

Summer Bridge Programs as an Intervention for College Retention and Graduation

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Haroot's Acknowledgements

During this project, we kept running across the phrase “You can’t be what you can’t see.” I realized that we started this journey doing just that. In one of our first asynch assignments, Dr. Quin Trank asked us to write our names with “Dr.” in front. Ever since then, this journey has been about being what I could see. **HUGE THANK YOUS- Cohort #7**, My previous academic pursuits were solitary in nature. You all made me realize how much more rewarding it is to be a part of a caring learning community. Whether it was Saturday study sessions, consecutive days of coding with R (I would like to point out that one of my Zoom meeting rooms is still called “Dante Only Had 9 Circles of Hell Because He Never Coded With R”), group projects, or virtual happy hours- this brilliant, compassionate, & curious group was the best part of this program.

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Important Terms & Definitions

St. Louis University (SLU)



SLU is one of the nation's oldest Catholic universities focused on the Jesuit tradition of "Cura Personalis," which reinforces care for the "whole person." Jesuit education encourages students to become well-rounded people who contribute to the greater good.

Summer Bridge Program



Designed to ease the transition to college and support postsecondary success by providing students with the academic skills and social resources needed to succeed in a college environment. These programs usually occur in the summer "bridge" period between high school and college.

Boniface Foundation



The Boniface Foundation supports high-quality education for the underserved in St. Louis county and city to help break the cycle of poverty, which ultimately results in the improved health and well-being of our community.

Affordances



In this paper, we conceptualize affordances as offerings and opportunities in a given environment that not everyone receives equally. In communities of practice, identity & participation are fully dependent on how people navigate, recognize, and utilize available affordances.

NativityMiguel Coalition



A faith-based environment in which member schools focus on the "whole child." They support students after graduation, foster their continued development, achievement, and contribution to their communities. NativityMiguel directs two middle schools in St. Louis-Marian Middle & Loyola Academy-both of which are partner schools for this project.



Access

Founded in 2005 by a small group of investors, Access emphasizes extended school days, a challenging curriculum, and hands-on counseling. Access directs three middle schools including St Cecelia which is one of the three partner schools for this project.

EXECUTIVE SUMMARY

Our capstone project explored the processes associated with the summer bridge program (SBP) for the Boniface Foundation in St. Louis, Missouri, an organization that funds programs within both the Access Academies and NativityMiguel Catholic school systems in St. Louis. These two organizations operated summer school programs focused on remedial academics for their struggling students and asked us to explore what, if anything, was missing from their current program. Although approximately 94% of students from these schools were successfully admitted to college, Boniface noticed lower college retention and graduation rates for their alumni when compared with national averages for first-generation, low-income students as well compared with the average graduation rates for students from the same socio-demographic backgrounds at St. Louis University (SLU). In conjunction with St. Louis University, Boniface wanted to use summer bridge program interventions to improve college retention for first-generation, low-income, and/or minoritized students from their schools.

Our project aimed to:

- Provide research-based insights to the university in improving their current bridge program structures.
- Compare the current summer program models at three schools – Loyola Academy, Marian Middle School, and St. Cecilia—and identify elements within each that align with researched based interventions which promote student college retention.
- Provide research-based evidence to support the three partner schools in moving from a summer school model to a summer bridge program model with wrap around supports.

Tinto's (1987, 1993) study on college attrition and retention which demonstrated that efforts on most campuses do not go far enough to promote student retention, especially for first-year students. We used Tinto in our conceptual framing and focused on SBP models which created a cohesive environment and provided opportunities for students, staff, and college faculty to build a learning community. We also drew on Hand and Gresalfi's conception of communities of practice and their findings that identity and participation are fully dependent on how people navigate, recognize, and utilize available affordances of a particular environment (2015). In this paper, we conceptualize affordances as offerings and opportunities in a given environment that not everyone receives equally.

We generated the following research questions:

Research Question (RQ) #1: What affordances intended to promote student retention currently exist in the SLU/Boniface summer bridge program? In what ways do these affordances demonstrate evidence-based elements that promote student retention?

Research Question (RQ) #2: What evidence-based elements are currently missing from the SLU/Boniface summer bridge program?

Research Question (RQ) #3: How can the SLU/Boniface bridge program and its stakeholders build capacity in developing the SBP program to address elements identified in RQ2?

To answer our three research questions, we drew on existing graduation data as well as a wide range of interviews with building principals, guidance counselors, school tutors, SLU staff,

and SLU students. We reported to SLU's director of community engagement bimonthly and coordinated in-person meetings with school leaders for our site visit in July 2021. Before the site visit, we prepared updates for the dean of SLU's School of Education and the CFO of the Boniface Foundation. During the visit, we met with the principals of Loyola Academy, and Marian Middle School. In addition, we met with the principal of St. Louis Catholic Academy and gathered the perspective of a high school leader. While in St. Louis, we also connected with the principal at St. Cecilia via Zoom. In order to gather stakeholder perspectives from all partner schools, it was important for us to learn more about the students and the supports they needed at a summer bridge program. We also examined the school data from 2015 to 2022 which tracked the partner school students and reflected their college retention and persistence and we collected secondary survey results from current SLU students from first-generation and low-income (FGLI) and/or minoritized backgrounds.

