Learning How to Tailor Programmatic Offerings to Support Low-income, First-generation, and Racially Minoritized Student Success

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Abstract

This study focused on the process of how the staff at the Thompson Scholars Learning Community, a comprehensive college transition program, tailored the programmatic offerings to meet the needs of low-income, first generation, and racialized minority students. Because college students are complex individuals, each of whom faces a unique set of challenges and opportunities, it is reasonable to hypothesize that tailoring support services to the multiple needs of each student may make them more effective. The research identified a four-part iterative and cyclical process to tailor the programmatic offerings for students, beginning with the individual student and then using information about individual needs to scale to broader group level tailoring. This broadening or scaling process is a new contribution to the literature that has not previously been identified. The tailored approach we identified works at both individual and group levels, which makes it viable as an intervention for large numbers of students. The effort to attend to and learn about individual students ensures that the intervention still meets the needs of individuals, but the testing of these interventions more broadly allows for understanding how these approaches will work for diverse group level tailoring.

Keywords: low income; transition program; racialized minority; first generation

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Campus leaders have not succeeded in helping low-income, first-generation, and racially minoritized college students (who we will call at-promise\(^1\) students within this article) to persist and graduate (Cahalan et al., 2018). About 25% of undergraduates in the United States are both low-income and first-generation college students and their six-year graduation rate when entering a four-year institution is only 41% compared to 73% for students who are neither low-income nor first-generation (Cahalan et al., 2018). The gap in graduation rates between students from the highest and lowest income quartiles has increased substantially since the 1990s (Cox, 2016). Additionally, the current 17 percentage point gap in college degree attainment rates between Black and White students is about the same as it was in 1990, while the gap between Latinx and White students has increased, even as the number of Black and Latinx matriculants has grown (Cox, 2016; Fry, 2011).

Many programs have been developed to serve a single population (e.g., racially minoritized or first-generation), yet most students have multiple needs (exception being TRIO that serves multiple students’ needs). Numerous aspects of their identities from race, class, and first-generation status as well as their family situations, jobs, personality, health, life experiences, aspirations, and many other factors will influence the opportunities they find, the challenges they face, and the resources they have available to them as they enter the college environment and make their way toward graduation (Bailey & Dynarski, 2011). While students from different traditionally marginalized groups sometimes face similar obstacles to college success, the way that these obstacles play out in the lives of individual students differs based on their multiple characteristics (Katz & Somers, 2017; Strayhorn, 2010; Yeh, 2004). Students who belong to any traditionally marginalized groups are more likely to belong to others (e.g., racially minoritized students are more likely to be low-income) and to face multiple challenges such as lower levels of academic preparation, multiple obligations outside of school, parenting while a student, attending part time, and working full time, that may create conditions that lead to their departure from college without a diploma (Engle & Tinto, 2008).

When support services (e.g., bridge, cultural centers, disability services) target a single aspect of identity, students may have to spend considerable time and energy traveling from place to place on campus to access support related to various aspects of their identities or otherwise fail to gain access to the support services they need in order to cope with the multiple specific challenges that they face (Engle & Tinto, 2008; Scrivener et al., 2015). Support programs that focus on specific identity categories have

\(^1\) We elected to use the term “at-promise” to shift focus away from deficit language like “at-risk” to emphasize the strengths, assets, and potential of these student groups (Harper, 2010).
been effective for some students, but the overall data around college persistence and graduation reveals that there is still work to be done, especially around meeting the needs of today’s increasingly diverse student population (Arendale & Lee, 2018; Bailey & Dynarski, 2011; Clotfelter et al., 2017; Redford & Mulvaney Hoyer, 2017; Scrivener et al., 2015). Whether students overcome the challenges they face and succeed in reaching their academic goals may be heavily influenced by the extent that the college staff and faculty who are there to support them are able to help them solve the specific challenges that their unique situations present.

Because college students are complex individuals, each of whom faces a unique set of challenges and opportunities, it is reasonable to hypothesize that tailoring support services to the multiple needs of each student may make them more effective. Other fields such as healthcare, social work, and K-12 education tailor and adapt programming to meet the multiple needs of individuals and develop practices for doing this systematically, at scale, and thus improve their outcomes (Norris et al., 2002). Prior work from this study (see Appendix B & C) has documented what tailored student support looks like for underserved students in the context of a college transition program (Kezar et al., 2020). In this paper, we articulate how staff and faculty on campuses can scale tailored student support in higher education to inform the development of more effective ways to support students. Based on growing awareness of these multiple challenges that students face, care teams and individual coaching have emerged on college campuses in recent years. Even with this emerging set of interventions, to date, there is virtually no data on how colleges can scale support for diverse, multidimensional students.

This study explored the Thompson Scholars Learning Community (TSLC), a comprehensive college transition program (described in detail in the methodology section), and the overall study examined whether, how, and why this program was successful in developing key psychosocial outcomes that are associated with student success, persistence, and graduation. Other articles from the study document the ways the program is successful in promoting these psychosocial outcomes associated with graduation, retention, and GPA, including sense of belonging, mattering (Melguizo et al., 2021), major and career self-efficacy (Hypolite et al., 2020), and academic self-efficacy (Kitchen et al., 2019). This article describes how the program was able to achieve these positive outcomes through tailoring the programmatic offerings support to students’ multidimensional needs.²

² Tailoring is not the only reason for program success and the study identifies several mechanisms including an ecology of validation, community building, and key programmatic elements such as the proactive advising and staff care and support.
Our research findings in this article indicate that staff best serve students’ multiple needs and reduce their cognitive load when they work at two levels simultaneously: interacting with students to understand their multiple individual needs, while also exploring how some of the needs they have identified might be shared among larger groups of students. Then, after identifying that these needs are broader and thus amenable to allocating resources, they create interventions tuned and calibrated to address these multi-faceted student needs or concerns at scale. It is these processes together which we identify as “tailoring,” which constitutes scaled customization. This type of scaled support has not been identified in early literature on proactive advising, success coaches, or other recent literature on approaches aimed to improve success of at-promise students. The research question guiding the current paper is: What is the process for tailoring programmatic offerings so that it best serves diverse students’ multiple needs? This article provides a closer look at the process that staff members undertake in order to create a scaled tailored program.

**Literature Review**

The section begins with a review of research on interventions aimed to support the multiple identities of students such as TRIO and other recent support programs, highlighting the importance of proactive advising and academic/success coaches as approaches for support. We note how the process of tailoring is different from these approaches. We also describe the very limited studies around designing these processes to be effective and later in our discussion note how the process of tailoring overlaps with, and is distinctive from, these other approaches. Next, we review concepts drawn from case management, describing studies of the process of customizing support. Research in education, particularly higher education, about processes of tailoring programs or approaches is rare. In order to understand this process, literature on case management from social work and healthcare was used to frame an understanding of the process or approach for tailoring services in this study. The dearth of literature in this area also suggests the importance of the current study and its findings.

**Proactive Advising and Academic/Success Coaches**

TRIO, which has historically served at-promise students, is a program where research has been conducted related to understanding approaches to meet students’ multifaceted needs (Swail, 2003). TRIO staff implement a variety of approaches to meet students’ multifaceted needs including one-to-one case management, advising, mentoring, and

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3 *Cognitive load* refers to the used amount of working memory resources (Jong, 2009). Information may only be stored in long term memory after first being attended to, and processed by, working memory. In this study, the cognitive load imposed by searching for and accessing services related to various identity support needs can add to the cognitive load imposed by other aspects of navigating the university environment, which can in turn lead to cognitive overload.
programmatic activities. Two key approaches have been identified in recent years to support students’ individualized needs—proactive advising and success coaches. A great majority of the literature on proactive advising and success coaches have been evaluations, focused on outcomes and much less on process, with no attention to scaling support to the group level. Proactive advising typically involves assigning a student an advisor who works to anticipate issues and checks in regularly to ensure students do not get off track on their path to success. This process involves an advisor meeting with students several times each semester, tracking student progress, assessing academic performance at mid-term, discussing improvement strategies, making referrals to the appropriate services if necessary, and acknowledges that students’ personal lives and non-academic factors may influence their college success (Chaney et al., 1997; Crockett, 2017; Engle & Tinto, 2008; Muraskin, 1997; Varney, 2012). Key issues of focus for discussions include course selection, choice of major, career goals, college adjustment, academic planning, personal issues, time management, and strategies for achieving success (Earl, 1988; Schwebel et al., 2008; Wortham, 2014). Because the process acknowledges students’ personal lives, it is possible that advisers become aware of information that would help them to individualize and customize support. Proactive advising is linked to student retention, reduction in probation and withdrawals, and increased academic achievement and GPA (Abelman & Molina, 2002; Backhus, 1989; Earl, 1988; Glennen, 1975; Glennen & Baxley, 1985; Molina & Abelman, 2000; Rodgers et al., 2014; Schee, 2007). Given the promise of proactive advising strategies, and despite it being a relatively common practice (Cannon, 2013), the proactive advising literature is surprisingly underdeveloped in terms of processes and approaches.

