dilemmas of guidance counseling. In T. Bailey & V. S. Morest (Eds.), *Defending the community college equity agenda* (pp. 195–222). Baltimore, MD: Johns Hopkins University Press.

Karp, M. M. (2013, May 1). *Entering a program: Helping students make academic and career decisions*. Community College Research Center. <https://ccrc.tc.columbia.edu/publications/entering-a-program-academic-and-career-decisions.html>.

## Author Note

Data collection and preliminary analysis were sponsored by the California Guided Pathways Project and the Norco College Title V "PACES" Grant (Pathways to Access, Completion, Equity and Success). The PACES project is funded by the U.S. Department of Education's Developing Hispanic-Serving Institutions (DHSI) program (Grant P031S190318). We have no conflicts of interest to disclose.

## Contact

David Schlanger, M.A.  
Program Manager, Title V Grant  
Norco College  
Email: [david.schlanger@norcollege.edu](mailto:david.schlanger@norcollege.edu)

Jethro Hathaway Midgett IV, M.S.  
Associate Professor of Counseling  
Norco College  
Email: [jethro.midgett@norcollege.edu](mailto:jethro.midgett@norcollege.edu)

# 7 Regis College Career Development Capstone Course for Doctoral Candidates

Heather N. Maietta, EdD, BCC

## Institutional Profile

Regis College is a four-year, private, Catholic university in Weston, Massachusetts, with over 3,000 undergraduate, graduate, and doctoral students. Inspired by the social justice values of the Sisters of St. Joseph of Boston, Regis is a welcoming and inclusive community, preparing students to pursue excellence, become change agents in their own communities, and serve as advocates for a more just and compassionate global society. Although first generation status is not collected for the doctorate population, approximately 28% undergraduates are first generation college students, defined as neither parent holding a bachelor's degree.

The Regis EdD challenges students to be informed decision-makers and reflective practitioners capable of contributing to the expansion of scholarship, learning, practice, and service. The program is part of the Carnegie Project on the Education Doctorate, a practitioner-focused doctorate degree that meets the needs of working professionals. As such 100% of enrolled students are commuters, employed full-time while attending college, and most remain in their current roles or advance within their institutions upon

graduation. Approximately 80% of the students/alumni are female; in addition, approximately 35% of the students/alumni are racially minoritized, and the program has a 96% graduation rate.

## Evidence of the Problem

**Career Indecision.** According to the National Science Foundation's 2018 Survey of Earned Doctorates, less than half (43.2%) of all doctoral graduates pursued employment in higher education (including tenure, nontenure, adjunct, and administrative roles), while 36.8% chose business/industry, and the remaining 20% opted for careers in government/nonprofit or entrepreneurship. Many graduate students' skills preparation for academic and non-academic professions is poor and professional development and career assistance are sparse. Not all doctoral programs adequately prepare students for faculty roles, such as teaching, advising, grant writing, service, publication, and research ethics (Adams, 2002; Austin, 2002; Helm et al., 2012) or workforce demands such as business acumen, entrepreneurialism, industry-related technology, and fundraising competencies (Nyquist & Wulff, 2000). In addition, doctoral students as adult learners continually reevaluate their

satisfactions with work and family lives, appearing to emphasize personal fulfillment and intrinsic outcomes when deciding to pursue additional training and career changes (Gianakos, 1996). These re-evaluations weigh on the doctoral to post-degree journey. Gender differences in demands, goals, and expectations in terms of job and career path have also been documented during or after a doctoral study (Malone et al., 2004). Specifically, female doctoral students experience greater work demand, financial constraints, childcare responsibilities, low confidence levels during and as new doctoral graduates (Maher et al., 2004; Manfield et al., 2010; Moyer et al., 1999). These differences are rarely addressed in career-related or professional development discussions.

Although graduate programs cultivate student growth through the development of problem-solving and critical-thinking skills. Typically, this transformation happens over several years, during which time students manage multiple programmatic obligations, such as research, writing, presenting, and occasionally teaching, as well as non-programmatic commitments that involve career, family, and community. While managing multiple roles provides solid career progression, it often leaves little space for career planning. Furthermore, career goals continue to change over time, so career aspirations entering a doctoral program may look much different than when exiting one. These factors can lead to confusion regarding future career prospects.

**Marginalization and Mattering.** A dearth of research exists on the neglect around the learning needs, interests, and styles of adult learners (Schlossberg et al., 1989; Kasworm, 1993; Kasworm et al., 2000; Sissel et al., 2001). Higher education continues to favor policies and processes that support traditional-aged undergraduate students, leaving little space, voice, and value to other groups and those who are the most different from young students: adult doctoral students. Whether it is policy, program, attitudes, classroom environment, or funding support, adult learners face institutional neglect, prejudice, and denial of opportunities. Sissel et al. (1997) posit the ability to socialize positively and productively significantly impacts the doctoral experience, degree completion, and successful post-doctoral career trajectory (Helm et al., 2012).

## Connecting Doctoral Degree to Career Decisions: A Career Development Capstone Course



Career development is fundamental to the success of doctoral studies in a variety of ways. For example, studies by Moran Craft (2016), Roksa et al. (2018), and others reveal engaging doctoral students in early career decision-making mentorship contributes to increased persistence and completion. Others by Campbell et al. (2005), King (2003), and Nyquist and Wulff (2001) reveal access to faculty, and other professionals provide opportunities to discuss professional development issues and career goals. These are a few of many indications where career support at the doctoral level impacts doctoral learning and applying that learning favorably to the broader world of work. Once graduated, doctoral students struggle to define 'next steps' or career path, but it doesn't have to be that way!

In fall 2018, the program repurposed one of the core leadership courses to focus on career development and application of the Dissertation in Practice (DiP). The DiP is a traditional five-chapter dissertation, plus a capstone chapter that culminates from one's research findings. Students are asked to align the capstone project to a problem of practice, within this field of higher education. The repurposed course is entitled: *Dissertation to Publication and Other Post-Graduate Pursuits: A Career Development Capstone Course* and will be in its third-year fall 2021. The objective of the course is simple: to provide doctoral students with career planning support as they transition from students to terminal degree-holding professionals.

Repurposing this course offered students an intentional way to learn how to apply knowledge and skills gained from the DiP to their current and post-graduate career aspirations. Because adults are less inclined to engage in learning unless meaningful (Merriam & Cafferella, 2020, Sandler, 2000, Sissel et al., 2001), the capstone course encouraged students to sustain and amplify their work through several signature activities directly related to their research interests and current occupational roles. The first step in designing the new course was to establish objectives with input from the program's stakeholders. Evaluation and prioritization of

the needs, wants, and values of various stakeholders are essential to the success of the design process (Magleby et al., 2001). Student feedback revealed the following interest areas: career reflection, post-graduate career identification, professional skills and document development, publication education and support, and longer-term career decision-making strategies. The following course objectives were developed from this input:

1. Gain a deeper understanding of potential non-academic career options outside of higher education and how the EdD provides value to these career options.
2. Analyze the range of roles available for employment across an institution that fully engage with desired life design.
3. Explore and prepare for academic and non-academic careers through resource/portfolio building.
4. Evaluate the vast array of professional networks to identify those that most appropriately aligned with desired career goals and create an engagement plan that maximizes investment.
5. Build a professional suite of marketing materials that showcase one's brand capacity across a myriad of industries and occupations.

Course objectives were met through the following signature activities:

- ***This I Believe Essay:*** Using Bandura's (1977, 1997) social cognitive career theory as a lens, students constructed a personal This I Believe podcast essay based on reflection of their doctoral journey and core values as scholarly practitioners.
- **Backcasting Goal Setting Activity:** Using Robinson's (1992) design research technique Backcasting and Asana or Trello software, students set a post-graduate scholarly publication submission target and timeline.
- **Design Your Life:** Looking at Schlossberg's (1984) adults in transition theory and using the doctoral designed CRM platform Imagine PHD, students engaged in values, skills, strengths, and interest assessment.

Other notable activities included creating a professional ePortfolio using Wix.com, a vita/professional resume, and conducting a series of informational interviews. Guest speaker topics included:

1. Mapping Your Career During Uncertain Times: Chaos Careers
2. The Ins and Outs of Search Firms
3. Happenstance In Your Career Search: Looking for Opportunities Where Opportunities Don't Exist
4. Dissertation to Publication and Other Publishing Strategies
5. You're a Doctor Now, Act Like It: Executive Presence

Forum and in-class discussions regarding other professional development pursuits needed for career advancement, inequities in the job search and hiring process, and how to know when to pivot during an unhealthy or unproductive career trajectory also took place.

## Assessment Methods & Design

In addition to the previous course assignments, students are given a pre- and post- assessment of their knowledge-level on several areas covered during the semester. The assessments contains both open and closed questions. Closed questions rated on a Likert scale of 1 being lowest and 5 being highest rating. The following areas were assessed:

- Ability to identify job opportunities post-doctorate degree in industries insides and outside of higher education.
- Ability to categorize past accomplishments into the domains of scholarship
- Awareness of personal values and how those personal values impact career decision-making
- Awareness of skills and how skills impact career decision-making
- Awareness of interests and how interests impact career decision-making
- Confidence in ability to set long-term goals
- Confidence in conducting an informational interview
- Confidence in the post-graduate job search
- Confidence in networking at professional conference
- Confidence about post-graduate career plans
- Confidence about executive presence

- Knowledge of models of career development as they apply to career decision-making
- Knowledge of domains of scholarship
- Knowledge of working with a search firm
- Knowledge of the dissertation to scholarly article publication process

To gauge where students were in terms of preparation for their transition out of doctoral studies, they were asked the following:

- Have you ever used Storyboarding as a tool for goal setting? (100% reported no)
- Have you ever used Backcasting as a goal setting technique? (86% reported no)
- Have you ever used software (Trello, Asana) to help you set and manage your goals? (72% reported no)
- Have you ever conducted an Informational Interview? (76% reported no)

- Do you have a current Resume? (52% reported no)
- Do you have a current Curriculum vita? (76% reported no)
- Do you have a current ePortfolio/professional website? (86% reported no)
- Do you have a current LinkedIn profile? (76% reported no)
- Do you know what the term 'job crafting' means? (100% reported no)

Students were also asked an open-ended question: Overall, reflect on the usefulness of the course to your overall EdD transition knowledge, preparation, and confidence?