We focused the investigation on the existing summer structure at St. Louis University, which included a wide range of programs for students from FGLI and/or minoritized backgrounds. All these programs were executed through SLU's Pre-college Programs Office, which supported students from across the nation attending the university. Since we could not gather middle school and high school data from all those students, we focused on students from the St. Louis area. We narrowed the scope of our problem of practice and chose to look at the students from the Boniface Catholic schools. We interviewed the middle school presidents, principals, and staff and conducted a focus group with the tutors assigned to the 2021 summer program.

The Boniface Foundation provided us with their available data in the following three categories: private high school acceptance rates, high school graduation rates, and college

acceptance and retention rates. We also used graduation and retention rates from St. Louis University’s FGLI and minoritized populations as a comparison group to the alumni from three Boniface middle schools: St. Cecilia, Marian, and Loyola Academy.

We created a survey to be completed by FGLI and/or minoritized students at SLU, whether they were currently in college, stopped attending college, transferred, or graduated. We collected this data to help us understand what interventions these current students at SLU experienced before coming to campus. In addition, we gathered information from the students about their perceptions of connection to faculty, other students, and the university.

Our analysis led to the following findings:

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| <p>Finding #1: SLU and the partner schools are currently providing interventions for academic readiness, which is one of the three components (academic readiness, co-curricular activities, and emotional supports) of evidence-based programs that support increases in college retention.</p> |
| <p>Finding #2: Saint Louis University and the partner schools are currently using a summer school program model strictly focused on addressing student academic deficiencies of students which may increase college readiness/acceptance but may not affect retention or persistence.</p> |
| <p>Finding #3: SLU and the partner schools are not including social/emotional or co-curricular supports in their SBP.</p> |
| <p>Finding #4: Although SLU/Boniface reported conducting an SBP- survey respondents did not report participating in an SBP and did not report a sense of belonging or feeling connected to the SLU campus, faculty, or their peers.</p> |
| <p>Finding #5: St. Cecilia School and Marian Middle School showed significantly lower college retention rates when compared with Loyola.</p> |
| <p>Finding #6: Loyola Academy has provided opportunities for its students to participate in an evidenced-based program that incorporates all three elements of summer bridge programs intended to increase retention.</p> |
| <p>Finding #7: Graduate Support Directors at the partner middle schools track and support their cohorts through middle school, high school, and college, yet their caseload prohibits their ability to successfully track students for retention and college graduation.</p> |

There were several complications in completing this study. One, the organizational structure at St. Louis University created silos of information to which we were not privy until we asked the correct question or happened to interview the correct person. In addition, our direct line of communication went through SLU’s director of community engagement. However, the decisions were made by the dean of the School of Education and the CFO of the Boniface Foundation. On multiple occasions, we received contradictory information and were not able to resolve the contradictions due to our inability to communicate directly with the primary decision-makers.

Considering the complexity of the organizational structure, the variety of the decision-makers, and the number of stakeholders, we modeled our recommended practices on increasing college readiness for underrepresented students through summer bridge programs (Strayhorn, 2011 Odeleye & Santiago, 2019) Based on our partner organizations’ input, our findings as well as a literature review of summer bridge programs aimed at increasing college retention, we created the following recommendations:

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| <p>Recommendation #1: To create a sense of belonging by providing students with the opportunity to live on campus, which helps build a cohesive learning community, Boniface/SLU should create a summer bridge program that takes place on SLU’s campus.</p> |
| <p>Recommendation #2: To build a learning community that reinforces a sense of belonging, SLU/Boniface should select faculty for the on-campus SBP program and ensure the instructors are trained and ready to interact with adolescents in their college courses.</p> |
| <p>Recommendation #3: To build social/emotional supports, provide models for SBP students and reinforce the importance of the summer bridge program, SLU should recruit undergraduate students—especially those from Boniface/Partner schools—to serve as leaders/mentors in the SBP program.</p> |
| <p>Recommendation #4: To maximize opportunities to build a learning community, the SBP should create groups from St. Cecelia, Marian Middle, and Loyola Academy to progress through the program in mixed cohorts.</p> |

Recommendation #5: To minimize the focus on deficiencies beyond the students' control and create a sense of belonging, SBP should provide clothes, meals, and all other necessary supplies for all students during the three weeks of SBP.

Recommendation #6: To decrease the workload of graduate support directors and create a more equitable tracking mechanism, The SBP at SLU should be directed by an individual not affiliated with Boniface or any of its partner schools.

Recommendation #7: To minimize the additional workload for the partner school staff, Boniface/SLU should create a group of 10 to 12 stakeholders, which would include the SBP director and selected mentors, to form a committee that elicits feedback, evaluates, plans, and makes changes to the SBP as necessary.

Recommendation #8: To ensure proper tracking of long-term student retention and graduation statistics, SLU should create an infrastructure for collecting qualitative and quantitative data after each SBP cycle.

ORGANIZATIONAL CONTEXT

As we explored the organizational context of SLU as well as the partner schools and aligned that context within our conceptual framework and literature review, numerous interviewees highlighted the racial climate in St. Louis. In follow-up interviews with stakeholders, our research, and visits to several neighborhoods in the city, we experienced “The Delmar Divide,” a division named after the road that physically separates the city but, more importantly, serves as the boundary between people of different races and socioeconomic statuses. We have included the historical background of the city as a backdrop for the organizational structure of the Boniface Foundation and St. Louis University.