The second major approach to customize and support has been the movement towards academic coaching or success coaches (Bettinger & Baker, 2014; Sepulveda, 2020; Valentine & Price, 2020). Academic coaching is an advising approach that encourages students to reflect on and act on their goals, interests, and passions. Academic coaches use a process very similar to proactive advising—the major difference is that academic coaches focus more on inspiring and motivation as well as providing structure and accountability to follow through on plans. Success coaching focuses more specifically on building students’ self-confidence. In fact, coaching can be a part of advising. Some approaches to coaching are similar to case management in terms of individualizing support, but generally, coaching focuses on a systematic methodology using general data about student transition issues or academic challenges. The methodology does not focus on identification of students’ multidimensional needs. Recent large-scale interventions, such as Accelerated Study in Associate Programs (ASAP), Opening Doors, or college promise programs for at-promise students, have utilized success coaches and identified them as helping students persist and graduate (Bettinger & Baker, 2014; Pechac & Slantcheva-Durst, 2019; Valentine & Price, 2020). In both proactive advising and with coaching, the process to supporting students involves building an understanding of the student, examining data, and tracking and making referrals to services. Proactive advising and success coaching focus on individualized support, but neither has a specific focus on multidimensional student needs or using trends identified to support larger student groups at scale.
Case Management and Tailoring

Research from case management in social work, healthcare, and K-12 education has found that when people face multiple, overlapping challenges it is often more effective to adapt support programming to their individual needs by coordinating and curating existing programming and/or creating new programming to fit a specific set of needs (Day & Roberts, 1991; Eber et al., 2002; Stuart & Gharabaghi, 2010; Tuma, 1989). Though there are a variety of case management models, case management can be generally defined as a process that involves professionals assisting people in assessing what kinds of services they need, finding and coordinating services that may be provided by a variety of individuals and organizations, assessing the extent to which services are helping the client to make progress toward their goals, and adjusting service provision as necessary (Stuart & Gharabaghi, 2010).

Research from case management suggests there are several key practices for identifying how to tailor programming or services (Cautilli et al., 2000; Stuart & Gharabaghi, 2010). First among the practices is the caring professional developing a quality relationship with the client (Cautilli et al., 2000; Day & Roberts, 1991). A quality relationship is typically defined as safe, caring, and reliable (Day & Roberts, 1991). If a client does not perceive that they have a quality relationship with the case management professional, it is less likely that they will share needed information that is necessary to tailor support (Eber et al., 2002). Thus, there is significant attention to the ways to develop a quality relationship as a foundation for obtaining information, learning, and then being able to tailor the support to meet client needs.

A second aspect that is emphasized is getting feedback from stakeholders in the client’s life (Day & Roberts, 1991; Eber et al., 2002; Tuma, 1989). In K-12 schools, this might be parents and teachers. In social work, it is family members, social workers, and community members. It is often important to obtain information from key groups that work with the client or student. These groups/individuals often also have data or information they can share that will help to better understand needs and adapting services. A teacher can share assessment or behavioral data, for example, that will help understand the student (Corrin et al., 2015; Eber et al., 2002). In some instances, developing relationships with these groups is also emphasized, much more so in working with communities than in schools where many of the relationships are built into the school system.

Third, systems are often put in place for obtaining information about a client or student. In schools, for example, there may be formal systems for school nurses to report feedback to the case manager (Corrin et al., 2015; Eber et al., 2002). Thus, the nurse does not need to wait to be contacted as part of informal stakeholder outreach. Instead, at regular intervals the nurse will know they will be reporting information back and more systematically collecting certain data that a case manager defines as important for supporting the students (Corrin et al., 2015). Generally, in case management within social work and healthcare, formal systems of feedback are emphasized much less in comparison to the relationship with clients that garners information about their needs.
and information seeking among stakeholders. However, this is often an area that is a critique within the literature about ways that case managers might implement more formal systems for feedback.

One exception that utilizes a formal system of feedback in K-12 education is Mascolo, Alfonso, and Flanagan’s (2014) model for tailoring interventions based on assessment results. They developed a model called a Systematic Method of Analyzing Assessment Results for Tailoring Interventions (SMAARTI). It is focused on collecting, organizing, and synthesizing assessment data in order to make the best choices around tailoring. They identify several types of tailoring—modification, accommodation, remediation, and compensation. It is more of a methodology to help organize larger amounts of data where interventions may have a significant amount of data (e.g., special education in K-12 school systems) and how to organize, sort, and make appropriate choices with the multitude of data. The recent push for increased data in school districts to guide improvement of the teaching and learning environment is another reason for the rise of such programs.

One limitation to both of these approaches is that they are very hard to scale across large numbers of students. For example, TRIO programs are limited as a vehicle for scale given they depend on federal funding, serve a small number of students, and are too often siloed from other campus support services. This study highlights a program and process that was scaled to thousands of students and which also provides individualized support for multi-dimensional needs. The approach builds from the promising practices in TRIO or case management but alters them for scale. The process of tailoring we identify focuses on and centers an understanding of students as having complex identities. It is more than being student-centered but being multiple identity conscious. Tailoring shares qualities of proactive advising and success coaches—it is proactive, it is holistic focusing on student’s personal and not just academic needs, and it is asset-based focusing on student strengths which is sometimes a part of coaching.

Case Study Methodology

This study explores the following research question—what is the process through which TSLC staff tailor the program to meet at-promise students’ needs—through qualitative case study research.⁴ In accordance with Merriam’s (2009) observations,

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⁴ Data were drawn from a broader research project that employs a longitudinal, mixed-methods design that examined whether, how, and why the program develops traditional academic short- and long-term outcomes, such as retention and GPA, and explored a multitude of psychosocial outcomes (e.g., academic self-efficacy, belonging). The larger mixed methods study included longitudinal surveys conducted with two cohorts of participants, student focus groups, digital diary interviews with students, and case study data collection (e.g., program observations, faculty, staff, and stakeholder interviews).
we have “chosen [qualitative case study research] because of our interest in insight, discovery, and interpretation rather than hypothesis testing” (pp. 28-29). The aim of this study was to examine the process of tailoring used by college staff rather than to test a predetermined hypothesis. Instead, the goal of case study research was to listen to the individual voices of participants (Merriam, 2009). In this study we sought to provide multiple staff perspectives on the processes used for tailoring to meet the needs of complex students with multiple identities and experiences within a program.

Site Selection

This study focused on the TSLC program which is a comprehensive college transition program at three University of Nebraska campuses (University of Nebraska at Omaha [UNO]; University of Nebraska-Lincoln [UNL]; University of Nebraska at Kearney [UNK]) that connects multiple programmatic and service elements in an effort to better support at-promise students. The TSLC program is one of many comprehensive college transition programs (such as ASAP, Opening Doors, and Stay the Course) that have become more popular in the last decade given data that show that they are better able to support at-promise students (Bertrand et al., 2019; Bloom & Sommo, 2005; Evans et al., 2017; Scrivener et al., 2008; Scrivener et al., 2015; Visher et al., 2012; Weiss et al., 2014). The TSLC program ranges in size from approximately 200-600 first- and second-year students at each campus with over 2,300 total TSLC scholars each year. The overall purpose of the TSLC program is to facilitate a successful college transition and to promote a pathway to college completion for low-income students (100%) who are primarily first-generation to attend college (69%), many of whom are racially minoritized students (UNO, 66%; UNL, 36%; UNK 29%). The TSLC program includes proactive advising, learning community courses, peer mentoring, social and academic programming, and a scholarship.