## Assessment Findings

Pre-and post-assessment results were as follows with 1 being least and 5 being most. The following areas were assessed (Table 7.1):

Table 7.1 *Pre- and Post-Test*

Question	Pre-Test Mean	Pre-Test SD	Post-Test Mean	Post-Test SD
1. Ability to identify job opportunities post-doctorate degree in industries inside and outside of higher education.	2.10	0.831	4.10	0.539
2. Knowledge of models of career development as they apply to career decision-making	1.57	0.598	3.76	0.889
3. Knowledge of domains of scholarship	1.90	0.768	3.86	0.573
4. Ability to categorize past accomplishments into the domains of scholarship	1.71	0.644	4.33	0.856
5. Awareness of personal values and how those personal values impact career decision-making	2.19	0.981	4.05	0.669
6. Awareness of skills and how skills impact career decision-making	2.67	1.017	4.62	0.669
7. Awareness of interests and how interests impact career decision-making	2.24	0.625	4.48	0.750
8. Knowledge of working with a search firm	1.43	0.598	4.05	0.669
9. Confidence in ability to set long-term goals	2.14	0.655	4.38	0.740
10. Confidence in conducting an informational interview	2.10	0.995	4.24	0.831
11. Knowledge of the dissertation to scholarly article publication process	2.33	0.856	4.24	0.944
12. Confidence in the post-graduate job search	2.24	1.044	3.90	0.768
13. Confidence in networking at professional conference	2.43	0.926	4.33	0.730
14. Confidence about post-graduate career plans	2.14	1.062	3.95	0.232
15. Confidence about executive presence	2.29	0.956	4.48	0.512

Given the sample size ( $n=21$ ) all changes in mean were significant.

Open ended responses to the question *Overall, reflect on the usefulness of the course to your overall EdD transition knowledge, preparation, and confidence?* were interesting in that participants generally expressed the course was useful to their professional and career growth. Many shared they established meaningful connection between self and career decision-making, felt a greater sense of confidence in several areas related to the college-to-career and post-doctorate transition, and a renewed sense of interest in developing oneself professionally after many years as a 'student'. Notable responses included:

*"This was extremely useful for me in terms of reflecting on my time in the program as well as thinking about my professional skillset moving forward. I highly recommend this course continue for future cohorts."*

*"This course has definitely helped me think about the future and how I am going to get there. I am very confident in my ability to do so."*

*"I really appreciated the self-exploration activities as well as learning about the publishing process. Taking the course felt inspiring to push me forward, especially the section related to the skills and values activities."*

*"I feel much more prepared to transition from the program. I am also grateful for the theoretical perspective and validation that transition postgrad can be difficult."*

The course is offered in the final semester of the student's EdD program intentionally given the course subject matter. One student took the course out of sequence and although found many components beneficial, provided the following feedback:

*"I found that creating the CV and ePortfolio/professional website activities to be two things that were not beneficial to me. I wonder if there should be something else for people who are not looking to transition jobs or something that might be more practical for people in the moment."*

Another student (who took the course in sequence) commented:

*"Offering the course as a capstone was helpful for me during this time in my doctoral journey, especially now that I am starting to have some self-doubt with finalizing the dissertation process. This was one uplifting thing I had this semester!"*

## Limitations



Quantitative and qualitative feedback revealed the course provided benefit to the doctoral students in many areas of career and professional growth. Limitations of the data include small sample size and the fact that the course has only been offered to three student cohorts. Recommendations include broadening sample size to include larger participant numbers.

## Implications for Practice



Crites' (1978) career maturity model includes accurate self-appraisal, gathering occupational information, goal selection, planning, and problem-solving. The ability to engage in these activities increases one's career self-efficacy or confidence to complete the necessary tasks associated with successfully making career decisions (Bandura's 1977, 1997; Betz et al., 2005; Taylor & Betz, 1983). Students exercised self-efficacy exploration during the *This I Believe* podcast essay and vita and ePortfolio creation and the ImaginePhD assessments.

Research reveals doctoral students are largely unaware of post-graduate opportunities and receive little guidance for career paths outside of academia, lack exposure to post-graduate professional development, and consistently identify a lack of mentoring and developmental feedback (Golde & Dore, 2001; Nerad et al., 2004; Wulff et al., 2004). Through the *Design Your Life* activity, students reflected on their more extensive learning journey and unpackaged how the EdD program prepared them for leadership and academic roles in and out of higher education. Students used the doctoral-designed CRM platform ImaginePhD examining their accomplishments and goals against the Boyer model of scholarship (Boyer, 1990) to discern past accomplishments and desired career direction. One point to note is timing of such offerings, whether it be through a course, via webinars, workshop focused, or another method of career development support, the timing delivery of such content matters. Delivered off sequence, the usefulness and impact of the material might not fully be realized.

The Regis EdD capstone course helped students capitalize on their professional knowledge, talents, and creativity and enhanced their problem-solving skills, intellectual versatility, leadership, adaptability, and breadth of understanding of their dissertation research specifically and their EdD program overall. Through the

carefully constructed activities, students reflected on how their DiP influenced their role as scholar-practitioners in both their current professional setting and in one they desire in their future.

## References

- Adams, K.A. (2002). What colleges and universities want in new faculty. *Preparing Future Faculty Occasional Paper*. Association of American Colleges and Universities and Council of Graduate Schools. <https://files.eric.ed.gov/fulltext/ED472499.pdf>
- Austin, A.E. (2002). Preparing the next generation of faculty: Graduate school as socialization to the academic career. *The Journal of Higher Education*, 7(1), 94-122.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1997). Self-efficacy: *The exercise of control*. Freeman.
- Betz, N. E., Hammond, M. S., & Multon, K. D. (2005). Reliability and validity of five-level response continua for the Career Decision Self-Efficacy Scale. *Journal of Career Assessment*, 13, 131-149. doi:10.1177/106907279600400103
- Boyer, E.L. (1990). *Scholarship reconsidered: Priorities of the professoriate*. The Carnegie Foundation for the Advancement of Teaching. John Wiley and Sons.
- Campbell, S. P., Fuller, A. K., Patrick, D. AG. (2005). Looking beyond research in doctoral education. *Frontiers in Ecology and the Environment*, 3(3). 153–160. The Ecological Society of America. <https://doi.org/10.2307/3868543>
- Crites, J. O. (1978). *Career Maturity Inventory*. CTB/McGraw Hill.
- Gianakos, I. (1996). Career development differences between adult and traditional-aged learners. *Journal of Career Development*, 22(3), 211-223.
- Golde, C.M., & Dore, T.M. (2001). *At cross purposes: What the experiences of today's doctoral students reveal about doctoral education*. Pew Charitable Trusts.
- Helm, M., Campa, III, H., & Moretto, K. (2012). Professional socialization for the Ph.D.: An exploration of career and professional development preparedness and readiness for Ph.D. candidates. *Journal of Faculty Development*, 26(2). 5-23.
- Kasworm C. (1993). An Alternative Perspective on Empowerment of Adult Undergraduates. *Contemporary Education*, 64, 162–165.
- Kasworm, C., Sandmann, L., and Sissel, P. (2000). Adults in Higher Education. In A. L. Wilson & E. R. Hayes (Eds.). *Handbook of Adult and Continuing Education*. Jossey-Bass.
- King M. (2003). *On the right track: a manual for research mentors*. Council of Graduate Schools.
- Litalien, D., & Guay, F. (2015). Dropout intentions in PhD studies: A comprehensive model based on interpersonal relationships and motivational resources. *Contemporary Educational Psychology*, 41, 218–231. <https://doi.org/10.1016/j.cedpsych.2015.03.004>
- Magleby, S., Todd, R., Sorensen, C. & Pugh, L. (2001). Recruiting and Selecting Appropriate Industrial Projects for Capstone Design Programs. *International Journal of Engineering Education*, 17(4).
- Maher, M.A. (2005). The evolving meaning and influence of cohort membership. *Innovative Higher Education*, 30(3), 195-211. <http://dx.doi.org/10.1007/s10755-005-6304-5>
- Malone, B.G., Nelson, J.S., & Nelson, C.V. (2004). Academic and affective factors contributing to degree completion of doctoral students in educational administration. *The Teacher Educator*, 40(1), 33-55. <https://doi.org/10.1080/08878730409555350>
- Manfield, K. C., Welton, A., Lee, P. L., & Young, M. D. (2010). The lived experiences of female educational leadership doctoral students. *Journal of Educational Administration*, 48, 727-740. <http://dx.doi.org/10.1108/09578231011079584>
- Merriam, S. B. & Caffarella, R. S. (2020). *Learning in adulthood: A comprehensive guide* (4th ed.). Jossey-Bass.
- Moran Craft, C., Augustine-Shaw, D., Fairbanks, A., & Adams-Wright, G. (2016). Advising Doctoral Students in Education Programs. *NACADA Journal*, 36(1). <https://doi:10.12930/NACADA-15-013>
- Moyer, A., Salovey, P., & Casey-Cannon, S. (1999). Challenges facing female doctoral students and recent graduates. *Psychology of Women Quarterly*, 23, 607-630. <http://dx.doi.org/10.1111/j.1471-6402.1999.tb00384.x>

National Science Foundation, National Center for Science and Engineering Statistics. 2019. *Doctorate Recipients from U.S. Universities: 2018*. Special Report NSF 20-301. <https://ncses.nsf.gov/pubs/nsf20301/>

Nerad, M., Aanerud, R., & Cerny, J. (2004). So you want to become a professor!: lessons from the PhDs – Ten Years Later study. In: Wulff, DH and Austin, AE (Eds.). *Paths to the professoriate: Strategies for enriching the preparation of future faculty*. Jossey-Bass.

Nyquist, J. D., & Wulff, D. H. (2000). *Re-envisioning the Ph.D.: Recommendations from national studies on doctoral education*. University of Washington. [https://depts.washington.edu/envision/project\\_resources/national\\_recommend.html](https://depts.washington.edu/envision/project_resources/national_recommend.html)

Nyquist, J. D, Austin, A., Sprague, J., & Wulff, D. H. (2001). *The development of graduate students as prospective teaching scholars, a four-year longitudinal study: Final report*. University of Washington, Center for Instructional Development and Research.

Robinson, J. B. (1992). Energy backcasting: A proposed method of policy analysis. *Energy Policy*. 337-344. Butterworth & Co.

Roksa, J., Feldon, D. F., & Maher, M. (2018). First-generation students in pursuit of the PhD: Comparing socialization experiences and outcomes to continuing-generation peers. *The Journal of Higher Education*, 89(5). 728-752. DOI: 10.1080/00221546.2018.1435134

Schlossberg, N. K. (1984). *Counseling adults in transition*. Springer.

Schlossberg, N. K., Lynch, A. Q., & Chickering, A. W. (1989). *Improving Higher Education Environments for Adults: Responsive Programs and Services from Entry to Departure*. Jossey-Bass.

Sissel, P. A., Hansman, C. A., & Kasworm, C. E. (2001). The Politics of Neglect: Adult Learners in Higher Education. *New Directions for Adult and Continuing Education*, 91, 17-27.