The City

The Gateway Arch monument in St. Louis sits along the west bank of the Mississippi River and takes its name from the city's role as the “Gateway to the West” during the 19th-century westward expansion in the United States. The gleaming archway, part of Gateway Arch National Park, commemorates the Louisiana Purchase (1803) and the subsequent opening of the west to settlers (Koning, 2006). The Park also includes the Old Courthouse, where Dred Scott, an

enslaved person, first sued for his freedom in a legal case that would eventually reach the U.S. Supreme Court. Many historians believe the Dred Scott verdict is the worst decision the Supreme Court ever made (Koning, 2006), a decision that amplified the divide in the country as it moved closer to civil war.

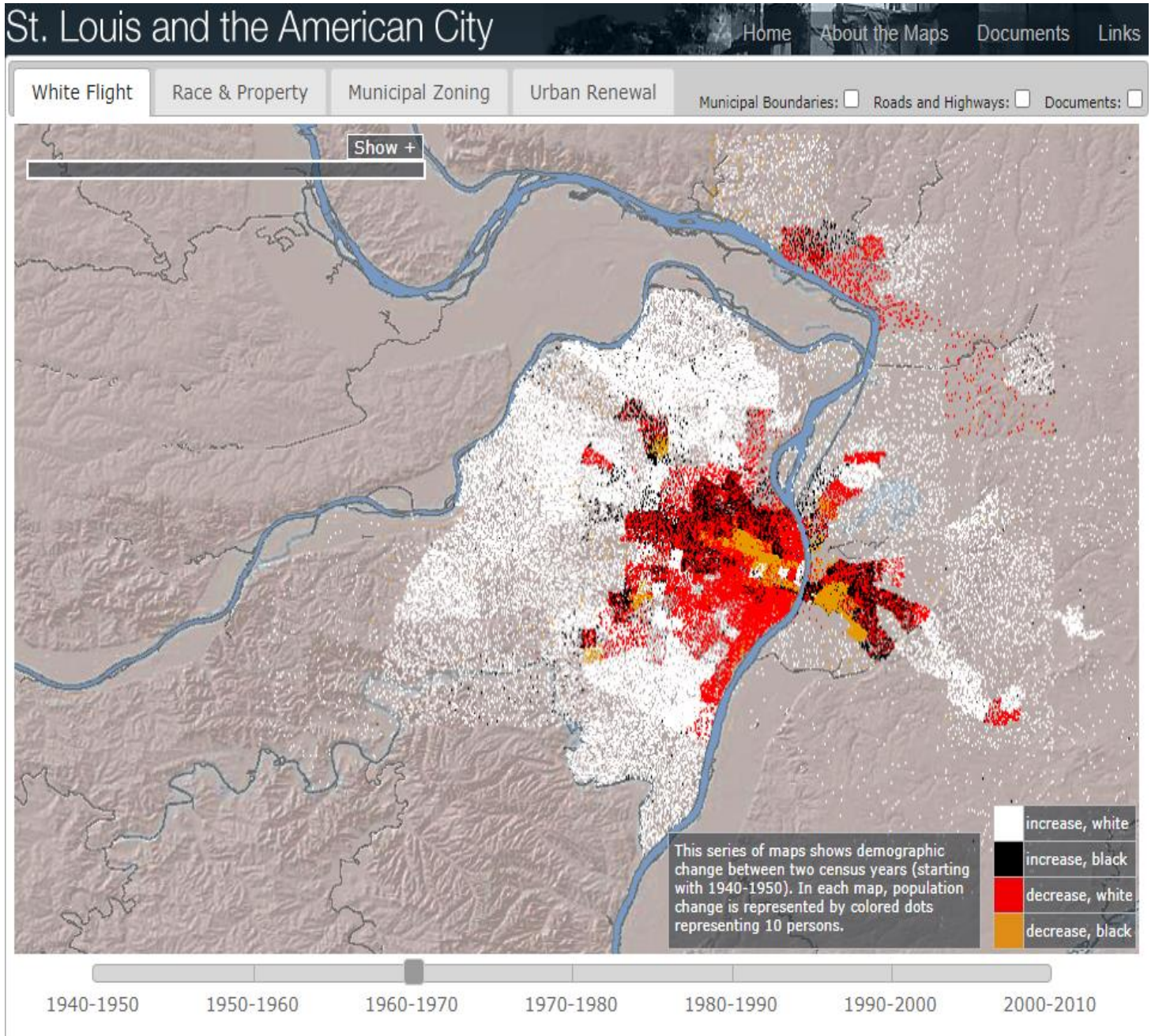
Before, during, and after the Dred Scott case, St. Louis has dealt with racial violence and its aftermath. One example of such violence came in 1917 in East St. Louis, Illinois. That city, located right across the Mississippi River in view of the Arch, suffered through a “race war,” leading to the death of dozens of Black men and women. Additionally, many homes and businesses were burned down, causing many Black families to escape to St. Louis, Missouri (Keyes, 2017). Racial tension and violence, as well as systemic prejudice and racism, are an undercurrent within the city, which its leaders have tried to combat.

As part of their revitalization effort to provide affordable housing for residents, city planners established the Pruitt–Igoe urban housing projects in 1954 (Checkoway, 1985). Living conditions in Pruitt–Igoe declined rapidly and by the late 1960s, it was widely characterized by its poverty, crime, and racial segregation. The 11-story high rises within the complex almost exclusively accommodated Black residents of the city and in 1974, all 33 buildings in the neighborhood were demolished. For city planners, city leaders, and the minoritized residents of St. Louis, the project has come to represent some of the failures of urban renewal, public-policy planning, and public housing (Bristol, 1991).