There are several reasons why TSLC is a strong site for this study of program tailoring. First, the evaluation of the program demonstrated that it significantly increased numerous psychosocial outcomes associated with student success (e.g., sense of belonging). Second, the TSLC program encompasses a wide variety of supports along many domains which gives staff a broad range of services to work with in tailoring the program experience for each student. Additionally, the TSLC staff members partner with other units around the university, which further broadens the range of services they have available. Finally, the program staff have the authority to tailor the program to meet students’ unique needs. For this study, we analyzed staff members’ tailoring practices at the three University of Nebraska campuses. We chose to include all three campuses, both to expand the range of staff members whose perspectives could be included and to be able to examine similarities and differences in staff tailoring strategies across campuses with programs of different student demographics and institutional contexts. We ended up identifying a similar process at all three campuses, and therefore we did not differentiate our findings by campus.
In terms of how the program works, each program has multiple points of contact for each student, including the program director and support staff, faculty coordinator, and peer mentors. A staff member also served as a primary point of contact (POC) for each student which allows a ready, consistent connection for information, support, and encouragement and mirrors the case management used in TRIO programs. Students meet regularly with their POC, which facilitates the development of a relationship between student and POC over time. Staff are required to proactively reach out to students, initiating contact regularly to check on students. The staff provide students both academic and interpersonal support and are empowered to tailor program offerings to meet the needs of individual students.

Data Collection and Sources

A descriptive case study involves collecting data from multiple sources, including interviews, observations, and documents to arrive at a detailed, rich, “thick description” of the case (Creswell, 2007; Stake, 2013). The larger study included: (a) interviews with staff and campus stakeholders; (b) over 600 hours of observations of program activities conducted on-site at each of the three universities; and (c) document analysis of annual reports and key program documents like planners or resources given to students. Staff and stakeholder interviews and observations of staff advising sessions with students and staff training were the primary sources of data for the current analysis.

Staff and Stakeholder Interviews. The study included longitudinal interviews with all staff that work at the three programs. In addition to the staff that interact with students, we interviewed a select group of campus stakeholders that partner with staff to tailor the program (e.g., office of multiculturalism, career services, student activities). Because program tailoring often depends on expertise from other offices, we thought it was important to interview these individuals to understand tailoring and provide context for staff interviews. The criteria to identify stakeholders for interview was identification by a TSLC staff member naming the individual as an important person who collaborates with the program. In total, 42 transcripts with 26 TSLC professional staff members across the three campuses were reviewed. Additionally, we interviewed 29 campus stakeholders across the three campuses (see Appendix A for the participant samples). Note there are more interview transcripts than interviewees as staff were interviewed multiple times.

Similar semi-structured interview protocols were developed for all three campuses for interviews with staff and stakeholders in order to facilitate the collection of comparable data (Bartlett & Vavrus, 2017). Document analysis and observation of the program took place prior to interviews in order to identify areas for follow up. Protocols were tested for understanding in pilot interviews with staff. Protocols for interviews with program staff were designed to explore the historical development of the program, the explicit and implicit goals of the various program interventions, and each staff member’s roles and experiences with students in the program. In addition to the formal interviews, researchers also conducted periodic informal interviews with program staff.
to fill in gaps in our understanding of program components and processes. The protocols for campus stakeholders focused on their partnership with the TSLC program, working relationships, and observations of how the TSLC program worked to support at-promise students. We worked with the program directors to identify individuals with whom they partnered across campus. Interviews were professionally transcribed. Staff and stakeholders are referred to generically to protect anonymity as there are few people in specific positions and even assigning a pseudonym would reflect gender or sex of a staff member, which could violate confidentiality.

**Observations.** One member of the research team was assigned as a lead researcher to each of the three campuses participating in our study, yet all researchers observed across each site over the course of the longitudinal study. The research team members conducted observations of program-related activities over a four-year period (2015-2019), initially visiting multiple times each semester and then reducing the number of visits per semester after relationships were built and data collection began to reach a level of saturation. Given that each researcher was entering an existing community, they were initially passive observers in each setting (Spradley, 2016). Over the four years of data collection, however, researchers established relationships with staff, instructors, and students in the programs and they became more active participants in the settings they were observing. This allowed for researchers to access high-stakes spaces such as advising sessions with students.

The researchers selected events to observe intentionally, identifying events that had similar foci across the three campuses (e.g., advising sessions, orientation, shared academic courses). This strategy resulted in data that were directly comparable across institutions (Bartlett & Vavrus, 2017). Field notes documented the content of events and discussions, students’ responses to content, and interactions between students, staff, and faculty. For this article, we analyze the observations of advising meetings, events, and staff training, specifically looking for ways in which staff learn about students’ needs in order to tailor the program. This allowed us to develop an understanding of the extent to which and the ways in which staff discussions are explicit about tailoring as part of their role in the program.

**Data Analysis**

We used deductive and inductive thematic analysis (Boyatzis, 1998). Boyatzis’ (1998) thematic analysis involves coding and then interrelates codes into larger themes and recommends allowing the data to be interpreted first without a particular coding scheme from the literature and then recommends bringing in literature to further understand the phenomenon. From observing the program, it was apparent that staff were customizing the program, which led to direct questions in interviews about this process. Therefore, the tailoring process was inductively identified through observation notes and then explored through interviews, and we sought out literature to understand this process through case management to enhance the analysis process. Observation notes and interview transcripts were initially inductively read and reread to identify
major trends in the process that staff use for tailoring the program and ways they noted they learned this process. In analyzing the interviews, we were particularly looking for descriptions of actions that staff members have taken to tailor the program for individual students as well as ways that they think about tailoring. A case study document that integrates the staff interviews and staff training observations was created for each campus.

We then conducted a cross-case analysis of all three campuses. First, we analyzed the data to understand inductively the experiences of tailoring the program for students following Boyatzis (1998). We used inductive analysis in order to capture themes that emerge from the data that we did not anticipate or that were not suggested by previous literature. Second, we engaged in deductive analysis utilizing the case management theoretical constructs. For the purposes of this article, we specifically looked for the ways that the tailoring approaches are similar to or different from the case management literature. Third, we explored similarities and differences in staff tailoring strategies across the three campuses but found a very similar process across institutional context and different students served.

Trustworthiness

Researchers utilized multiple forms of trustworthiness including prolonged engagement for four years with each TSLC program which enhanced the credibility of the data (Merriam, 2009). The study used multiple forms of data and triangulated interviews, digital videos, observations, and documents. We conducted member checking with multiple groups of participants and stakeholders. We presented the four-part iterative model and they verified this as the process they used. They had not been consciously using such a model but agreed that this articulation documented their process. The process of member-checking involved sharing initial insights to get feedback. Lastly, we had a team of seven qualitative researchers who have different backgrounds and gathered differing data for the project. We leveraged the large size of our team to review and challenge how we were individually making sense of the data. In order to ensure reliability across the team of researchers we had regular meetings where we discussed codes and themes, we developed a coding handbook, and we reviewed each other’s analysis.

Findings

Recall that the research team sought to explore how staff and faculty were able to scale customization through tailoring so that the multidimensional needs of diverse students were met. The research team identified that TSLC staff members utilize a four-part iterative and cyclical process to tailor the programmatic offerings for students—beginning with the individual student and then using information about individual needs to scale to broader group level tailoring. This broadening or scaling process is a new contribution to the literature that has not previously been identified. The first three
parts of the process for tailoring happen simultaneously. The fourth part, reflection, while on-going, tends to be a culminating part of the process. The staff members did not specifically identify this as a conscious process they had decided to use but were doing it automatically.