Sissel, P. A., Birdsong, M. A., and Silaski, B. A. (1997). *A room of one's own: A phenomenological investigation of class, age, gender, and politics of institutional change regarding adult students on campus*. In R. Nolan (Ed.). Proceedings of the 38th Annual Adult Education Research Conference. Stillwater: Oklahoma State University.

Taylor, K. M., & Betz, N. E. (1983). Applications of self-efficacy theory to the understanding and treatment of career indecision. *Journal of Vocational Behavior*, 22, 63-81. doi:10.1016/0001-8791(83)90006-4

Wulff, DH., Austin, AE., Nyquist, JD., & Sprague, J. (2004). The development of graduate scholars as teaching scholars: a four-year longitudinal study. In: Wulff, DH and Austin, AE (Eds.). *Paths to the professoriate: Strategies for enriching the preparation of future faculty*. Jossey-Bass.

## Contact



Heather N. Maietta, EdD, BCC  
Doctorate of Higher Education Leadership  
Regis College  
Email: [Heather.maietta@regiscollege.edu](mailto:Heather.maietta@regiscollege.edu)

# 8 Rice University ProfessionOwl Program

Raylea Rideau, Ann McAdam Griffin, and Michelle Passo

## Institutional Profile

Boasting a 300-acre tree-lined campus in Houston, Rice University is ranked among the nation's top universities. Rice has a 6-to-1 undergraduate student-to-faculty ratio, and a residential college system, which supports students intellectually, emotionally, and culturally through social and scholastic events.

In 2018, Rice launched its Vision for the Second Century, Second Decade (V2C2) strategic plan. It consists of seven priorities, including "Expand Access, Diversity, and Inclusiveness." To promote broad success, we must enable students from all backgrounds to thrive at Rice, including supporting access to the full range of Rice experiences and opportunities. This aspiration aligns with the vision of the ProfessionOwl Program, which includes expanding access to classroom-based career development.

In the fall of 2020, Rice's undergraduate student body was composed of 4,052 full-time students, of whom approximately 70% lived on campus. Demographics of the undergraduate population include gender (48% female, 52% male), racial/ethnic background (35% White, 31% Asian, 11% Black, 17% Hispanic, 5% Other, with 12% International Students.) Also, 15% of students are Pell Grant recipients (2018-19) and 11.35% of students identified as first-generation (2020). A student at Rice is considered first-generation when neither parent has received a bachelor's degree or higher.

For students who entered Rice in the Fall of 2014, their 4-year graduation rate was 84.9%, 5-year graduation rate 92.7%, and 6-year graduation rate 94.2%. The freshman retention rate for students entering the Fall of 2019 was 96.7%. With some yearly variation, approximately 60% of Rice graduates enter the workforce, and 40% pursue graduate education.

## ProfessionOwl Program

According to the National Association of Colleges and Employers (NACE), new college graduates are 'career ready' for the workplace when they can demonstrate eight career competencies or skills (NACE, 2021). Based on their mission to connect, educate, and empower Rice students, the Center for Career Development (CCD) team reasoned that scalable resources and services would maximize the center's reach to support students in the pursuit of their professional goals and competency development.

Produced as an infographic, the ProfessionOwl Plan served as a tool to educate students on flexible career planning approaches. Some principles of the plan were taken from an in-person career course (UNIV 212: Career & Life Options) that the CCD had been offering for decades. While some students benefited from UNIV 212, offering the class once per year limited the ability for students with schedule constraints to enroll. The CCD team agreed that offering an asynchronous class involving the ProfessionOwl

Plan could increase accessibility to the material, making the course more equitable and individualized.

Asynchronous learning allows students to learn at their own pace and path in a guided format. According to Martin et. al (2020), “Online courses require students to consider new ways to prepare, organize, engage, and complete requirements calling for students to utilize higher levels of independence and self-direction” (p.39). Engaging in a career course or career planning curriculum can positively impact career development through identity development, decision-making, critical thinking, and academic achievement (Hansen, Jackson, & Pederson, 2017).

To build the course curriculum, the CCD identified learning opportunities related to career development based on CCD appointment data, anecdotal evidence of learning gaps for undergraduates at Rice and a close textual analysis of past syllabi from a CCD in-person course. This baseline data informed the development of the course structure. Online career readiness programs were also benchmarked to discover how other schools leveraged their learning management system (LMS) to deliver career-related content to diverse student populations. The CCD team developed six modules through Canvas, the LMS utilized by Rice. The modules included interactive quizzes, instructional videos, forums, guided activities, and reflection exercises. Each content module also outlined specific learning objectives. Using the Dick and Carey (1996) instructional design model, the modules centered around the “career and self-development” competency. It involves awareness of professional strengths, areas for development, and understanding opportunities for career growth and planning (NACE, 2021). Before the launch, a select group of students were asked to navigate the course and provide feedback on each module.

From summer 2019 into August 2020, the ProfessionOwl Plan evolved into the ProfessionOWL Program also known as POP. POP is a one-hour-credit online asynchronous course with a holistic approach to career development. It launched as a pilot program with two course offerings for both the Fall 2020 and Spring 2021 semesters. POP not only provided tools for students to consider their career development, but connected to Rice’s larger objective of supporting access to the full range of Rice experiences and opportunities. Marketing for POP involved multiple social media posts, newsletter articles, and targeted outreach to on-campus partners like Rice Student Success Initiatives, Academic Advising, and Rice Student-Athlete Development.

The learning objectives for the course were that students would be able to:

- identify knowledge of self and careers gained from exploring and navigating online tools and in-person discussions through informational interviews, events or experiential opportunities;
- effectively articulate skills and experience(s) through a resume, cover letter, outreach email, elevator pitch and interviews;
- determine a next career step by developing an action plan that includes a list of employers, fellowships, scholarships, and/or graduate or professional schools, and execute items on action plan by preparing to apply to at least one opportunity in the next year; and
- recognize how to adapt POP’s elements to future goals.

The first module provides a welcome and overview explaining the expectations of POP. The second module (Self Exploration) emphasizes personal exploration of values, personality, interests, skills and how these elements connect with career decisions. In the third module (Research Majors & Careers), students learn how to leverage research to explore majors and careers of interest. The module introduces the concept of networking and the process of conducting informational interviews. In the fourth module (Articulate your Story), students learn how to craft and prepare various job search materials like resumes, cover letters, an elevator pitch, and answers to common interview questions. The fifth module (Establish and Grow Your Network) helps students establish their networking strategy and exposes students to different online networking platforms like LinkedIn and SallyPortal, a Gradway mentorship platform specific to Rice. The final module focuses on next steps with a final reflection on the course and a discussion on goal setting.

Though the primary POP course delivery is asynchronous, students are required to meet with their course instructor, who serves as a CCD career counselor or advisor, at least two times during the semester. The first meeting helps students build trust with the instructor and discuss their goals for POP. During the second meeting, the instructor assesses the student’s progress, answers questions, and provides the student with any additional resources. These meetings enhance the online touchpoints embedded into the course by building psychological safety for open discussion and additional engagement with the CCD. The instructor, as well as the other career counselors and advisors,

operate as generalists by serving all students instead of specializing in careers for a specific major. The counseling team empowers students to apply lifelong career development principles to decision making and action planning.

## Assessment Methods & Design

To assess the effectiveness of the POP curriculum, the instructor implemented pre- and post-class surveys administered through Google Forms. These surveys evaluated the achievement of the broad POP learning outcomes and content module learning objectives based on the curriculum. They included questions related to topical objectives along with more ancillary questions like whether a student connected with the CCD prior to the course or their preferred communication format. In addition to the curricular pre- and post-surveys, Rice also administers course evaluations; however, the questions asked in the evaluation did not inform our review of the pilot's learning objectives.

A total of 22 students completed POP for both the Fall and Spring semesters. Twelve students participated in POP's Fall 2020 cohort. Eight students completed the pre-test and those eight plus one additional for a total of nine students completed the post-test. For the POP Spring 2021 cohort, ten students participated in the course. Seven students completed the pre-and post-tests. All of these students were of diverse classifications, majors, and backgrounds.

In addition to the surveys, future data will be collected to examine whether students who completed POP have secured an outcome at graduation and at 6 months post-graduation at a higher rate than students who do not complete POP. Students' first destination outcomes data are later collected through a Senior Exit Survey and 6 month follow up survey.

## Assessment Findings

For both POP cohorts, for each curricular question, more students reported gaining awareness, confidence, and knowledge in their career development skills and key career tools, in addition to a deepened understanding of how to deploy their learnings for their career.

In addition to the surveys, students offered qualitative feedback on their experience with POP. One student stated, "The course allowed me to truly narrow down my options when entering the professional world. I was able to connect with people at top companies and learned how to approach them in a compelling way."

As shown in Figure 8.1, students displayed growth across five key curricular areas: flex or 21st century skills, crafting strong bullet points, effective LinkedIn profile, and using the STARR interviewing method. In the pre-test, administered before the class began, 13% of students reported an awareness of their flex or 21st century skills; confidence in crafting strong bullet points, an effective LinkedIn Profile and confidence in conducting an internship or job search. Zero percent of students knew how to prepare for behavioral interviews using the STARR method.

As shown in Figure 8.2, students produced similar results for the key curricular areas. In the pre-test, administered before the class began, 14% of students reported an awareness of their flex or 21st century skills and confidence in conducting an internship or job search. More students in the Spring cohort believed they have an effective LinkedIn Profile (28%) and have confidence in crafting strong bullet points (43%). Once again, zero percent of students knew how to prepare for behavioral interviews using the STARR method.

After completing POP, students demonstrated tremendous gains across each of these learning objectives through their responses on the post test.

The team looks forward to analyzing outcome and internship data as it becomes available as students continue towards graduation. Rice collects internship data from undergraduate students through the Survey of All Students, which is administered during the fall semester.