The educational system was also a target of the city planners’ efforts to fight against systemic racism. Explicit policies to combat de facto segregation in schools led to busing and a multicultural approach to education. The efforts to create more diverse schools led to white flight

and disinvestment in the city (Frievoegel, 2003). Between 1950 and 1970, close to 60% of the white population left the city (Gordon, 2008). See **Figure 1 and the interactive link**.

Figure 1 (<http://mappingdecline.lib.uiowa.edu/map/>)



Over the last 20 years, there has been gradual progress in St. Louis's efforts to revitalize the economy. The city has been recognized for its urban restoration of the Washington Avenue Historic District, Forest Park (adjacent to Washington University in St. Louis), and the Central West End (adjacent to St. Louis University). These efforts helped the city win the World Leadership Award for Urban Renewal (Jackson, 2006). Despite these efforts, a racial divide still exists, with one major roadway serving as the literal and figurative emblem of systematic city difference.

Delmar Boulevard is a major four-lane road that runs east to west in St. Louis. To its north, the population is 99% Black, with 5% of residents possessing a college degree. To its south, the population is 70% white, and 67% of residents have a college degree. To its north, home values average \$78,000; to its south, \$310,000 (Harlan, 2014). Delmar serves as a racial and socioeconomic dividing line in St. Louis, and coincidentally, the road ends about five blocks north of St. Louis University, establishing the social and historical context within which the university operates.

St. Louis University Academic Data

According to the U.S. Department of Education (2021), persistence rate is measured by the percentage of students who return to college at any institution for their second year, while retention rate represents the percentage of students who return to the same institution. Graduation refers to students who earn their first degree within six years of enrolling in college for the first time. Based on SLU's Enrollment & Retention Management office (Admissions Annual Report, 2017) from 2008 to 2016, SLU's retention rate for FGLI students was between 78% and 86% with a 12-year average of 83.6%. The six-year graduation rate for these students ranged from 52% to 60% with an average of 57.2% (see Appendix D). The retention rate for

Hispanic/Latino students in the same period ranged from 74% to 93% with an average of 86%. The six-year graduation rate for these students ranged from 62% to 83% with an average of 71% (see Appendix E). For Black students, the retention rates ranged from 68% to 83% with an average of 74.7%. The six-year graduation rate for Black students ranged from 51% to 58% with an average of 55.1% (see Appendix F).

St. Louis University and the Jesuit Tradition

SLU is one of the nation's oldest Catholic universities and is steeped in its Jesuit tradition. This tradition is focused on "Cura Personalis," a Latin phrase used by the order of the Jesuits, which reinforces care for all aspects of a person's health, from the physical to the mental and the spiritual. Jesuit education encourages students to become well-rounded people who contribute to the greater good. This tradition fosters SLU's commitment to service and social justice within its community. The *Princeton Review* recognized SLU for its focus on contributing to the greater good with a second place ranking among universities for community service and fourth place among best schools for making an impact (2019). SLU's overall goal to serve the community within which it operates is mirrored in the mission of its School of Education.

The School of Education

The School of Education's mission statement embraces innovative learning techniques through a "strong commitment to diversity and social justice" (2021). This mission is guided by the spiritual and intellectual ideas of the Jesuit tradition. According to its policies and procedures, the School of Education advances the university's mission through its research and service to family, the school, and local, national, and international communities (2016). The vision of the School of Education (2021) is based on the idea that education is "a human right,"

and the college works toward building cultural competence in its staff, faculty, and students while embracing diversity, learning to serve, and contributing to change. This mission is demonstrated through a variety of outreach programs.

At the post-bachelor's degree level, the Billiken Teaching Corps (BTC) requires students to live and teach in the local Catholic schools. Supported by an in-school mentor, a university supervisor, and an instructional coach, the BTC students earn an M.A. in teaching while supporting the greater St. Louis community (2021). The School of Education prides itself on its commitment to social justice and focuses on preparing its students to think on systems levels about inequality.

As a part of its commitment to equitable educational practices, the SLU School of Education provides summer bridge programs for a variety of students. By definition and design, bridge programs provide incoming students with the academic and emotional skills necessary to be successful in their college experience. They improve the preparation and ease the transition for the upcoming school year. Students who attend are often those who are at-risk or in need of remedial classes but may simply need stronger skill sets or self-advocacy skills. Once exposed to these supports, strategies, and personal connections, students are equipped to continue their academic careers.

Bridge programs are intended to help minoritized students as well as FGLI students gain access to college and persist until graduation. As a part of the commitment to contribute to change, SLU offers three bridge programs: Pre-College, Access, and TRIO-which are all operated through the School of Education. These promote educational opportunity, success, and persistence with specific emphasis on FGLI students, as well as students from underrepresented

groups, or students whose academic preparation may not have thoroughly prepared them for college and career success (2021).

The Access Academies and Partnership with SLU

Convinced that education was the most enduring path out of poverty, a small group of St. Louis business owners, entrepreneurs, and lawyers founded Access Academies in 2005 (Access Academies, 2021). They embraced a model that emphasized extended school days, a challenging enrichment curriculum, and hands-on counseling; the first Academy had 15 students in a single, South City middle school. Access currently partners with four middle schools and 25 private high schools, serving more than 500 students in the St. Louis metropolitan area.