One of the key findings in the study of the process of tailoring is the way that this approach can be scaled because it is different from case management approaches that are highly individualized; the tailored approach we identified works at both individual and group levels, which makes it viable as an intervention for large numbers of students. The effort to attend to and learn about individual students ensures that the intervention still meets the needs of individuals, but the testing of these interventions more broadly allows for understanding how these approaches will work for diverse group level tailoring. The findings identified the same process across all three campuses, so we do not describe differences by campus. Findings draw upon observations and staff and stakeholder interviews from all three campuses. Appendix D provides a diagram of this iterative process that is cyclical and not linear.

Part One:
Relationship Building in order to Guide Programmatic Tailoring

Staff noted the importance of building relationships as foundational to the tailoring process because it provides one of the best avenues for obtaining a holistic picture of the student and it is the only mechanism for developing trust that allows staff to get information typically not accessible through any other means. This trust is also central for staff to obtain buy in for students to follow their guidance and follow the tailored approach offered. Staff recognize that the trusting relationships they have built made it much more likely for students to engage in the support they offered:

I talk to staff in counseling and they comment on how the relationships we have with students have made it much easier for them to work with them. To be open. And it’s not just with counseling but when I tell a student they need to talk to their faculty members and get or feedback, whatever, it’s something they follow up on. And if we didn’t have this relationship, I’m not sure they would.

Staff and instructors noted the importance of building relationships in order to obtain a holistic perspective on students’ lives and helping students to draw upon their assets and face their challenges. Developing this holistic understanding of students’ lives makes staff members aware of below the surface student characteristics and the challenges they face. It is through this relationship building that staff members earn the requisite trust that allows them to speak to students about sensitive topics as they come up and to explore more about students’ backgrounds and perhaps hidden needs. In turn, the process of talking about potentially sensitive topics together strengthens the relationship between students and staff members. Two staff members described the process through which they get to know a student holistically, develop trust, and then use that information later to help the student address challenges in their lives like this:
I know we [TSLC] have an educational focus, and we have to, but from my past experience, you have to see this person as a whole, so they feel like you’re seeing them. But beyond that, to really tap into the other resources in their life beyond us. Because a lot of times, those other systems either aid them or actually don’t, and somehow bring them down or outside of their track in pursuit of their goals.

So, I definitely do [learn about the student holistically], and I think I do that by wanting to know their story. I ask them about what brought them here and what influenced and shaped their life. I ask a lot about important social supports in their life, so family, friends. I usually do that in my first meeting and bring it up regularly.

In these quotes, the staff members explain that building a relationship and getting to know the student as a whole person was an essential part of effectively supporting them. This approach was rooted in the belief that students’ relationships and networks outside of the program could be both assets and challenges to them and that by getting to know them, the staff member was better able to remind students of the assets and resources that they had in their lives when they faced challenges in the future. At the same time, it allowed the staff member to anticipate challenges that students might face and provide tailored support to guide them through these challenges more effectively.

**Part Two: Helping Students Understand and Articulate Their Needs in order to Guide Programmatic Tailoring**

Tailoring occurs as students learn or get feedback that helps them articulate new needs to program staff. Through these learning experiences, students are able to better understand their needs and articulate them to staff so that the program support can be altered to best support them. In turn, staff played a role in creating opportunities for students to learn about their needs or capitalize on existing mechanisms. The process of developing initiatives to help students understand their need was an intentional and deliberate activity. There were three primary mechanisms that staff described that helped them to better understand student needs and that they participated in creating: opportunities to share personal stories, ongoing self-assessment and tools, and feedback in courses.

The first mechanism was opportunities to reflect on their personal stories and backgrounds. On one campus, students participate in an autobiography reading and writing course (see Perez et al., under review). As part of that course, they write about their personal journeys which often lead to them making connections about how trauma, family relationships, previous experience with the faculty member or teacher, or experience with a particular subject matter that shaped who they are as a learner. They publicly present the papers at the end so that staff and instructors in the program had an opportunity to learn their individual story. A staff member described how the courses helped students understand themselves as learners and their needs:
The autobiography class is one of the ways that we help students discover themselves. Several students have told me how enriching the class is, not just because they get to share their personal stories and hear others which develops a community among the students, but because they learn so much about themselves and how they learn.

The course was designed to enhance students’ writing skills, but they also gained a deeper understanding of themselves by reflecting on their experiences and conveying them in narrative form. This curriculum was beneficial both because students sometimes revealed tangible needs in their writing and because it helped students reflect on their lives and articulate their needs in ways that made it easier for staff members to understand them. One staff member commented on the value of the autobiography course to tailor the program:

The course helps surface so many aspects of their individual journeys—homelessness, food insecurity, family trauma, interests, all that can help inform our work with them—the counseling support or connections to resources that are particular to them.

While the autobiography course provided an opportunity for self-reflection, students and staff at the other two campuses reported that the assignments in the first-year seminar (FYS), especially the self-assessment exercises, “helped them (students) gain insight into themselves as learners.” The FYS includes a variety of assessment tools and identity assignments (helping them better understand what it means to be first-generation, racially minoritized, and other identity categories) that help the staff, instructors, and peer mentors to better understand the students and to respond to their identified needs. Staff commented on how helpful it was when students use these opportunities of self-reflection to report back to them about issues they are wrestling with. One staff member commented about this issue:

At the end of the first semester, students come back and say they learned about themselves in FYS, sometimes it’s about their learning style, sometimes about their confidence, about being first-generation and less familiar with how to choose a major or work with faculty. Just them telling us this makes all the difference that we can start to better help them.

Staff members discussed how the FYS was a location for learning about students so they could tailor the program: “We get so many different forms of data through assessments, assignments, and conversations in the FYS that it is one of the major ways we are able to make the program work for every student whether first gen, rural, academically challenged.”

Another mechanism that staff reported that helped students understand their needs as learners were assessments of their academic skills such as exams, performance in classes, and feedback from instructors or staff. Many times, students thought they had the skillset or understood the instructions or material, but only once they had feedback
were they able to better understand where they might need additional assistance. A staff member talked about the importance of feedback for students to comprehend and communicate their needs:

In our check-in, he (student) mentioned how he thought he was doing really well in the course and then got the first exam results, and he just bombed. But we are able to focus on helping him explore why he thought he did well, and what did the exam results revealed to him. And he started to rethink his study habits and approach. He realized he needs to study more in groups so he can check his understanding more. This helps me connect him to some others to work with.

As this quote suggests, students need to undergo a learning process to be able to explore and share what their needs are. The program created multiple opportunities for students to learn about themselves so they could help staff tailor the program for them.

**Part Three: Comprehensive Information Collection in order to Guide Programmatic Tailoring**

Staff learned how to tailor the program through very different kinds of information, including individual conversations (described in part one), data, feedback from stakeholders, programmatic input, and formal evaluations and research that offered varying insights from peer mentors and faculty members within the program. The data were then used systematically in three ways. First, staff used the data and information gathered to enhance the individual conversations that they had with students on an ongoing basis. Second, campuses had data dashboards where certain information was loaded up and shared with other professionals, being careful not to violate the Family Educational Rights and Privacy Act. Third, staff brought shareable and non-individualized data to key meetings with other groups. For example, staff met with faculty teaching the learning communities courses and data were shared at these meetings with other stakeholders of the program. Additionally, staff met together weekly and shared data so that other professional staff could give their opinions about avenues of support. Given the complex and varying nature of student needs, these very different sources of data were seen as essential to fully serve students and effectively tailor the program. This overall ethic of, and commitment to, collecting varied information sources is captured in a staff member’s description of using a variety of sources to inform his work:

So, every year, we’re constantly seeing—what’s happening with our students? What do our students need in our community? What’s happening nationally in terms of research? What data has been collected on campus? What’s happening in terms of what have our students told us, by virtue of literally just conversations? Not only by formal assessments, but by, “What have we heard?” and being able to think about what’s been useful or helpful for students. And our students know that they can come to us, to me with new ideas about changing the program to fit their experience.
As this quote illustrates, program staff needed various forms of information to tailor the program effectively. While there were a dozen ways they accessed information about students, we highlight three (data, peer mentors, and campus stakeholders) in this section and offer other avenues in Appendix E.