Figure 8.1 Fall Cohort Pre-Test Versus Post-Test

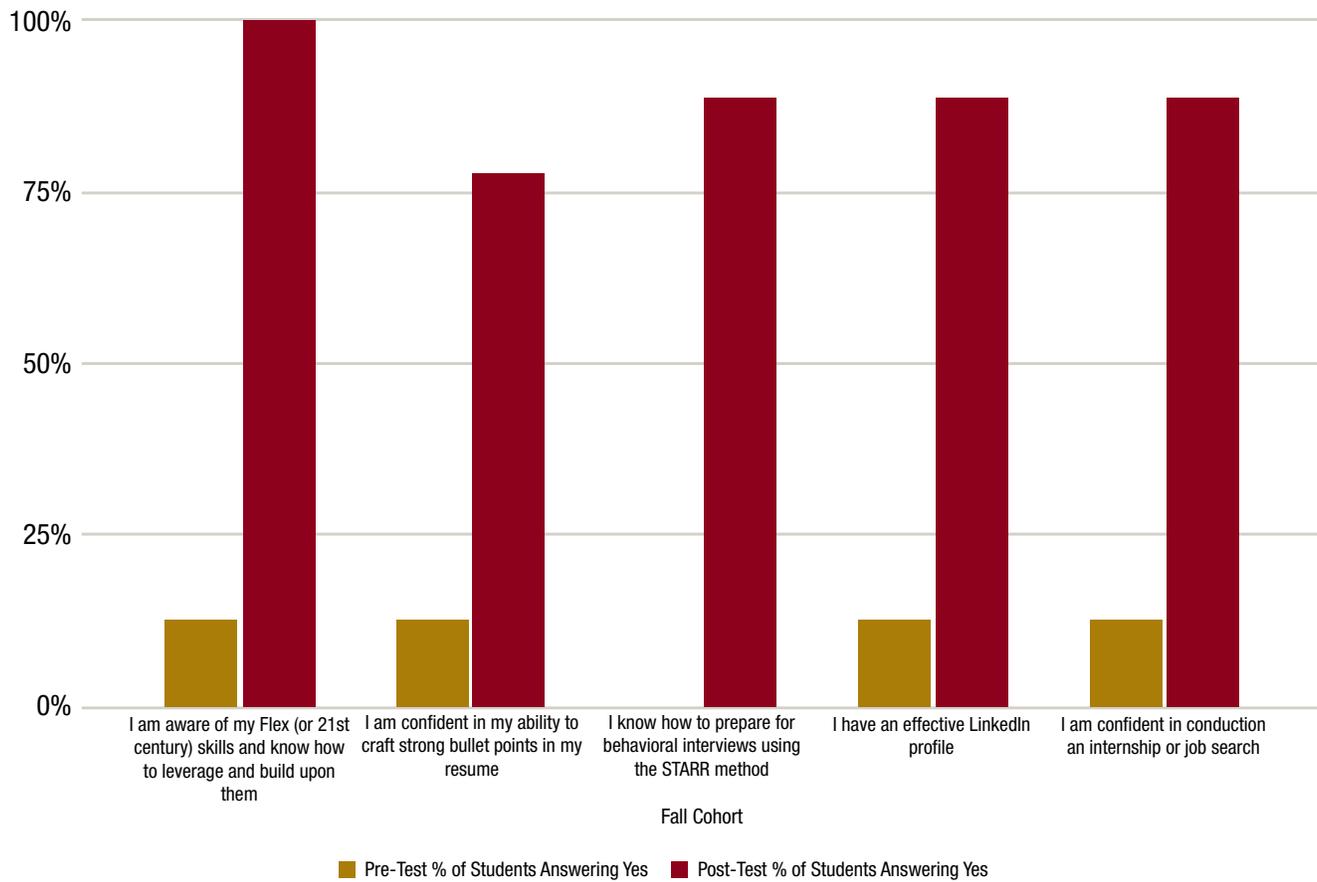
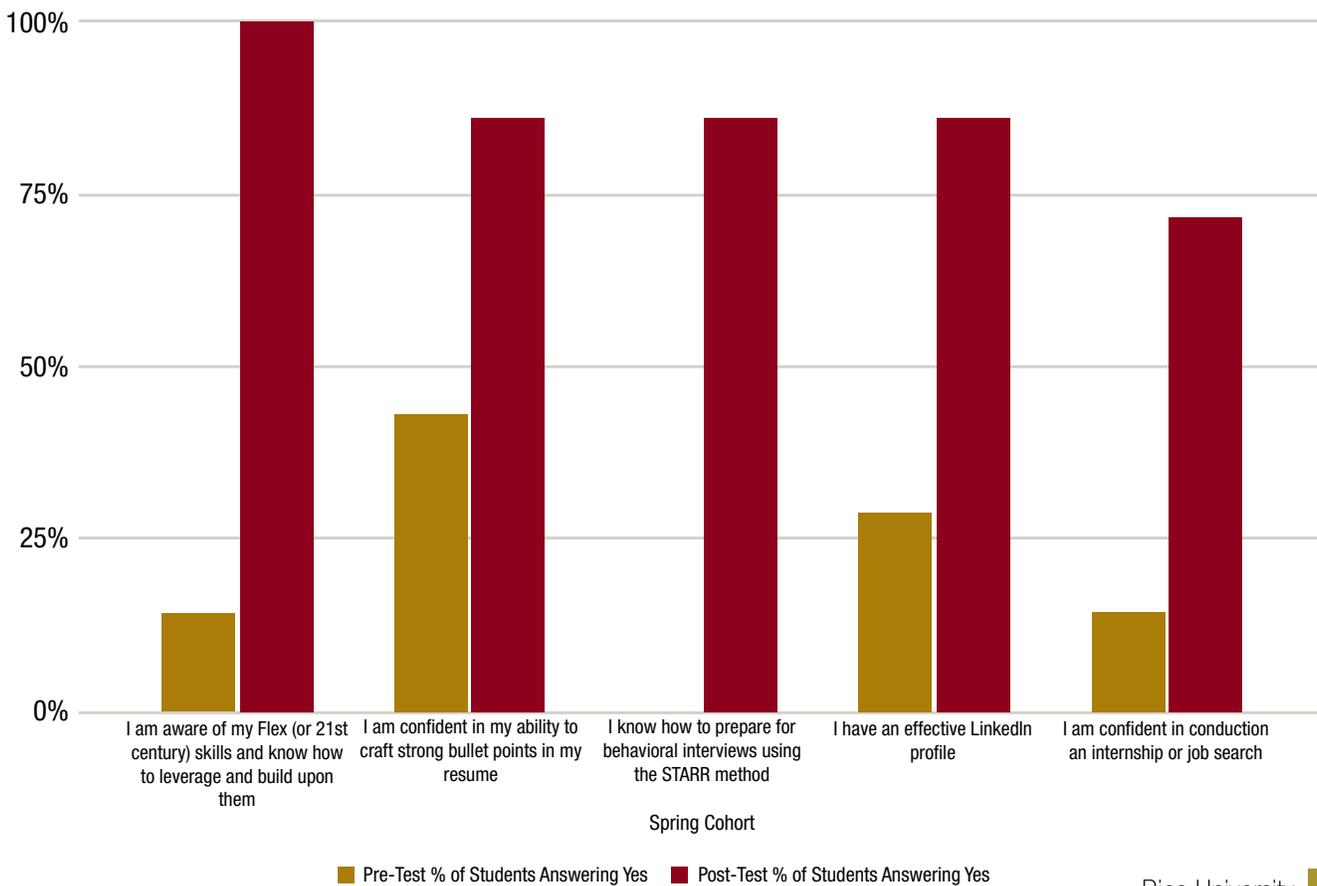


Figure 8.2 Spring Cohort Pre-Test Versus Post-Test



## Implications for Practice

As a pilot, POP was successful in giving students holistic guidance on career planning. It helped students understand the different career elements and that career does not have to be a linear approach. The next goal would be to continue expansion of POP. The CCD plans to do this by leveraging more campus partners, especially those that support first-generation, underrepresented and marginalized populations. The CCD will also continue to expand marketing of the POP program to students through CCD career workshops and during Rice orientation sessions. On the Rice campus, peer recommendations for course selection are highly valued. Student testimonials from both Fall and Spring cohorts will be shared to further enhance marketing efforts.

As part of the Rice V2C2, POP embodies the idea of providing students with a transformative education while ensuring access to all members of the undergraduate Rice community. Through POP, the CCD approached student learning equitably by acknowledging that not all students start on the same path for career development and may value learning in different ways. POP allowed students to reflect on their experience and develop a professional plan with support during each step regardless of varied familiarity with the career topics.

Leadership at Rice has recognized the value of experiential and professional development opportunities provided to students through the CCD. As Rice expands their efforts to enroll more students of diverse racial and socioeconomic backgrounds, POP can serve as the tool to start students off on a strong footing for their future. As shared by one POP pilot participant, “This class was super helpful! It provided me a lot of tools for navigating my future educational and career paths. I feel way more equipped to navigate the future than I had previously.”

## References

- Dick, W. (1996). The Dick and Carey Model: Will it survive the decade? *Educational Technology Research and Development*, 44(3), 55–63.
- Hansen, J. M., Jackson, A. P., & Pedersen, T. R. (2017). Career development courses and educational Outcomes: Do career courses make a difference? *Journal of Career Development*, 44(3), 209–223.
- Martin, F., Stamper, B., & Flowers, C. (2020). Examining student perception of readiness for online learning: Importance and confidence. *Online Learning*, 24(2). <https://doi.org/10.24059/olj.v24i2.2053>
- National Association of Colleges and Employers (NACE). (2021). *Career readiness: Competencies for a career-ready workforce*. <https://www.naceweb.org/uploadedfiles/files/2021/resources/nace-career-readiness-competencies-revised-apr-2021.pdf>
- Rice University. (2018). *Vision for the Second Century, Second Decade (V2C2): Rice University's strategic plan*. <https://v2c2.rice.edu/sites/g/files/bxs3336/files/2020-01/V2C2-Supporting-Documents-2018.pdf>

## Contact

Raylea Rideau, Ph.D.  
Assistant Director, Career Development  
Rice University  
Email: [rdr3@rice.edu](mailto:rdr3@rice.edu)

Ann McAdam Griffin  
Associate Director, Career Development  
Rice University  
Email: [amg@rice.edu](mailto:amg@rice.edu)

Michelle Passo  
Experiential Education Program Manager  
Rice University  
Email: [mip2@rice.edu](mailto:mip2@rice.edu)

# 9 | SUNY Old Westbury College Sophomore Shadow Program

Kaitlin Janes

## Institutional Profile

The College at Old Westbury (OW) is a comprehensive four-year college within the State University of New York's (SUNY) 64-campus system. The most diverse comprehensive college in the SUNY system, the college upholds its traditions of providing educational access to an ethnically, racially, and economically diverse student body it serves and cultivates a respect for diversity. SUNY Old Westbury is a Minority Serving Institution and recently designated as a Hispanic Serving Institution. Approximately one-third of the student population identifies as first generation. SUNY Old Westbury defines a first-generation student as one whose parents or guardians did not complete a four-year college degree. Financially, 86% of students receive some form of financial assistance, with 61% receiving federal Pell grant. As of 2019, SUNY Old Westbury student population included 800 campus residents and 4,000 commuter students. The graduation rate of first time-to-college students in 2019 was 48.8%. As of 2020, the number of full-time enrolled undergraduate students were 4,742. The pilot group of Sophomore Shadow represents SUNY Old Westbury's diverse student body. See Table 9.1 and 9.2 for further enrollment information.