Among Access's population, 97% of students represent minoritized groups while 94% qualify for free/reduced lunch. Nearly two-quarters of the students live in single-parent households (Access Academies, 2021). The program serves 175 students in three partner middle schools—St. Cecilia School & Academy, St. Louis Catholic Academy, and Sister Thea Bowman Catholic School in East St. Louis—as well as 333 students in 25 college-prep high schools. Their graduates attended 59 colleges and post-secondary institutions across the country (Access Academies, 2021).

In July of 2020, Access Academies integrated its successful middle school enrichment and high school and college support programs into St. Louis University's School of Education. This partnership strengthened SLU's connection to students in local Catholic schools and their surrounding neighborhoods and allowed Access to leverage the School of Education's expertise, resources, and the BTC (St. Louis University, School of Education 2021).

Saint Louis University/Partner School Faculty and Staff

The partnership between Access Academies and SLU gathered a complicated array of stakeholders who all strive to provide “access” to and readiness for college. The School of Education has seven staff members that report directly to the college’s dean, Gary Ritter. Two members of the staff, Josh Goldman-director of community engagement- and Ryan Wilson-community project program coordinator, interact directly with the Summer Programs. In addition, Dean Ritter supervises the office for Pre-College, Access, and TRIO, which are all directed by Will Perkins. This office oversees all programs aimed at increasing access, readiness, and retention for underserved populations. The funding and staffing are multifaceted; Confluence Charter Schools and two religious organizations, the Boniface Foundation and The NativityMiguel Coalition support these programs. (Confluence 2021, Boniface Foundation 2021, & NativityMiguel, 2021).

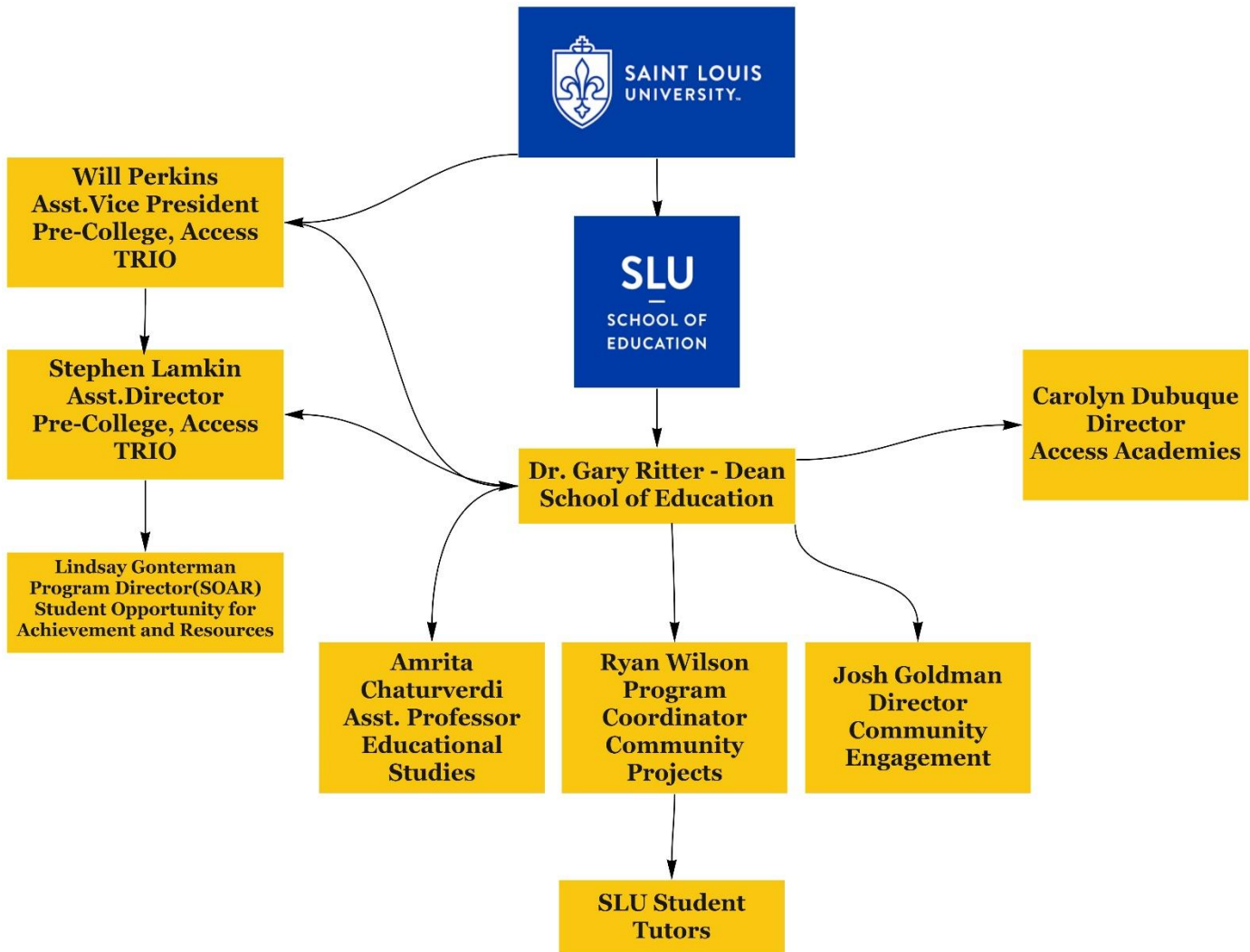
At the recommendation of Dean Ritter, this capstone project focused on the schools funded by Boniface and NativityMiguel, which are under the direction of Carolyn Dubuque from SLU. Dean Ritter narrowed the focus on the “best available programs,” bestowing his confidence that the Boniface Foundation would be more likely to fund “research-based best practices” because we would have more freedom to explore our options. Carolyn Dubuque-Director of Access Academies- coordinates the staff members from the middle and high schools, communicates with the school’s graduation support directors, and serves as the liaison between SLU and the surrounding educational community. She handles all of the activities associated with the Access program.