Staff noted various forms of data were collected to assist with tailoring, including transcript data from high school and during college, assessments, grade checks, advising inventory, and e-advising data. For example, staff members used an advising inventory that includes a variety of data points including students’ perceptions of their own preparation, things they are nervous about, and how persistent they are in general as well as demographic information and scores on a mathematics placement exam. They used the information to identify individual student’s potential needs as well as trends in student needs across the program. A staff member described using the advising inventory which includes various types of information about students:

> It is really helpful it includes their persistence level, their toughest subject, what do they feel the most prepared about, what are they most nervous about, so looking on the onset at certain demographics or qualities that others might predict – such as a GPA or ACT score, how they’ve done on a math placement exam to what types of classes are they enrolled in.

Staff members reviewed all of this information and used it to inform decisions about “what can [they] potentially offer as programs that might support them in a more meaningful way”; this ranged from tutoring, additional advising, study centers within the program and across campus, or conversations they might have with faculty. Staff members also used academic data points about specific students, such as their high school GPAs, high school rankings, and ACT scores, to predict the kinds of challenges that students were likely to face. For example, at one campus the staff used a risk score comprised of ACT score and high school rank to identify students who were likely to face academic challenges and who would, therefore, benefit from their Preventative Education Retention System (PERSYST) program, which provided additional academic interventions and tailored support.

Second, staff gleaned feedback from peer mentors. Each student is assigned a peer mentor who provides support during the first year of the program. Staff check in with mentors, particularly if they notice something seems wrong with students in the program with whom the mentor has built a relationship. Additionally, mentors are expected to reach out to staff to report on students’ needs. Peer mentors might be able to ascertain information that students might not feel comfortable sharing with staff. Student mentors (usually more experienced students) can identify challenges that students in their first year may not be able to articulate without more experience. One staff member discussed the role of mentors in providing feedback:

> The mentors also tell us about students that might need our support. It was from a mentor that we found out about a student that was really homesick and feeling isolated. We were able to connect him with counseling and
student clubs. So, it is things like this we can do with input from peers. Additionally, staff members had regular meetings with peer mentors in which they could discuss the progress of students in their mentor groups. The conversations that happen within these structured meetings provided staff members valuable insight about students’ needs.

Third, staff described feedback from campus stakeholders (e.g., counseling office, multicultural office, TRIO, tutoring, career services, faculty in courses) that offered a number of important insights regarding student needs. Campus stakeholders had access to different information about students as well as expertise to provide support through campus dashboards. Other campus offices often see a student related to a particular challenge about which the stakeholders have particular expertise so the staff can glean key information that only a counselor, career coach, or departmental advisor would be knowledgeable of. Staff capitalize on this specialized expertise to inform the holistic student picture. The director for multicultural affairs shared this feedback:

I always feel that the close relationship that we have (TSLC), because if anything happens they’ll call me, and I’ll call them or they will say do you know this student or do you have a relationship with this student or likewise I would have one. We have such a great relationship with them...

Staff also took the information they garnered from these various forms of data and tested out certain issues for broader impact through focus groups with students and the evaluation processes for annual review. Focus groups were helpful for checking in on issues such as the counseling needs for racially minoritized students and surveys to explore financial stress and literacy. When appropriate, they utilized focus groups, surveys, and evaluation methods to identify if individual student issues were a broader trend (see Appendix E for more details).

Part Four: Reflection in order to Guide Programmatic Tailoring

The culminating part of tailoring is reflection that brings together all the earlier steps, imagining solutions after data have been aggregated. Staff recognize the importance of not just responding in the moment, but also having conversations with each other about student needs and for personal and collective reflection to consider the best support. The program directors have structured two types of opportunities for reflection—personal and collective. One staff member discussed personal reflection that is set aside for staff to tailor the program for different students:

I carve out some time in the afternoon on Mondays where there are no interruptions to reflect and analyze to understand students’ situations and what components they need, things we can change to make their experience optimal. So that gives me a much better sense of how to engage them in the week and I encourage that among all staff so we are best able to really listen and respond to students.
As researchers, we observed program directors encouraging staff to reflect on students’ needs as well as talking about and role modeling how they took seriously reflection as a practice. One program director commented on this practice, “So I usually block off an hour, hour and a half to read professional development stuff in the morning.”

The staff in the program also discussed how individual reflection is supported by group reflection time:

> Also, we reflect as a staff. We reserve a space for staff for an hour or two depending on their schedule and needs of their students. It is an opportunity for them to kind of steal away with their colleagues and get feedback on students they are working with. This also provides us a chance to talk collectively and come up with broader strategies.

Individual and group reflection provided the space to bring together conversations with students, data, feedback from stakeholders, and programmatic input. These sources of information create a holistic picture of the students in order to tailor the program. But the gestalt does not emerge without reflection. The various forms of information will not be as intentionally and effectively combined without this reflection time and staff were aware of the need to identify and protect this time in service of students.

Reflection time was critical in moving beyond individual tailoring to considering how a challenge for one student may cut across a variety of students with similar circumstances. This type of thinking led to the creation of the PERSYST program that provides additional study hours, advising sessions, and review of grades and course performance for students coming into the first semester of college with a low ACT score, students working over a certain number of hours a week, and parenting students. It was also the identification of students working significant hours in jobs that would not help them in their future that led to the creation of workshops at one of the campuses where they connected these students with employers for paid internships. One staff member talked about how the individual conversations are translated into broader group reflection and later specific programming:

> So as we were talking among the staff we realize there’re lots of students going through traumatic experiences, one student’s mother had cancer, another one’s brother was unemployed, but a lot of things that were weighing on students and without this is a great opportunity to do some programming to talk about these challenges and how to build resiliency.

Dozens of programmatic changes were scaled for whole groups of diverse students based on more collective reflection among staff, starting off with individual needs. In Appendix C, we list examples of the 23 different programmatic changes made across the three campuses that range from supporting students with learning disabilities, to mental health needs, to undocumented students, to refugee and immigrant students, to undecided majors versus decided, to academically less prepared, to honors, to racially minoritized students, to students changing majors, to first-generation, to commuter
students, to transfer student, and to financially insecure students. In addition to the PERSYST program above, we provide one detailed example of the Bridge program in Appendix B. We document these various tailored group interventions in other articles (Kezar et al., 2020). In the end, this four-step process allows staff/faculty to customize at the individual level and tailor at the group level.

**Discussion, Implications, and Future Research**

A major contribution of our study was its focus on the process of scaling individual customization through tailoring. Neither the higher education TRIO/advising literature or case management literature articulate an approach where customized support is scaled so it can serve much larger numbers of individuals with multiple identities in a less resource intensive way. The interest in translating individual tailoring to appropriate group level or program-wide changes also seems a unique process in higher education. Case managers in public health and social work do not appear to be engaged in processes to use the experience of individuals to translate into broader trends that can help broader groups of people. It may be that the difference in settings makes such translation from individuals to groups less possible. However, staff identified many meaningful opportunities to scale interventions for groups based upon the work they did to tailor the program for complex, multidimensional individuals. To support this group tailoring, research from K-12 educational case management offers some formal mechanisms for gathering the information, such as the SMAARTI model (Mascolo et al., 2014) reviewed in the literature section; these more formal processes might be a beneficial model for higher education practitioners to consider. Future interventions that test out formal assessment mechanisms that combine human insights and technology systems used to tailor support in K-12 would be another helpful addition to the research.

Additionally, the literature about proactive advising and coaching, often based on evaluations of interventions, describes outcomes, but not how those are achieved. Further, case management literature tends to focus on “what” the individualized support itself looks like, and far fewer studies exist about the process of aggregating data and creating systemic responses. Thus, the empirical evidence about how practitioners actually go about the process of individualizing support is a helpful addition to the literature, particularly higher education where few such studies exist. And while there is general literature about high quality advising (e.g., Kramer, 2003; Swanson, 2006), this literature often has not been tested specifically with at-promise students with complex, multidimensional needs. Processes noted in advising literature (both from coaching and proactive advising) note largely similar processes of an advisor meeting with students several times each semester, tracking student progress, assessing academic performance at mid-term, discussing improvement strategies, making referrals to the appropriate services if necessary, and acknowledges that students’ personal lives and non-academic factors may influence their college success. This study identified different processes that are important for tailoring to occur, such as group processes for
learning about interventions and collective staff and faculty reflection processes to scale up interventions for groups. The first part of developing a relationship with students reflects and builds on long-time developmental advising literature (Kramer, 2003). In effect, the process of tailoring described in this paper brings back a stronger orientation to relationship development that is not as present in the current proactive advising or coaching practices that focus more on being student-centered. Being student-centered does not necessarily mean that a deep and trusting relationship is built but that students’ interests and needs are the focal point of developing an intervention. Further, relationship building in and of itself is not the goal, but that relationship building serves the broader goal of systematic improvement.