## Sophomore Jump

Sophomore Jump is a collaborative effort among multiple departments and offices on campus to provide second-year students with support. Through Sophomore Jump, students have access to skill development workshops, financial literacy education, academic advising, academic degree planning, faculty mentorship, and career exploration. The overarching goal of the second-year experience program is to increase retention and graduation rates.

Sophomore Jump is the larger second-year experience program that houses the Sophomore Shadow program. Sophomore Jump aims to serve the sophomore class, which is defined by students in their second year of college regardless of credit standing. With the diversity of our student body and considerable number of commuter students, offering flexibility in our programming is critical to provide equal opportunities for students to engage with the campus community. See Table 9.3 for demographic information of the Sophomore Shadow program

Table 9.1 *Student Demographics – Fall 2020 term (all enrolled students)*

<b>Race-Ethnicity</b>	<b>%</b>
American Indian or Alaskan Native	0.40%
Asian	10.60%
Black or African American	24.70%
Hispanic	33.20%
Native Hawaiian or other Pacific Islander	0.20%
White	26.40%
Unknown or Multi-racial	3.70%
Non-Residents	0.80%
Totals	100.00%

Source: INR\_SDS\_EXTRACT reports, based on student self-identification

Table 9.2 *Enrollment by Gender Fall 2020*

<b>Gender</b>	<b>%</b>
Male	39.40%
Female	60.50%
Other	0.10%

Table 9.3 *Sophomore Shadow student demographics*

<b>Race-Ethnicity</b>	<b>Number of Students</b>
Black or African American	9 (47%)
Asian	1 (5.9%)
Hispanic or Latinx	3 (23.5%)
White	2 (11.8%)
Two or more races	2 (11.8%)
Totals	17 (100%)
<b>Gender</b>	<b>Number of Students</b>
Male	2 (11.8%)
Female	15 (88.2%)

## Design & Delivery of Sophomore Shadow

Funding from a Title III- Strengthening Institutions Program grant enabled Sophomore Jump to develop and implement a new, career-oriented program called Sophomore Shadow. This program focuses on career exploration, networking, and professional development for a pilot group of students. Due to the COVID-19 pandemic, the program was entirely virtual for Fall 2020-Spring 2021.

Sophomore Shadow was created with the goal of providing opportunities for students to explore career interests, engage in professional development and goal setting, and become better prepared to participate in advanced learning opportunities in their junior year. The design of Sophomore Shadow was influenced by Baxter Magolda's Theory of Self-Authorship, Astin's Theory of Involvement, and Arthur Chickering's Seven Vectors of Development (Evans et al., 2010). Based on these theories, it was key for the students to remain at the center of the development process and play an active role in the preparation and reflection components of the program. Through use of a theory-to-practice approach, the

student engagements became an active learning space wherein students reflect on themselves and make educational and professional decisions based on their self-knowledge.

## Practices in Equity

Focus was placed on providing an equal opportunity for students to participate fully in the program. Greater emphasis was placed on skills building, training, and providing prompt and personalized feedback throughout the program. The importance of acknowledging student developmental differences and taking steps to bring success to all students within the program was recognized. The structure and content of the program were careful to incorporate the student's level of knowledge and skill set. Training activities conducted in the Fall 2020 semester emphasized skills development and consisted of Resume Writing, Networking, and Informational Interviewing Skills. Students were also introduced to self-assessment and career research tools during training. The engagements with professionals in the Spring 2021 semester provided students with clear guidance on what it takes to succeed in their intended career field. Professionals from similar backgrounds to the student population were highly sought and utilized. Preparation and reflection were built into the program through regular meetings with program staff and reflection questionnaires. The reflections enabled students to connect the information received with their own career paths and identify action items to continue their learning and development. The individualized attention ensured that each student was able to fully participate and learn from the experience.

## Engagements with Professionals

Students who participated in the pilot program were divided into the following industry groups: Law, Clinical Psychology, Forensic Psychology, Healthcare, Education, Pharmaceuticals, and Accounting.

The program's structure included scaffolding within the experience as a part of the preparation process leading up to the one-on-one informational interview with an experienced professional. At the beginning stage of the program, group meetings were arranged to provide students with foundational knowledge to become better informed and to ask targeted questions to the professionals scheduled later in the program. Group meetings were scheduled with current graduate students in a program related to their career field, Graduate Program Coordinators, or Pre-Professional advisors to discuss basics of pursuing their intended

careers. In addition, 47 professionals with varying degrees of experience engaged with the 17 students in the program. Twenty-eight were connected to Old Westbury, as either faculty (6), staff (2), alums (12), or current senior undergraduate or graduate students (8). Collaboration with academic departments enabled students to become familiar with the people, resources, and programs available to them within their campus community (See Figure 9.1).

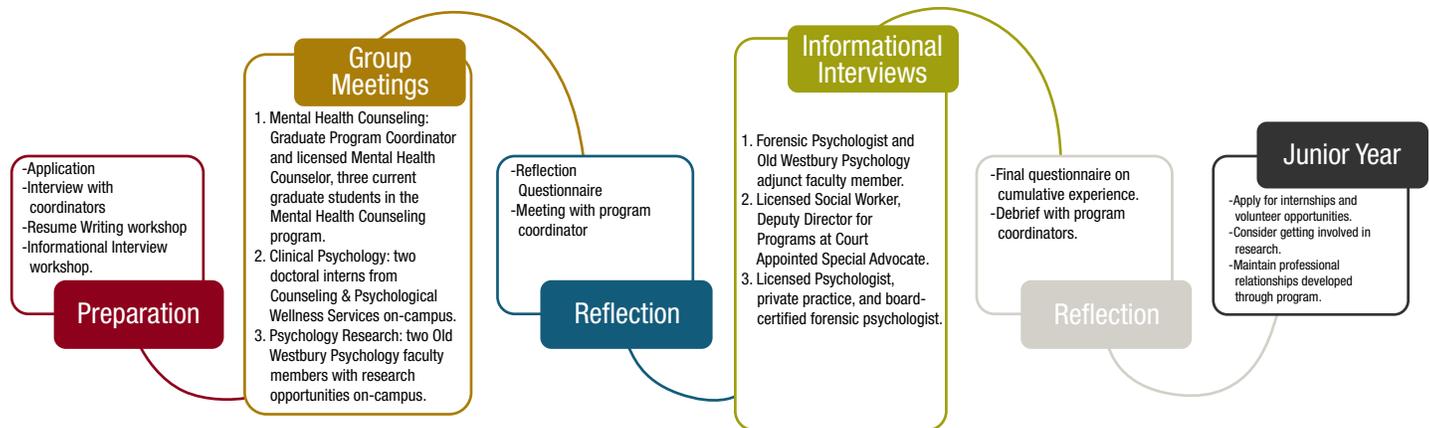
After participating in group meetings, informational interviews were arranged with professionals for each student. The professionals were selected carefully and with consultation from the students to ensure they had a genuine interest in the position and field. Part of the program involved developing a specialized database of professionals which included partnerships with local non-profit organizations. Many students in the program met with more than one professional which allowed them to gain different perspectives on their field of interest. Figure 9.1 below illustrates the Sophomore Shadow approach with a sample student's journey.

## Assessment Methods & Design

The larger institutional goals of the program include increasing rates of sophomore retention and persistence to graduation. Additionally, the program intends to increase the number of students in the junior year who participate in an advanced learning opportunity and decrease the number of students who change their major. Quantitative data collected on students who participated in the program is compared to the general sophomore population to assess program effectiveness. Students who actively participate in Sophomore Jump are tagged and tracked using EAB Navigate. Outcomes are measured by tracking the number of students who participate in advanced learning opportunities, and the number of students who officially change their declared major in junior year. In the future, post-graduation results related to employment and continued education will be collected through surveys.

Student learning objectives for the Sophomore Shadow program were developed based on the Council for the Advancement of Standards in Higher Education (CAS) Student Learning and Development Outcomes and National Association of Colleges and Employers (NACE) Career Readiness Competencies. From CAS, the outcomes focused on three domains: knowledge

Figure 9.1 Female, 19 years, Black/African American, Criminology major with Psychology minor, Field of Interest: Forensic Psychology, Student Groups: Clinical Psychology, Forensic Psychology



acquisition, construction, integration and application, interpersonal competence, and cognitive complexity (Council for the Advancement of Standards in Higher Education, 2015). From NACE, career readiness is defined as a foundation from which to demonstrate requisite core competencies that broadly prepare the college educated for success in the workplace and lifelong career management (National Association of Colleges and Employers, 2021). Program outcomes focused on professionalism, teamwork, communication, critical thinking, and career & self-development. Student learning objectives are measured qualitatively, and data is collected using surveys, reflection questionnaires, and interviews.

Student learning objectives for the program:

- Awareness of one person or office on campus that can assist with career planning and development
- Ability to list at least three marketable and/or transferable skills obtained through academic or professional experience
- Awareness of ways to gain experience relevant career before graduating
- Familiar with one office or resource at Old Westbury used to find opportunities and events on campus related academic or professional development
- Knowledgeable of the steps needed to build a professional network
- Familiar with at least one resource used to explore and gather information related to major and career options

## Assessment Findings

Students who participated in the pilot program demonstrated success in learning and development as measured by the post-assessment interview and survey responses. One hundred percent of students surveyed agreed or strongly agreed with all six learning objective statements. Regarding the program assessment outcomes, 100% of students expressed an increase of confidence in their chosen career fields and their ability to continue their career development. Further assessment and analysis of the qualitative and quantitative data collected from this pilot program is ongoing. Professionals were surveyed on their experience and satisfaction with the program. One hundred percent of professionals surveyed expressed a strong willingness to participate again next year and stated the students were well prepared for their engagement. Students' feedback was overwhelmingly positive, with all stating they found the experience to be beneficial and insightful.

In the future, longitudinal assessment of retention, graduation, and post-graduation results will be conducted as the cohort progresses to graduation and beyond. Using the college's student success management system, EAB Navigate, students are tagged by graduating class and can then be tracked as they progress to graduation.

As of June 2021, 78% of the sophomore cohort have enrolled for the Fall 2021 semester, compared with 94% of the Sophomore Shadow pilot group. Retention numbers are not

finalized until after the end of the Fall 2021 registration period in September. See Tables 9.4 and 9.5 for retention outcomes by student demographic.