The middle school students in the Access Summer Program are selected based on their grade point averages. Students with a GPA of 2.8 or below are required to attend the academic

support sessions for math and summer reading while students with a GPA above 2.8 have the option to attend. This is one form of an extended-school-year model since students are required to attend because of their academic records. Approximately 70 students attended the program in 2020. Teaching staff from the partner schools have direct instructional duties for the math portion of the programs, and under the direction of Ryan Wilson from SLU, student tutors are provided for the reading portion of the program.

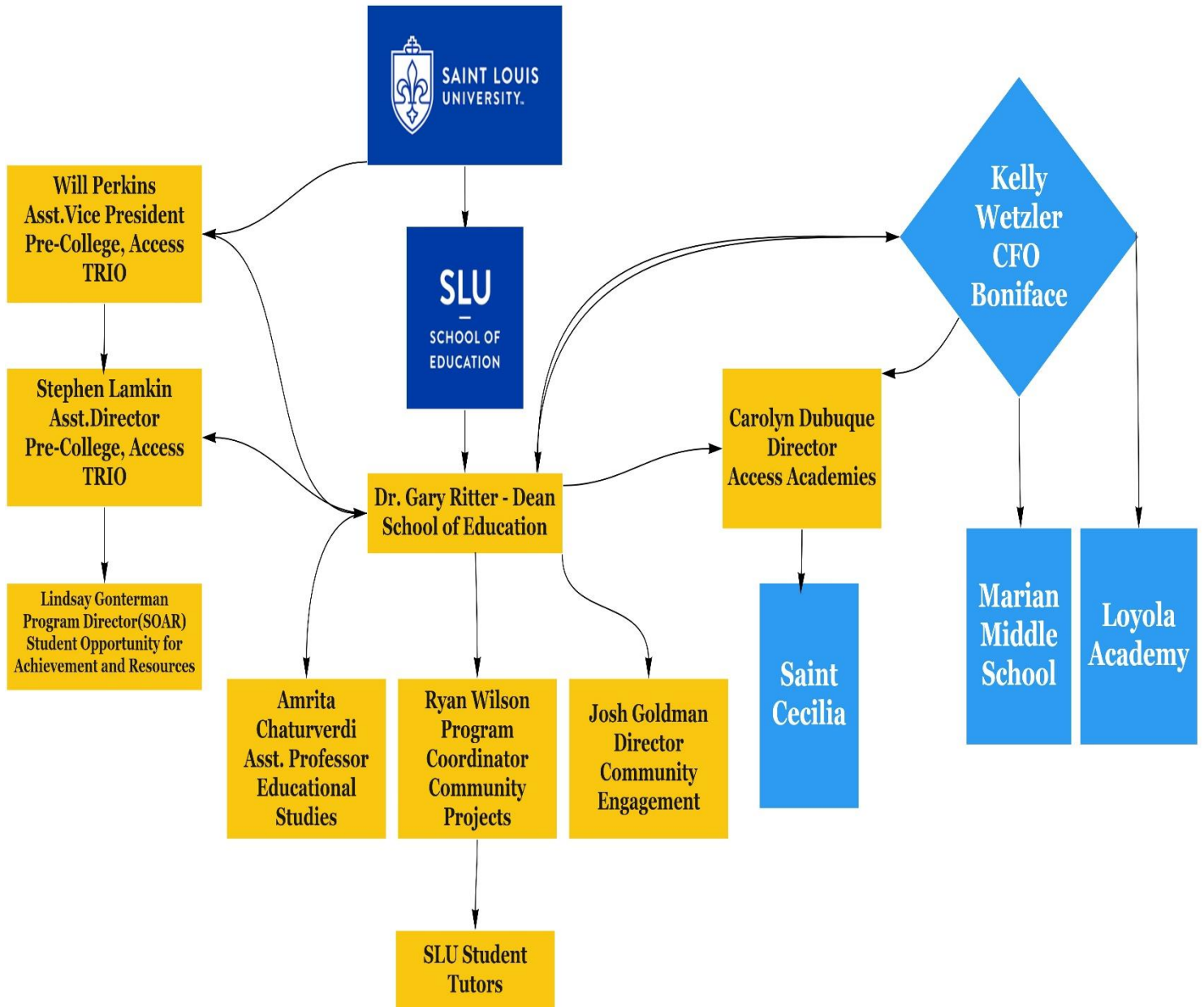
The diagram below (Figure 2) explains the different offices within SLU that are responsible for summer programs.

Figure 2



In addition to the different offices within SLU that are responsible for summer programs, the following chart (Figure 3) shows the entire organizational structure, including the partner schools.

Figure 3



PROBLEM OF PRACTICE

Based on data from 2015 to the winter of 2022, the SLU/Access programs provided college readiness and access for their students but have not demonstrated an improvement in college retention for their targeted population. Kelly Wetzler, executive director of the Boniface Foundation, which provides the main source of funding for the Access programs, is interested in an evidence-based improvement plan for college readiness, retention, and persistence. To meet this challenge, our capstone project explored the characteristics of SLU's existing summer bridge programs and identified existing strategies intended to increase college readiness. We also identified specific elements of SBPs (Strayhorn, 2011) lacking at SLU that affect college retention and persistence.