Another contribution from this study is documenting the role of staff and instructors in helping students better understand themselves as learners as an important part of tailoring that seems aligned with the education setting. None of the current literature about support for at-promise students or advising emphasize the value of students learning about their own needs so they can communicate them to advisers. Continuing generation students, for example, are socialized to explore their strengths and weaknesses and therefore are often better able to offer up this information to advisers. This new part we described in our tailoring process makes an important contribution to the literature by offering a process that can be included in programs that support at-promise students as well as advising approaches aimed at supporting them. This study documented key ways to do this through reflection activities, inventories, autobiographical writing and assignments, and feedback through assignments. We imagine there are many other approaches that can be documented and collected to assist staff and instructors in supporting students in developing themselves as learners and co-constructing their own tailored support. Future research might explore if some approaches are more effective in helping students identify their needs and whether different modes work better with certain student populations.

The processes of gathering information documented within this paper on how to tailor reflects and reinforces the promising approaches in proactive advising and coaching literature. However, the myriad types of information, approaches to obtaining information, and extensive outreach to different stakeholders on campus to garner information about students was more extensive than described in the case management or advising literatures (Day & Roberts, 1991; Eber et al., 2002; Tuma, 1989). Part of the reason for the extensive collection of data appears to be the interest in moving from individual customization to a broader group tailoring that benefits more students. Staff and instructors combined needs they identified in one-on-one student conversations, feedback from stakeholders or assessments, and conducted further analysis through focus groups, evaluation, or conversations across stakeholder groups to identify if there were broader trends that might be addressed through group tailoring.

The fourth part of the process, staff reflection, is also emphasized in the advising literature. However, the collective forms of reflection that results in the ability to tailor support for groups of students with multi-dimensional needs is a new addition to the
literature. This collective reflection is tied to the ability to scale customized supports and we recommend it as a way to meet the needs of more students in a more efficient manner. Future studies should continue to test this four-step process to ensure it works in other settings and to see if any additional dimensions emerge within the steps or if any new steps are identified.

In terms of implications, care teams, proactive advising, and coaching efforts on campus can use the tailoring process outlined in this article to help scale their approach to student support by broadening changes on campus for diverse and multidimensional student populations by checking whether some of the individual needs that they are identifying are happening more broadly among students as well as creating spaces for broader reflection among student success staff on campus. In addition, proactive advising and coaching efforts to scale their work can be enhanced by focusing even more deeply on relationships that build trust, assist students to better understand their strengths and weaknesses so they can communicate them to staff, and explore an even wider variety of data to inform their advising/coaching practices. The process of staff group reflection and having staff members consider more group level interventions and moving beyond individual ones is an important next step for programs across the country aimed at at-promise students including TRIO.

The study also has implications for support programs that target a single aspect of a student’s identity. Such support programs can benefit from utilizing this four-part process to better understand the multi-faceted needs of students within their programs. The study also helps such programs to identify data sources and interventions that support students learning about their needs that might help the programs to flush out students’ needs and assets. The reflection processes described can help programs expand their focus more on a single aspect to better serve students’ multi-dimensional assets and needs.

References

Abelman, R., & Molina, A. (2002). Style over substance reconsidered: Intrusive intervention and at-risk students with learning disabilities. *NACADA Journal, 22*(2), 66–77. https://doi.org/10.12930/0271-9517-22.2.66

Arendale, D. R., & Lee, N. L. (2018). Bridge programs. In R. F. Flippo & T. W. Bean (Eds.), *Handbook of college reading and study strategy research* (3rd ed., pp. 281–292). Routledge.

Backhus, D. (1989). Centralized proactive advising and undergraduate retention. *NACADA Journal, 9*(1), 39–45. https://doi.org/10.12930/0271-9517-9.1.39

Bailey, M. J., & Dynarski, S. M. (2011). *Gains and gaps: Changing inequality in US college entry and completion* (No. w17633). National Bureau of Economic Research. https://doi.org/10.3386/w17633

Bartlett, L., & Vavrus, F. (2017). Comparative case studies: An innovative approach.
Bertrand, M., Hallberg, K., Hofmeister, K., Morgan, B., & Shirey, E. (2019). Increasing academic progress among low-income community college students: Early evidence from a randomized control trial. University of Chicago Poverty Lab. https://onemilliondegrees.org/wp-content/uploads/2019/05/2_OMD-Year-2-Working-Paper_FINAL-1.pdf

Bettinger, E. P., & Baker, R. B. (2014). The effects of student coaching: An evaluation of a randomized experiment in student advising. Educational Evaluation and Policy Analysis, 36(1), 3–19. https://doi.org/10.3102%2F0162373713500523

Bloom, D., & Sommo, C. (2005). Building learning communities early results from the opening doors demonstration at Kingsborough Community College. MDRC. https://www.mdrc.org/sites/default/files/full_36.pdf

Boyatzis, R. E. (1998). Transforming qualitative information: Thematic analysis and code development. Sage Publications.

Cahalan, M., Perna, L. W., Yamashita, M., Wright, J., & Santillan, S. (2018). 2018 indicators of higher education equity in the United States: Historical trend report. The Pell Institute for the Study of Opportunity in Higher Education, Council for Opportunity in Education (COE), and Alliance for Higher Education and Democracy of the University of Pennsylvania. http://pellinstitute.org/indicators/reports_2021.shtml

Cannon, J. (2013, March). Proactive advising 101: How to be proactive without intruding. Academic Advising Today, 36(1). http://www.nacada.ksu.edu/Resources/Academic-Advising-Today/View-Articles/Proactive-Advising-101-How-to-be-Proactive-Without-Intruding.aspx

Cautilli, J. D., Rosenwasser, B., & Clarke, K. (2000). Best practices for the administration of behavioral health rehabilitation services (wrap around) in Pennsylvania: Six basic problems and their solutions. The Behavior Analyst Today, 1(2), 42–56. https://doi.org/10.1037/H0099870

Chaney, B., Muraskin, L., Cahalan, M., & Rack, R. (1997). National study of student support services. Third-year longitudinal study results and program implementation study update. Westat, Inc.

Clotfelter, C. T., Hemelt, S. W., & Ladd, H. F. (2017). Multifaceted aid for low-income students and college outcomes: Evidence from North Carolina. Economic Inquiry, 56(1), 278–303. https://doi.org/10.1111/ecin.12486

Corrin, W., Parise, L., Cerna, O., Haider, Z., & Somers, M. A. (2015). Case management for students at risk of dropping out: Implementation and interim impact findings from the Communities in Schools Evaluation. MDRC. https://www.mdrc.org/sites/default/files/CIS_One_Year_FR.pdf

Cox, R. D. (2016). Complicating conditions: Obstacles and interruptions to low-income students’ college “choices”. The Journal of Higher Education, 87(1), 1–26. https://doi.org/10.1080/00221546.2016.11777392
Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Sage Publications.

Crockett, M. (2017). *Evaluating the Trio advising model: Identifying successes and strengths* [Unpublished doctoral dissertation]. Ferris State University.