## Implications for Practice

Sophomore retention is an institutional priority. The efforts of Sophomore Shadow program were recognized by the Middle States Commission on Higher Education during their 2021 accreditation visit. This pilot case study had sufficient positive results to continue and expand to serve a greater number of sophomore students in the program. A unique but replicable aspect of the program that was cited by the students as being highly beneficial was the individualized support provided by the Sophomore Shadow

program staff as the students progressed through the program. The program design allowed students to start with who they are, their interests and passions, and then engage in self-assessment and reflection to better understand themselves. The program was then tailored specifically to their needs and interests. Students were encouraged to provide input on new interests throughout the program, so their professional engagements remained relevant. The relationships students form with peers, faculty, and professionals from inside and outside Old Westbury's community help establish personal support systems, open doors to more advanced opportunities, and advance equity.

Connecting students to tools and resources within their campus community, providing individualized support and encouraging self-reflection are cornerstones of the Sophomore Shadow program. To strengthen the program moving forward, the size of

*Table 9.4 Sophomore student retention outcomes by demographic (as of June 2021)*

<b>Race-Ethnicity</b>	<b>Number of students enrolled Fall 2021</b>	<b>% Retained</b>
American Indian or Alaskan Native	3	50%
Asian	50	78%
Black or African American	114	73%
Hispanic	54	84%
Native Hawaiian or other Pacific Islander	3	75%
White	69	84%
Two or more races	12	92%
Unreported/not assigned or Other	6	75%
Totals	311	78%

*Table 9.5 Sophomore Shadow student retention outcomes by demographic (as of June 2021)*

<b>Race-Ethnicity</b>	<b>Number of students enrolled Fall 2021</b>	<b>% Retained</b>
American Indian or Alaskan Native	N/A	N/A
Asian	0	0%
Black or African American	9	100%
Hispanic	3	100%
Native Hawaiian or other Pacific Islander	N/A	N/A
White	2	100%
Two or more races	2	100%
Unreported/not assigned or Other	N/A	N/A
Totals	16	94%

the industry groups will increase as the overall number of participating students increases. The number of group meetings with professionals, especially from within the OW campus community, will also increase. Group reflection meetings by industry will be implemented as an active learning process while also increasing student peer interaction to strengthen community building. The virtual setting alleviated some original program limitations including meeting location and travel costs. The flexibility of virtual meetings helped inform the decision to transition the program to a hybrid model, which will incorporate both virtual and in-person meetings. Program participants will continue to receive individual interviews and reflection meetings at the start and end of the program to keep the personalized aspect of the program intact.

## Contact



Kaitlin Janes  
Sophomore Jump Coordinator and Academic Advisor  
SUNY Old Westbury College  
Email: [janesk@oldwestbury.edu](mailto:janesk@oldwestbury.edu)

## References



Council for the Advancement of Standards in Higher Education (2015). CAS learning and development outcomes. In J. B. Wells (Ed.), *CAS professional standards for higher education* (9th ed.). Washington, DC: Author.

Evans, N. J., Forney, D. S., Guido, F. M., Patton, L. D., & Renn, K. A. (2010). *Student development in college: theory, research, and practice* (2nd ed.). Jossey-Bass.

National Association of Colleges and Employers. (2021). What Is Career Readiness? *What is Career Readiness?* <https://www.naceweb.org/career-readiness/competencies/career-readiness-defined/>.

# 10 | University of South Carolina Career Champions Program

Ashley Byrd-White

## Institutional Profile

The University of South Carolina (UofSC) is a public four-year institution in Columbia, South Carolina. The number of full-time students enrolled in the 2020-2021 academic year was 27,162. Forty-six percent of students are male while 54% of students are female. Less than 1% of first-time, first-year students are over the age of 25 while 3% of all undergraduates are over the age of 25. The student demographic makeup for degree-seeking undergraduates is as follows: 2.2% nonresident aliens, 5.3% Hispanic/Latino, 8.8% Black or African American, non-Hispanic, 74.6% White, non-Hispanic, 0.17% American Indian or Alaska Native, non-Hispanic, .08% Native Hawaiian or other Pacific Islander, non-Hispanic, 4.2% two or more races, non-Hispanic, 0.83% Race and/or ethnicity unknown. In total, 6% of first-time, first-year students commute and a total of 73% of undergraduate students commute. The institutional graduation rate is 78% while the institutional job/career placement rate is 73%. Approximately 19% of students are first-generation (which is defined as having both of his/her living parent(s) or stepparent(s) as self-reported on the application for admissions have less than a 4-year college degree.) and 19% of students are Pell grant-receiving students.

## Career Champions Program

In fall 2017, the UofSC's Career Center created the Career Champions program. The thought leadership for the program was inspired by the consensus that University of South Carolina students organically build relationships beyond the walls of the Career Center. Not to mention, students often turn to mentors, supervisors, faculty, staff, and academic advisors to ask questions and seek guidance with their career path. The Career Champions program was created to educate and empower campus faculty and staff on best practices to have career conversations with students. Thus, the Career Champions program is open to faculty, staff, and graduate assistants, as they are often in communication frequently with students. Since fall 2017, there have been 364 attendees at the trainings. This program has evolved tremendously resulting in the creation of additional training levels and an online community for past participants. However, the overall goals remain the same:

- To empower and educate faculty and staff to gain skills and tools to enhance their impact of career planning conversations with students;
- To develop an opportunity for service extension/scalability; and

- To deliver consistent messaging to students regarding employability.

Each training session has a PowerPoint and a workbook for participants. In addition, resources are provided for participants to implement with their students. Traditionally, all training is held in-person but has since moved to asynchronous online delivery method. One of the beneficial aspects about the Career Champions program is that the topics we train our faculty, staff, and graduate assistants on can be implemented and beneficial for students at any point in their college career.

When the program was first created it consisted of one training. The initial training was a three-hour session that focused on career exploration and general professional life skills with learning outcomes for level as follows:

- Participants will gain a basic knowledge of career development theory and the career decision making process;
- Participants will learn how to assist students with goal setting in relation to their career development;
- Participants will gain a foundation of basic helping skills to best assist students with career planning;
- Participants will learn how to make an effective referral to the Career Center; and
- Participants will learn the professional and ethical guidelines as outlined through NACE.

In Spring 2019, a level two was created which focuses on experiential education. The level two training is a two-hour session which was soon added as an elective training session for the University of South Carolina's Center for Integrative and Experiential Learning. The learning outcomes for level two are as follows:

- Participants will gain knowledge around experiential education;
- Participants will identify different opportunities in the Career Center and beyond available for students to gain experience;
- Participants will identify ways to help students discover what opportunities they are interested in and know where to find them;
- Participants will gain knowledge in how to support students while they are involved in their experience to make it more impactful;

- Participants will articulate ways on how to encourage reflection during and after the experience; and
- Participants will identify ways on how to handle concerns that can arise while a student is participating in an experiential education opportunity.

In Fall 2019, a level three was created that focuses on transferable skills, more specifically the NACE core competencies. Level three is a two-and-a-half-hour training with its own learning outcomes:

- Participants will be able to define career readiness and explain what it means to be "career ready;"
- Participants will be able to explain the importance of career readiness with our students;
- Participants will be able to identify and define the 8 core competencies as outlined by NACE; and
- Participants will be able to create activities to foster competency development and reflection with their students.

In support of the University's strategic plan (Focus Carolina 2023) and our university values as articulated through the Carolinian Creed, the equity and inclusion plan focuses on creating and sustaining an inclusive learning, living and working environment where all members of the university's community feel that they are valued and supported. We transform our university by attracting and retaining a diverse population of students, faculty and staff who enhance our teaching, learning, scholarship and community outreach. One of the pillars of the Career Champion program is that it promotes the philosophy of "career everywhere." In addition, the institution strategic plan includes *Increase Diversity* as Strategic IPriority 4. Under *Increase Diversity*, the University outlines the importance of ensuring equity for all students across key measures of success. This includes improving outcomes for students from underrepresented, low-income, and other marginalized groups. Often, we have found that students are not going to go out of their way to connect with the Career Center. However, when students are intentionally connected with trained academic advisors, TRiO program coordinators, and other staff and faculty, we can better assist with career planning and thus, help students achieve better outcomes upon graduation.

## Assessment Methods & Design

Each level of training has its own post-assessment. The first assessment is a survey that is given to all participants to complete at the end of each training session. The questions are based on the learning outcomes as well as questions on overall satisfaction, what could be improved, and additional topics to learn more about. In total, 218 participants have completed the Level I initial assessment, 53 have completed the Level II initial assessment, and 25 have completed the initial Level III assessment.

The second assessment is administered electronically six-months post-training. This assessment is sent to all recent past participants. This assessment gauges if and how the training has helped participants in their work with students. In addition, it offers participants to share what aspect of the training was the most helpful what topics they would like to learn more about, and if they would be interested in additional training. In total, 55 participants have responded to the six-month post training survey. We believe the low response rate is due to it being an electronic survey sent via email.

## Assessment Findings

The assessment findings for the Career Champion program have been very positive and have resulted in making positive changes to the program.

A full representation of the survey questions for Level I is shown in Table 10.1. Of note, there were some highlights shared from faculty and staff who provided feedback on Level I of the Career Champions program through our question: Please share what you liked about the training today:

*“Good content. Lots of good takeaways - seemed applicable.”*

*“Getting resources that I can use with my students.”*

*“I really enjoyed learning about the different models for career decision making and how to utilize these when talking with students.”*

Of note, there were some highlights shared from faculty and staff who provided feedback on Level II of the Career Champions program (see Table 10.2):

*“I appreciated the ideas for how to connect with students before, during, and after experiences.”*

*“It was informative and thought provoking. Really enjoyed it!”*

Table 10.1 Assessment findings for the initial Level I training survey

Survey Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
As a result of this training, I am more knowledgeable of the career decision making process:	66.5%	31.2%	1.4%	0.9%	–
As a result of this training, I am more knowledgeable of career development theory:	70.6%	26.1%	2.8%	0.5%	–
As a result of this training, I feel more equipped to assist students with goal setting regarding their career development:	66.1%	29.8%	4.1%	–	–
As a result of this training, I feel more equipped to utilize helping skills in the career decision making process:	64.7%	30.3%	4.6%	0.5%	–
As a result of this training, I understand the ethical guidelines regarding candidate referrals, student reneging on a job offer and serving as a reference:	63.8%	31.7%	4.6%	–	–
As a result of this training, I know how to make an effective referral to the Career Center:	70.2%	26.6%	2.8%	0.5%	–

*"I find these to be very helpful! I encourage my coworkers to attend. I appreciate the practical applications and materials."*

*tion covered, then get specific ideas from others on how to implement that. It gave us some good ideas for how to help students in our area."*

Finally, Table 10.3 represents the Level III survey feedback. A few highlights from faculty and staff who provided feedback on Level III of the Career Champions program through our include:

The data from the six-month post assessment also shows promising signs of the program's impact. In fact, 32.7% of respondents said the Career Champion training and materials were very helpful while 45.5% said it was helpful. In addition, when asked in what ways have you applied the training to your work with students, participants shared . . .