The bridge programs at SLU operate within the larger context of increasing college access and readiness in all the secondary schools within the greater St. Louis area. The SLU's institutional goal for these programs is higher college retention and graduation rates for minoritized and/or FGLI students. While the schools and the Boniface Foundation felt that they provided a high level of support for their students, as evidenced by 97% of the middle school students attending partner high schools and over 70% attending college, they wanted to explore why this support has not yielded intended results in college retention and graduation (Figure 2)

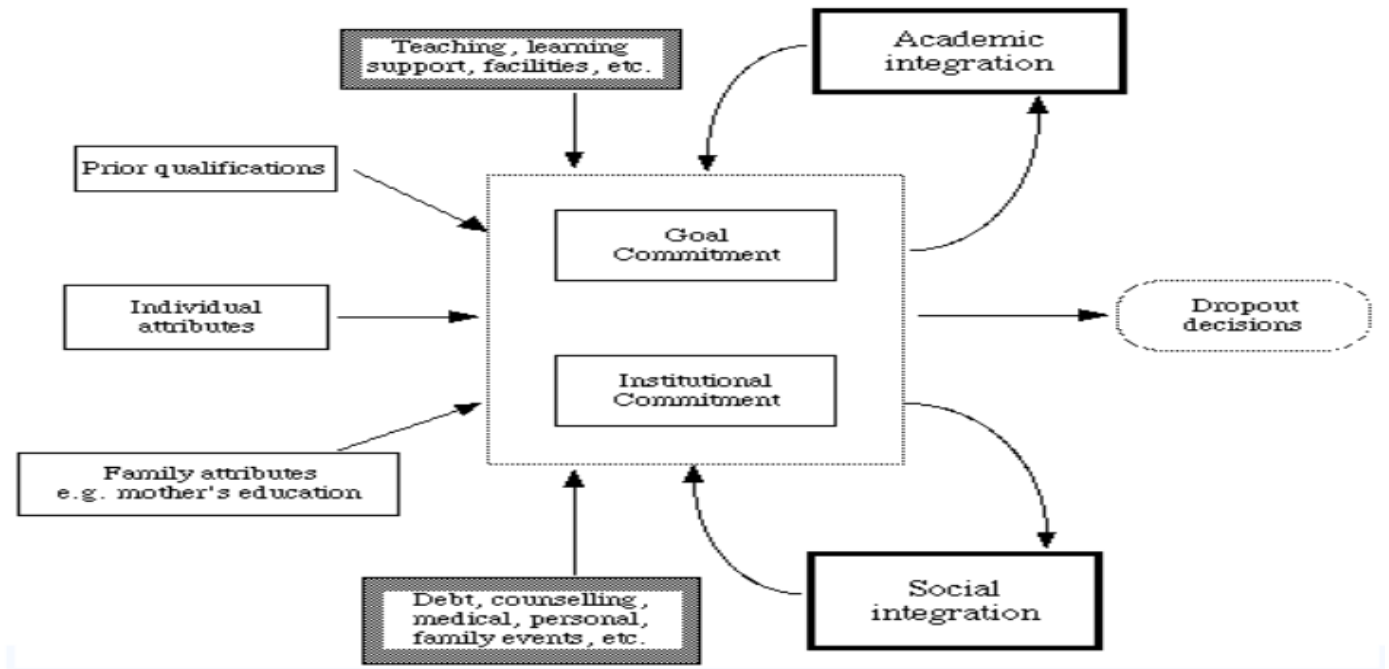
Figure 4

Percentage of post-secondary graduates (since 2015) currently enrolled or graduated from an accredited 4-year college.

| | 2019 | Spring 2020 | Fall 2020 |
|-----------------------------------|-------------|--------------------|------------------|
| Loyola | 56.8 | 67.6 | 67.6 |
| Marian | 41.3 | 35.6 | 44.7 |
| Access Academies | 25.8 | 31.3 | 32.1 |
| Avg. for all three schools | 41.3 | 44.8 | 48.1 |

The current structure treats SBPs as synonymous with extended-day or extended-year academic programs, which equate college retention with academic readiness. According to Tinto’s (1975) original research, however, academic readiness is only one of the seven possible student characteristics that affect college retention and persistence. Based on research conducted by Reason (2009), which expands Tinto’s findings, a framework for college retention that includes comprehensive social/emotional factors in addition to academic preparation leads to college retention (See Figure 5).

Figure 5



The Algebra portions of the program are taught by certified teachers from the middle and high schools associated with Boniface and Access Academies. The summer reading portion is staffed by SLU tutors, who are primarily college sophomores and juniors. While there is a wealth of data that points to Algebra 1 and Geometry as important factors in college readiness, focusing solely on academic readiness is a limited approach because it neglects social and emotional factors that contribute to retention (Tinto, 1987, Reason, 2009, Fredericks et al. 2004).

Based on conversations with Dean Ritter, SLU is aware that extended-day and summer programs are not synonymous with bridge programs. Wetzler of the Boniface Foundation is concerned that the current structure is effective in getting their targeted student population into private and parochial high schools and colleges but has not impacted college retention and

graduation. According to Dean Ritter, only about 30% of the students in the Boniface programs graduate from college.