Day, C., & Roberts, M. C. (1991). Activities of the child and adolescent service system program for improving mental health services for children and families. *Journal of Clinical Child and Adolescent Psychology, 20*(4), 340–350. https://doi.org/10.1207/s15374424jccp2004_2

Earl, W. (1988). Proactive advising of freshmen in academic difficulty. *NACADA Journal, 8*(2), 27–33. https://doi.org/10.12930/0271-9517-8.2.27

Eber, L., Sugai, G., Smith, C. R., & Scott, T. M. (2002). Wraparound and positive behavioral interventions and supports in the schools. *Journal of Emotional and Behavioral Disorders, 10*(3), 171–180. https://doi.org/10.1177%2F10634266020100030501

Engle, J., & Tinto, V. (2008). *Moving beyond access: College success for low-income, first-generation students*. Pell Institute for the Study of Opportunity in Higher Education. http://www.pellinstitute.org/downloads/publications-Moving_Beyond_Access_2008.pdf

Evans, W. N., Kearney, M. S., Perry, B. C., & Sullivan, J. X. (2017). Increasing community college completion rates among low-income students: Evidence from a randomized controlled trial evaluation of a case management intervention (Working Paper No. 24150). National Bureau of Economic Research. https://doi.org/10.3386/w24150

Fry, M. (2011). Literature review of the impact of nurse practitioners in critical care services. *Nursing in Critical Care, 16*(2), 58–66. https://doi.org/10.1111/j.1478-5153.2010.00437.x

Glennen, R. (1975). Proactive college counseling. *College Student Journal, 9*(1), 2–4.

Glennen, R., & Baxley, D. (1985). Reduction of attrition through proactive advising. *NASPA Journal, 22*(3), 10–14. https://doi.org/10.1080/00220973.1985.11071921

Harper, S. (2010). An anti-deficit achievement framework for research on students of color in STEM. *New Directions for Institutional Research, 148*, 63–74. https://doi.org/10.1002/IR.362

Hypolite, L., Kitchen, J. A., & Kezar, A. (2020, April). *Developing major and career self-efficacy among marginalized students: Impacts of a comprehensive college transition program*. Paper for the annual meeting of the American Educational Research Association (AERA), San Francisco, CA.

Jong, T. D. (2009). Cognitive load theory, educational research, and instructional design: Some food for thought. *Instructional Science, 38*(2), 105–134. https://doi.org/10.1007/s11251-009-9110-0
Katz, S., & Somers, C. L. (2017). Individual and environmental predictors of college adjustment: Prevention and intervention. *Current Psychology, 36*(1), 56–65. https://doi.org/10.1007/s12144-015-9384-0

Kezar, A., Kitchen, J., Estes, H., Hallett, R., & Perez, R. (2020). Tailoring programs to best support low-income, first-generation, and racially minoritized college student success. *Journal of College Student retention, 87*(1), 1–26. https://doi.org/10.1177%2F1521025120971580

Kitchen, J. A., Cole, D., Rivera, G., & Hallett, R. (2020). The impact of a college transition program proactive advising intervention on self-efficacy. *Journal of Student Affairs Research and Practice, 58*(1), 1–15. http://dx.doi.org/10.1080/19496591.2020.1717963

Kramer, G. L. (2003). *Faculty advising examined: Enhancing the potential of college faculty as advisors.* Anker Publishing Company.

Mascolo, J. T., Alfonso, V. C., & Flanagan, D. P. (2014). *Essentials of planning, selecting, and tailoring interventions for unique learners.* John Wiley & Sons.

Melguizo, T., Martorell, P., Swanson, E., Chi, W. E., Park, E., & Kezar, A. (2021). Expanding student success: The impact of a comprehensive college transition program on psychosocial outcomes. *Journal of Research on Educational Effectiveness.* Advance online publication. https://doi.org/10.1080/19345747.2021.1917029

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation.* Jossey-Bass.

Molina, A., & Abelman, R. (2000). Style over substance in interventions for at-risk students: The impact of proactiveness. *NACADA Journal, 20*(2), 5–15. https://doi.org/10.12930/0271-9517-20.2.5

Muraskin, L. (1997). “Best practices” in student support services: A study of five exemplary sites. U.S. Department of Education.

Norris, S. L., Nichols, P. J., Caspersen, C. J., Glasgow, R. E., Engelgau, M. M., Jack Jr., & Briss, P. (2002). The effectiveness of disease and case management for people with diabetes: a systematic review. *American Journal of Preventive Medicine, 22*(4), 15–38. https://doi.org/10.1016/s0749-3797(02)00423-3

Pechac, S., & Slantcheva-Durst, S. (2019). Coaching toward completion: Academic coaching factors influencing community college student success. *Journal of College Student Retention: Research, Theory & Practice.* Advance online publication. https://doi.org/10.1177%2F1521025119869849

Redford, J., & Mulvaney Hoyer, K. (2017). First generation and continuing-generation college students: A comparison of high school and postsecondary experiences (ED575985). ERIC. https://files.eric.ed.gov/fulltext/ED575985.pdf

Rodgers, K., Blunt, S., & Trible, L. (2014). A real PLUSS: An proactive advising program for underprepared STEM students. *NACADA Journal, 34*(1), 35–42. https://doi.org/10.12930/NACADA-13-002
Schee, B. (2007). Adding insight to proactive advising and its effectiveness with students on probation. *NACADA Journal, 27*(2), 50–59. https://doi.org/10.12930/0271-9517-27.2.50

Schwebel, D., Walburn, S., Jacobsen, S., Jerrolds, K., & Klyce, K. (2008). Efficacy of proactively advising first-year students via frequent reminders for advising appointments. *NACADA Journal, 28*(2), 28–32. https://doi.org/10.12930/0271-9517-28.2.28

Scrivener, S., Bloom, D., LeBlanc, A., Paxson, C., Rouse, C. E., & Sommo, C. (2008). *A good start: Two-year effects of a freshmen learning community program at Kingsborough Community College.* MDRC. https://files.eric.ed.gov/fulltext/ED500477.pdf

Scrivener, S., Weiss, M. J., LeBlanc, A., Ratledge, A., Rudd, T., & Sommo, C. (2015). *Doubling graduation rates: Three-year effects of CUNY’s accelerated study in associate programs (ASAP) for developmental education students.* MDRC. http://www.mdrc.org/publication/doubling-graduation-rates

Sepulveda, A. (2020). *Coaching college students to thrive: Exploring coaching practices in higher education.* University of Northern Colorado.

Spradley, J. P. (2016). *The ethnographic interview.* Waveland Press.

Stake, R. E. (2013). *Multiple case study analysis.* Guilford Press.

Strayhorn, T. L. (2010). When race and gender collide: Social and cultural capital’s influence on the academic achievement of African American and Latino males. *The Review of Higher Education, 33*(3), 307–332. https://doi.org/10.1353/rhe.0.0147

Stuart, C., & Gharabaghi, K. (2010). Personalized service delivery for young people and families: A synthesis review. *Child and Youth Care Research and Publications.*

Swail, W. S. (2003). Retaining minority students in higher education: A framework for success. *ASHE-ERIC Higher Education Report.* Jossey-Bass Higher and Adult Education Series.

Swanson, D. J. (2006). Creating a culture of “engagement” with academic advising: Challenges and opportunities for today’s higher education institutions. *Online Submission.*

Tuma, J. M. (1989). Mental health services for children: The state of the art. *American Psychologist, 44*(2), 188–199. https://psycnet.apa.org/doi/10.1037/0003-066X.44.2.188

Valentine, J., & Price, D. (2020). *Improving student success through proactive coaching: a case study of Randolph community college.* DPV-Praxis. https://www.dvp-praxis.org/wp-content/uploads/2021/02/2021_Randolph-Brief_web.pdf

Varney, J. (2012, September). Proactive (proactive) advising! *Academic Advising Today, 35*(3). http://www.nacada.ksu.edu/Resources/Academic-Advising-Today/View-Articles/Proactive-Proactive-Advising.aspx
Visher, M. G., Weiss, M. J., Weissman, E., Rudd, T., & Wathington, H. D. (2012). *The effects of learning communities for students in developmental education: A synthesis of findings from six community colleges*. National Center for Postsecondary Research. https://files.eric.ed.gov/fulltext/ED533825.pdf

Weiss, M. J., Mayer, A., Cullinan, D., Ratledge, A., Sommo, C., & Diamond, J. (2014). *A random assignment evaluation of learning communities seven years later: Impacts on education and earnings outcomes*. Society for Research on Educational Effectiveness. (ED562717). https://files.eric.ed.gov/fulltext/ED562717.pdf