*"I liked the how and why for each competency. I think this is a great workshop/program."*

*"Interactive, important, and relevant"*

*"Lots of good information and discussion from others on campus. It was good to have the basic workshop informa-*

*Referring students to career center for resume workshops, mock interviews, finding internship opportunities. Also helping*

**Table 10.2 Assessment findings for the initial Level II training survey**

Survey Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
As a result of this training, I am more knowledgeable of what Experiential Education is:	60.4%	32.1%	7.5%	—	—
As a result of this training, I am more knowledgeable of the different opportunities for Experiential Education at UofSC:	75.5%	20.8%	3.8%	—	—
As a result of this training, I feel more equipped to assist students before they have an experience:	64.2%	35.8%	—	—	—
As a result of this training, I feel more equipped to assist students during an experience:	66%	32.1%	1.9%	—	—
As a result of this training, I feel more equipped to assist students after they have an experience:	67.9%	32.1%	—	—	—
As a result of this training, I understand why a quality, reflective Experiential Education opportunity is important for all students:	77.4%	20.8%	1.9%	—	—

**Table 10.3 Assessment findings for the initial Level III training survey**

Survey Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
As a result of this training, I am more knowledgeable of what it means to be career ready:	72%	28%	—	—	—
As a result of this training, I am more aware of the competencies employers are looking for in recent grads:	84%	8%	8%	—	—
As a result of this training, I feel more equipped to articulate the importance of the core competencies to students:	72%	24%	4%	—	—
As a result of this training, I feel more equipped to create exercises for students to develop the core competencies:	64%	32%	4%	—	—
As a result of this training, I feel more equipped to facilitate reflection for students around the core competencies:	68%	24%	8%	—	—
As a result of this training, I feel more empowered to help our students become career ready:	76%	20%	4%	—	—

*skills: asking students what their interests are, direct them to the career center and also suggest internship/field/employment/service options related to their skills & interests based on my own knowledge of surrounding community and options available."*

*"I now have materials to use to ask questions that will lead to the students having a clearer understanding of what they really want to pursue in life."*

*"Everyday conversations with my students; educating them about what's important to for their future careers and what employers want/look for."*

One large gap in our assessment is assessment from the students directly. It is hard to capture the student impact when these conversations are occurring organically. However, when looking at data from where our referrals to the Career Center are coming from, we have documented the data in Table 10.4.

We can then see that the percent of referrals coming from Career Champions is increasing each year. While we cannot say this is a result of the Career Champion program, it is worth noting.

## Implications for Practice

In a survey we conducted with a small sample of our students, we found that 32.5% of students said they would go to an academic advisor first for trusted career guidance. In addition, 25.7% said they would go to a faculty member first. Compare these data points to 16.4% that said they would go to the Career Center. Additionally, in the same survey we found that 95% of respondents said they would appreciate the opportunity to discuss their future plans/career if a faculty or staff member started the conversation. These data points help us understand the bigger picture and help us think about equity and access.

Early career planning and exposure to career related opportunities help students have a successful outcome. The Career Champion program increases access to career resources for students that may need it. By training faculty and staff that interact with students outside the Career Center, we are ensuring students that may never come to the Career Center still get the guidance they need.

## Contact

Ashley Byrd-White  
 Director of Graduate Career Education (MIB)  
 University of South Carolina  
 Email: [Byrdac@mailbox.sc.edu](mailto:Byrdac@mailbox.sc.edu)

Table 10.4 Career Center Referrals

Career Champion Referring	2020-2021	2019-2020	2018-2019
Yes	43% (N=34)	38.8% (N=56)	29.8% (N=74)
No	57% (N=45)	61.1% (N=88)	70.2% (N=174)

# 11

## University of the Fraser Valley Career Success as a Lifelong Journey: A Capstone Course Case Study

Candy T. Y. Ho

### Institutional Profile

The University of the Fraser Valley (UFV) is a public, four-year teaching-intensive university located in Abbotsford, British Columbia (Canada). Designated as a special purpose teaching university serving the province of British Columbia, the institution offers more than 100 programs, including master's degrees and graduate certificates, bachelor's degrees (with majors, minors, and extended minors in more than 35 subject areas), undergraduate certificates, diplomas, associate degrees, and adult training, trades, and technology programs (UFV, 2021a).

UFV serves a diverse student demographic of over 15,000 students, with a 57:43 female to male ratio. Approximately 200 students (1%) live on campus and 825 are self-declared (5%) as Indigenous. There are 2,353 international students (15%) representing 49 countries, with the top five home countries being India, China, Vietnam, Republic of Korea, and Japan. In the 2019-20 academic year, 2,608 credentials were conferred, with an institutional job/career placement rate being 88%. In 2020, the percentage of first-generation students, defined as students with neither parent having any post-secondary education, was 22% (UFV, 2021a).

# PORT 399: A Career Capstone Course

This case study defies what some may perceive to be a traditional model of advising; it describes the development and delivery of a senior-level university course that focuses on instructional guidance and student personal reflection as its fundamental advising components. Combined, students are supported in their transition between an undergraduate education and their post-University work or educational journey. In this model, the instructor serves as a Career Influencer – an informal advisor who guides and helps students develop career skills and competencies through the facilitation of curricular and co-curricular activities (Ho, 2019) – while the students themselves use their own self-reflection to guide their journey and process of self-discovery.

Portfolio (PORT) courses have existed within UFV's College of Arts since 2018 with the intention to assist students with translating their education into skills and experience relevant to their career aspirations. Students' career paths are not always explicit as compared to their counterparts in disciplines such as business, trades, and science (Hartley, 2017). PORT courses were originally inspired by the Association of American Colleges and Universities' (AAC&U) research and resources on curricular and pedagogical innovation (AAC&U, 2021).

The decision to incorporate PORT courses as compulsory in the Bachelor of Arts (BA) program was spearheaded by the Associate Dean of Students, who chaired the College of Arts Curriculum Committee (CACC). Between 2015 and 2017 when the College was revising the BA degree, a Program Working Group (PWG) was formed that consisted of CACC representatives and an Academic Advisor, who consulted with students, faculty members, and department heads. This ultimately led to the recommendation for PORT courses to be included in the BA program.

Specifically, *PORT 399: Designing Career Mobility* is a three-credit capstone course designed for all Bachelor of Arts students with at least 75 university-level credits. In the course, students reflect on their undergraduate journey by connecting co-curricular and curricular experiences and identifying transferable skills and experiences they can leverage as they prepare for graduation. The course description states:

Drawing on skills learned throughout their degree, students will research and learn strategies needed for a successful transition from university into work, graduate studies, or post-university life; or for increasing their career mobility. Students will engage in critical discussions and produce assignments related to professional practices, participation in a learning economy, the future of work, and their exploration of career mobility throughout a lifespan as a way to design their work/life career pathways (UFV, 2021b).

PORT 399 is available as a semester-long, 13-week course during spring and fall terms; in the summer semester it is offered as a condensed seven-week course. Since UFV is a teaching-intensive institution that emphasizes quality teaching, each course section has a maximum of 36 students. Most of the course content is taught asynchronously online, with monthly synchronous in-person classes which have pivoted online due to the COVID-19 pandemic and consists of the following key topics:

- Contextualizing one's career as their "constellation of life roles" (Super, Savickas, & Super, 1996) to expand the notion of career to encompass civic and social responsibilities;
- Identifying skills, abilities, and traits developed during undergraduate studies that are relevant to aspired possible futures;
- Conducting research and information interviews to enhance understanding of desired professional field(s), labour market and future work trends;
- Constructing applications and ePortfolios, accompanied with artifacts, to showcase unique value propositions to employers and school programs; and
- Understanding how career planned happenstance, in forms of unexpected and chance events, can play a role to influence one's career decisions (Krumboltz, 2011).

The course adopts an equitable "choose your own adventure" approach, where course instructors work with students to explore their career aspirations and to identify actions to realize these aspirations. The student demographic is quite diverse and comprises students who are: first-generation, BIPOC, single parents, mature and experienced, international, and neurodiverse. As such, students' choice of adventures can range from landing their first professional role, applying to graduate studies, giving back to their Indigenous communities, transitioning to retirement, to

becoming an entrepreneur. Often, assignments are adapted to suit students' individual needs. For example, a student suffering from a chronic illness aspired to become an advocate for individuals with similar health conditions; in lieu of an ePortfolio, she created a website providing resources and coping strategies, as well as a list of workshop topics she could facilitate for related organizations. Additionally, she also submitted a business plan on how she would promote her website and advocacy work. In this sense, students remain agents of their own learning and benefit from pursuing renewable assignments whose value extends beyond the course (Seraphin et al., 2019).

## Interdepartmental partnerships

The course has several wrap-around advising services that augment and support the course's key concepts and overall student success. Notably, as students engage in the career exploration process through personality assessment tools, they are encouraged to book an individual appointment to obtain general insights through debriefing their results and exploring interests and themes with a professional from UFV's Counselling Services. When working on their ePortfolios, students are often referred to UFV's Centre for Experiential and Career Education to receive tailored advice and feedback. A career services coordinator from the centre also developed supplementary resources, such as a skills inventory worksheet, to enhance the module on transferable skills.

Finally, during the course development phase, to advance UFV's mandate toward Indigenization and Reconciliation, a teaching and learning specialist in Indigenization was consulted to provide feedback on course topics and materials. The consultation resulted in the inclusion of the Seven Sacred Teachings (Centennial College, n.d.) to highlight professional attributes, and the Seventh Generation Principle (Indigenous Corporate Training Inc., 2020) to promote social responsibility as an integral component to student career development.

## Assessment Methods & Design

In addition to weekly discussion forum posts and semi-regular journal entries, students complete four assignments that are designed to enhance the insights gleaned from their self-assessments and their own self-reflection:

- LinkedIn Profile: Students create and receive feedback on a LinkedIn profile (an offline option is available to those who do not wish to have an online presence)
- ePortfolio: Students build assets over the term that culminate in the creation of an e-Portfolio they can leverage to support future job or professional school applications (an alternative option exists to cater the assignment to individual student needs)
- Interview Analysis: Students interview a member of the class and then provide and receive feedback on their respective performances.
- Career Connections (Information Interviews): Students identify and conduct information interviews with three individuals they feel can provide insights into their career or graduate school of interest. They then identify insights generated from these conversations in relation to the advancement of their career and/or educational aspirations.

To complement the formal course evaluation administered by the institution, students are invited at the end of the course to complete a survey measuring their perceived career competencies prior to and after course completion:

Question: To what extent do you agree with the following statements? (Options: Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree).

The last question in the survey provides a comment box for students to make final remarks about their course experience (Table 11.1):

Table 11.1 *PORT 399 end of course survey on student perception on career competencies*

Competency	Before this course...	After this course...
Transition strategies	I developed strategies needed for a successful transition from university into work, professional and graduate studies, or post-university life.	I develop strategies needed for a successful transition from university into work, professional and graduate studies, or post-university life.
Professional knowledge	I developed relevant knowledge and insight related to my field(s) and professional practice(s).	I develop relevant knowledge and insight related to my field(s) and professional practice(s).
Understanding career influences	I had a clear understanding of internal and external factors that can influence my career exploration and decision-making processes.	I have a clear understanding of internal and external factors that can influence my career exploration and decision-making processes.
Articulating skills, experiences, and strengths	I believed I can effectively articulate my skills, experience, and strengths to future employers, schools, and organizations.	I believe I can effectively articulate my skills, experience, and strengths to future employers, schools, and organizations.
Career confidence	I felt confident in my ability to manage my career development and decision-making processes.	I feel confident in my ability to manage my career development and decision-making processes.

## Assessment Findings

Out of 140 students who took the course in the 2021 Winter semester (January-April), 106 students completed the end of course survey, resulting in a 75% response rate (Table 11.2). All respondents reported seeing improvements in all five competencies after taking the course, with the most dramatic increase being an enhanced understanding of their internal and external career influences.

In their final reflection on their overall course experience, students highlighted the practical nature of course and felt the activities and assignments were applicable and beneficial to their future careers:

*“As a student, I often sit in classes and learn complex topics. Then immediately forget those concepts after the final. In this course I actually left with knowledge that I’ll remember and help me in my future endeavors.”*

*“I was actually offered a job from the Career Connection [information interview] project! I’ve seen a noticeable improvement in my ability to interview and articulate myself since the start of term.”*

*“I thought that I had my post-university life figured out, however, this course made me realize that there are certain areas that I have not figured out and have to work on. For example,*

*I thought I had my interviewing skills up to par, however, that assignment made me realize that I need some practice before I start applying to some jobs in the near future.”*

Consequently, the level of growth that students display is directly correlated with the activities, assignments, and content that is delivered through PORT 399. Notably, both formal and informal advising components that are integrated appear to be an effective means of delivering content while providing immediate practical, applied application to support longer-term retention and success.

## Implications for Practice

While the course will continue to gather evidence using formal and informal evaluative means, the current survey results deem PORT 399 as an effective career intervention. It affords students the opportunity to reflect on their undergraduate journey, articulate transferable skills and attributes, and identify concrete actions toward realizing their career aspirations.

Incorporating PORT 399 as a mandatory course for Bachelor of Arts students recognizes career education and advising as an integral part of students’ learning experience. This is part of the explicit intention of the course to ensure that those students who typically have less straightforward career paths are able to feel more certain about their opportunities as well as how they may best transition to a career or educational opportunity that aligns

Table 11.2 *PORT 399 end of course survey on student perception on career competencies – results for the Winter 2021 semester*

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<b>Transition strategies</b>					
Before this course, I developed strategies needed for a successful transition from university into work, professional and graduate studies, or post-university life.	9% (10)	30% (32)	26% (28)	28% (30)	6% (6)
After this course, I developed strategies needed for a successful transition from university into work, professional and graduate studies, or post-university life.	66% (70)	28% (30)	4% (4)	2% (2)	0% (0)
<b>Professional knowledge</b>					
Before this course, I developed relevant knowledge and insight related to my field(s) and professional practice(s).	13% (14)	55% (58)	21% (22)	11% (12)	0% (0)
After this course, I developed relevant knowledge and insight related to my field(s) and professional practice(s).	66% (70)	26% (28)	6% (6)	2% (2)	0% (0)
<b>Understanding career influences</b>					
Before this course, I had a clear understanding of internal and external factors that can influence my career exploration and decision-making processes.	8% (9)	25% (26)	30% (32)	32% (34)	6% (6)
After this course, I have a clear understanding of internal and external factors that can influence my career exploration and decision-making processes.	60% (64)	30% (32)	9% (10)	0% (0)	0% (0)
<b>Articulating skills, experiences, and strengths</b>					
Before this course, I believed I can effectively articulate my skills, experience, and strengths to future employers, schools, and organizations.	4% (4)	40% (42)	28% (30)	23% (24)	6% (6)
After this course, I believe I can effectively articulate my skills, experience, and strengths to future employers, schools, and organizations.	62% (66)	38% (40)	0% (0)	0% (0)	0% (0)
<b>Career confidence</b>					
Before this course, I felt confident in my ability to manage my career development and decision-making processes.	8% (8)	36% (38)	23% (24)	26% (28)	8% (8)
After this course, I feel confident in my ability to manage my career development and decision-making processes.	60% (64)	32% (34)	8% (8)	0% (0)	0% (0)

with their passions and interests. When students have both the competence and confidence to continue their post-graduation journey, UFV will be able to fulfill its institutional mission of “engaging learners, transforming lives, [and] building community” (UFV, 2021c).

Finally, PORT 399 highlights the role faculty members can play as Career Influencers who informally provide career advice and guidance through their formal teaching function (Ho, 2019). Throughout the course, instructors establish rapport, credibility, and trust with students through facilitating course modules, offering

office hours, and providing assignment feedback. Combined, this positions them well to engage in career conversations with students during and beyond the course.

## References

Centennial College. (n.d.). 12. *Seven Grandfather Teachings*. Retrieved from <https://ecampusontario.pressbooks.pub/indigstudies/chapter/seven-grandfather-teachings/>

Hartley, S. (2017). *The fizzy and the techie: Why the liberal arts will rule the digital world*. New York: NY: Houghton Mifflin Harcourt.

Ho, C. (2019). *Professionals in post-secondary education: Conceptions of career influence*. (Doctoral dissertation, Simon Fraser University, Surrey, Canada). Retrieved from <http://summit.sfu.ca/item/18827>

Indigenous Corporate Training Inc. (2020). *What is the Seventh Generation Principle?* Retrieved from <https://www.ictinc.ca/blog/seventh-generation-principle>

Krumboltz, J. D. (2011), Capitalizing on happenstance. *Journal of Employment Counseling*, 48: 156–158. doi: 10.1002/j.2161-1920.2011.tb01101.x

Seraphin, S. B., Grizzell, J. A., Kerr-German, A., Perkins, M. A., Grzanka, P. R., & Hardin, E. E. (2019). A conceptual framework for non-disposable assignments: Inspiring implementation, innovation, and research. *Psychology Learning & Teaching*, 18(1), 84–97. <https://doi.org/10.1177/1475725718811711>

Super, D. E., Savickas, M. L., & Super, C. M. (1996). The life-span, life-space approach to careers. In D. Brown, L. Brooks and Assoc. (Eds.), *Career choice and development* (3rd ed.) (pp. 121-178). San Francisco, CA: Jossey-Bass.

UFV. (2021a). *UFV stats and facts*. Retrieved from <https://www.ufv.ca/about/stats-and-facts/>

UFV. (2021b). *Portfolio (PORT > Academic calendar*. Retrieved from <https://www.ufv.ca/calendar/current/CourseDescriptions/PORT.htm>

UFV. (2021c). *Vision, mission, values*. Retrieved from <https://www.ufv.ca/about/vision-mission-values/>

## Contact



Candy Ho, Ed.D.  
Assistant Professor, Integrative Career and Capstone Learning  
University of the Fraser Valley  
Email: [Candy.Ho@ufv.ca](mailto:Candy.Ho@ufv.ca)



# Conclusion

Isaac Portillo

This case study volume explored programmatic and systematic innovation around student success and career advising, focusing on career and identity exploration to advance equity for Pell-receiving students, first-generation college students, and students of color. When we understand how students' identities shape their experiences on campus, we can make our institutions places that promote robust identity exploration and development so that students leave with content knowledge and are better positioned to become thriving members of their communities (ATD, 2021). In the previous case study, the importance of a multi-faceted and multi-varied approach to advising was highlighted as a way for students to achieve their academic, personal, and career goals. Here we highlight one of the many components to holistic advising, career advising and the importance of empowering students to understand the value of postsecondary education and have them form connections between their academic course content and personal experiences and articulate the career skills and competencies that they have acquired or mastered while in school. The value of a postsecondary education is important for not just students who receive a credential, but also for their families, communities, and broader society. If postsecondary education increases the number of students of color and students from low-income backgrounds who reap the economic benefits of a postsecondary credential, it will have a tangible payoff for society in terms of a stronger economy, a more diverse and prepared workforce, and a healthier, happier, and more civically engaged populace (Postsecondary Value Commission, 2021c).

## Themes of the Collection



In this case study, we asked authors to give institutional demographic information to paint a picture of their respective student populations. Provided with this context, we asked institutions to describe their approach to career advising, deliver their own findings and assessments, and detail their understanding of its implications for practice. This resulted in five themes that serve as bright points in the constellation of career advising. These bright points are named *targeted intervention*, *cross-functional approach*, *train the trainer*, *credit bearing course*, and *student centric programming*.

The first theme “targeted intervention” highlights programs that disaggregate student data to provide career advising that is tailored to the student’s individual experience. Case studies that fit within this theme are George Mason University and Norco College. The next theme, “cross functional approach,” focused on institutions who used the interconnected network of players within the campus community to create a collaborative approach to career advising. Case studies who exemplified this theme are Augustana University, Bakersfield College, George Mason University, and University of the Fraser Valley. Another theme that arose was the “train the trainer” model. In this approach, the focus was not on advising students directly, but providing support and development for the professional staff who advise and interact with students. University of South Carolina provides a clear example of this theme/model. One of the largest themes was “credit bearing courses,” which points to the creation of career advising curricula that focuses on reflection and evaluation of student experience to develop an understanding of career competencies. The following case studies fit into this theme: Gustavus Adolphus College, Lorain County Community College, Regis College, Rice University, and University of the Fraser Valley. The final theme was “student centricity” pointing to the individual student experience to drive the conversation around career advising. Two case studies, Lorain County Community College and SUNY College at Old Westbury, fit into this theme.

## Final Thoughts



Career advising, like all advising practices, requires a multifaceted and multiphase approach. The case study themes overlap, intersect, and connect, as can be seen by how the case studies themselves often do not neatly align into a singular theme. Rather the constellation created by connecting, articulating, and enacting these themes provides a richness and diversity for the field to identify, connect, and hopefully emulate promising practice. It is our goal that this volume serves as a catalyst and encouragement for the work of practitioners who seek to support student futures.