Wortham, F. (2014, December). Proactive advising: At-risk students on a commuter university campus. *Academic Advising Today, 37*(4). http://www.nacada.ksu.edu/Resources/Academic-Advising-Today/View-Articles /Proactive-Advising-At-Risk-Students-on-a-Commuter-University-Campus.aspx

Yeh, T. L. (2004). Issues of college persistence between Asian and Asian Pacific American students. *Journal of College Student Retention: Research, Theory & Practice, 6*(1), 81–96. https://doi.org/10.2190%2FMG9G-76UR-7BUK-5JUW
## Appendix A

### Participant Demographics—Stakeholders

|       | # of People | # of Interviews | Man | Woman | Trans or Nonbinary | White | Racially Minoritized | Unsure |
|-------|-------------|-----------------|-----|-------|---------------------|-------|----------------------|--------|
| UNK   | 12          | 14              | 8   | 4     | 0                   | 9     | 3                    | 0      |
| UNL   | 9           | 9               | 3   | 6     | 0                   | 8     | 1                    | 0      |
| UNO   | 7           | 7               | 4   | 3     | 0                   | 5     | 2                    | 0      |
| NU    | 1           | 2               | 0   | 1     | 0                   | 1     | 0                    | 0      |
| Total | 29          | 32              | 15  | 14    | 0                   | 23    | 6                    | 0      |

### Participant Demographics—Staff

|       | # of People | # of Interviews | Man | Woman | Trans or Nonbinary | White | Racially Minoritized | Unsure |
|-------|-------------|-----------------|-----|-------|---------------------|-------|----------------------|--------|
| UNK   | 4           | 9               | 2   | 2     | 0                   | 3     | 1                    | 0      |
| UNL   | 9           | 15              | 2   | 7     | 0                   | 5     | 4                    | 0      |
| UNO   | 13          | 18              | 4   | 8     | 1                   | 7     | 6                    | 0      |
| Total | 26          | 42              | 8   | 17    | 1                   | 15    | 11                   | 0      |
Appendix B

Example of Program Tailoring

The Bridge program at the University of Nebraska Omaha is an example of programmatic tailoring. The Bridge program is designed to meet the unique curricular and co-curricular needs of students in TSLC who were designated as English as a Second Language (ESL) and English Language Learner (ELL) by the university. The program helps first-year TSLC students enrolled in English as a Second Language courses (ESL I or ESL II), and any other students whose primary language is not English, navigate the campus and encourage them to attend and participate in the events and meetings. For example, ESL students have their own autobiography course offered during the spring instead of the fall in order to give them time to work on reading and writing in English before crafting their own autobiography. All other TSLC students are required to take the writing course the first semester of college. Students in Bridge also have two Bridge peer mentors who work under the guidance of a TSLC advisor. Bridge peer mentors are former ESL and ELL students and have had experiences similar to the first-year students they are working to support. Program staff recognize that many ESL students were immigrants, and as the Bridge program evolved, it also included group meetings where students were able to share cultural traditions with their peers and learn about campus multicultural resources. In effect, the Bridge program was designed to build on students’ cultural assets to foster a supportive learning environment and affirming community. The TSLC program has been able to work with the institution to develop TSLC specific sections of ESL II, which functions as a shared academic course (SAC) for Bridge students. TSLC ESL II instructors are intentional about supporting students’ English language reading and writing development, and of demonstrating sensitivity to entering another culture. And like all the tailoring examples we identified (see Kezar et al., 2020 for several examples of tailoring), Bridge evolved out of the four-step process described in this paper.
## Appendix C

### Chart of Tailored Efforts by Campus

| UNK | UNO | UNL |
|-----|-----|-----|
| Those who decided their major/career versus those that are exploring major/career-- Two tracks of programming and curriculum in the second year | Recent immigrant and refugee students – Bridge program | Learning disabilities – Provide testing and Accommodation and advising |
| PERSYST – for students with low academic performance, working adults, and students with multiple external obligations | English language learners – Bridge program and recommend appropriate placements in courses for students and tailor various supports to meet their needs | Probation – the staff were trained to serve as the probation advisors by the university. The staff use the information gathered within these meetings to identify challenges that students experience broadly. |
| Students with mental health issues – Advising that destigmatized mental health issues, “Tune Up” Tuesday (i.e., bring in mental health counselor Tuesdays for program) | Racially and ethnically minoritized students – Programming to showcase culture, advising, partnership with Multicultural Affairs, ethnic studies SACs | Students with mental health issues – Advising that destigmatized mental health issues. Based upon this, all mentors and staff are trained on how to support students in taking advantages of services and helping to bridge connections to mental health. |
| Success Sessions – “Choose your own adventure according to your own needs” | Commuter students – FYS seminar with mentor group and mentor, study and lounge spaces in program office, advising, much of the programming during lunch hour or at 5:00 pm M-F | Students changing majors – Additional advising and programming. The program built relationships with the Explore Center (who helps undeclared students explore majors) and WHT will pay for career/major exploration tests. They also created seminars for students to explore different majors. |
| First-generation – FYS and college knowledge, scheduling of events at particular times to accommodate work schedules/family commitments | First-generation – FYS content, advising, programming, collaboration with other offices on campuses serving first-gen students | First-generation – FYS content, proactive advising, collaboration with other offices to create programming |
| Transfer student orientation/programming | Undocumented students – Advising, Connection to campus support network | Students of color with mental health issues. Based upon meetings with students of color, the director learned that students of color experience the most challenges going over to the counseling offices. In coordination with the multi-cultural center, WHT brings over a counselor who is a woman of color for drop in meetings in the MC. |
| Programming around financial literacy – “Financial avenues” online courses in second year, and discussions about budgeting during FYS in first year | Students who are parents – Advising, programming | Honors students – The program collaborated with the honors program to allow students to contract WHT classes to earn honors credit as well as creating a few sections for Honors/WHT courses. |
| Those who decided their major versus those that have not – Second year dinners designed to build networks according to needs | Programming around financial literacy |
Appendix D

Diagram of Tailoring Process

Part 1: Building relationships with students
Part 2: Helping students learn about themselves
Part 3: Collecting comprehensive information
Part 4: Reflecting and sharing information to identify opportunities for tailoring
Tailored program
## Appendix E

### Additional Types of Information Brought to Tailoring

| Type of information          | What is it?                                                                                                                                                                                                 | Source of data                                                                                                                                                                                                 |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Instructor feedback          | Faculty are brought together for orientations, trainings, and other gatherings, in which they share information about their experiences working with the students in and out of the courses.                 | Staff learned about issues related to academic performance as well as personal information about students.                                                                                            |
| Instructor-staff comparison information | Staff and instructors met on a regular basis to discuss students’ progress and needs.                                                                                                                       | Staff learned about issues related to academic performance as well as personal information about students. Instructors learned about students’ background.                      |
| First-Year Experience course feedback | Instructors teaching the courses communicate with the staff about how students are responding to and performing in the course. This is key information since it is offered in the first semester during their major transition time. |
| Proactive advising discussions | Proactive advising involves several one-to-one conversations with staff.                                                                                                                                 | Individual data that is identified in one-to-one meetings helps to identify trends when they have discussions across advisers.                                                                         |
| E-advising data              | Campuses have electronic advising systems where various offices can identify and tag information.                                                                                                           | Information flagged by other offices can be valuable for understanding resources that they are utilizing.                                                                                                 |
| Surveys                      | After offering programming and events, the staff typically survey the students about their experience.                                                                                                       | While the program surveys focus on the particular programming that was offered, there is also open-ended questions that allows students to share broader data that help understand their experience. |
| Focus groups | Occasionally, staff might gather students for focus groups to help better understand their experience. | Focus groups were a way for staff to learn about the experience of student groups such as those on probation, working students or parents. |
|--------------|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Program evaluation | The programs conduct yearly evaluations, which can include further information collection beyond the surveys and focus groups that they have already conducted. | Annual review of data helps to identify and look at trends that they might be seeing in the individual student’s experience or background over time. |