This capstone project explored the SLU/partner schools' summer bridge program model and identified evidence-based SBP practices that can lead to college retention and persistence. According to Kanter et. al. (2017), many minoritized students at predominantly white institutions feel disconnected from faculty, staff, and other students at higher rates than their white counterparts; therefore, failure to address social and emotional frameworks with specific emphasis on individual student attributes and a college identity must be considered in the program aimed at helping those populations.

LITERATURE REVIEW

Given the organizational context and our problem of practice, our literature review explored situative learning, positioning, and affordances and how those elements created “pre-college characteristics” and a college student identity. Our research found that effective summer bridge programs created a sense of belonging, prepared students academically, and included co-curricular activities. When these components were implemented, research indicated higher levels of college retention and persistence.

Summer Bridge Programs

Many colleges and universities in the United States offer summer programs for their incoming students. While programs are structured and administered in a variety of ways and target various student populations, the most common type of summer bridge program aims to serve historically underrepresented students and students of low socioeconomic status (Odeleye & Santiago, 2019). The primary goal of these programs is to promote college retention and

improve completion rates by providing students with the academic, social, and emotional tools needed to succeed in college before beginning their undergraduate studies (Garcia & Paz, 2009).

Summer bridge programs are designed to provide incoming students with the academic and emotional skills necessary to be successful in their college experience (Odeleye & Santiago, 2019; Tomasko et al. 2016). They improve the preparation and ease the transition for the upcoming school year. Students who attend are often those who are at-risk or in need of remedial classes but may simply need stronger skill sets or self-advocacy skills. Once exposed to these supports, strategies, and personal connections, students are equipped to continue their academic careers.

According to Tomasko et al. (2016), students who participated in a six-week science, technology, engineering, and math (STEM) program before their first term of enrollment at a research-intensive land-grant university showed statistically significant gains in retention as compared with the non-participating students in the incoming classes of 2009–2011. Although these findings were specifically associated with STEM programs, gains in retention occurred for all minoritized populations (in this case, Black, Latino, and Native American students), with the highest increase for women. Tomasko et al. (2016) showed that these gains were associated with programming that focused on preparation for college coursework, a sense of belonging as measured by qualitative surveys, and the use of academic support structures.

Summer Bridge Programs - College Retention

In general, ACT scores and high school GPA were predictive of college students' GPAs, but poor predictors of retention (Saunders-Scott et al., 2017). Conversely, self-perceived stress and grit were poor predictors of college students' GPAs but were statistically significant

predictors of retention. Traditional factors, often used for college admissions, were less important than non-traditional, psychological factors in predicting who will complete college.

Lotkowski, Robbins, and Noeth (2014) argued that the overall relationship between college performance and retention was strongest when ACT Assessment scores, high school GPA, and socio-economic status (SES) were combined with academic self-confidence and achievement motivation. Their recommendations included summer bridge programs that implement formal retention programs that consider the academic, social, and emotional needs of students. Their findings indicated that non-academic factors such as “academic self-confidence, academic goals, institutional commitment, social support, and social involvement” all had a positive relationship to retention. According to DeWitz, Woolsey, and Walsh (2009), creating interventions to positively influence students’ subjective sense of self-efficacy and purpose in life improved college retention.

Colleges and universities have created a variety of support programs aimed at increasing retention in higher education, with emphasis on factors affecting students from FGLI backgrounds. According to *The Digest of Educational Statistics*, in 2006, 30% of white students aged 25 and older held a bachelor’s degree, compared with 17% of Black students and 12% of Latino students in the same age range (2009). According to Thayer (2000), emphasis on these students is important for two reasons: first, because students from FGLI backgrounds are among the least likely to be retained through degree completion, and second because strategies that work for FGLI students are likely to be successful for the general student population, as well. As a result, institutional retention efforts that take the needs of such students into account result in more equitable educational attainment rates (Thayer, 2000). Thayer also suggested that structured first-year and learning community programs should respond in practical ways to

theories and to the specific needs and characteristics of students from FGLI backgrounds (2000). Research also shows that lifetime family income was directly related to post-secondary education (Lemieux, 2006).

Summer Bridge Programs - Affordances, Positioning, and Identity Formation

Middle and high schools create affordances to promote both high school completion and college enrollment. When this is not prioritized, schools contribute to students' early departure from school or feelings of isolation and alienation. Huerta, McDonough, and Allen (2018) spoke with more than 150 Black, Latino, and Asian American Pacific Islander students enrolled in 10 urban and suburban high schools in California. They found that having a school identity motivated these students to graduate and challenged the dominant narrative that young men of color are not invested in higher education (p. 713). This highlights how male students negotiated their agency in making decisions on how to accomplish their educational goals. This positioning allows them to take ownership and negotiate a college identity.

Huerta, McDonough, and Allen (2018) noted that FGLI high school students "need specific forms of college information" to know how to prepare for college and oftentimes, schools overlook that many of their students "lack the funds of knowledge" required for this process (p. 719). McDonough (1997) reinforced this claim by arguing that schools expect students "to possess forms of cultural capital," but do not share it with all the students; only small groups of selected students receive this necessary information. This is particularly true since cultural capital is associated with white upper or middle-class norms. "College knowledge" therefore becomes a prized commodity only available to the normative majority. (McDonough, 1997). Savitz-Romer and Bouffard (2012) defined a college-going identity as the "state of mind in which youth believe that college is right for them and aspire to obtain a college degree" (p.

64). From this conceptualization and using Marcia's (1980) ego identity status framework, the students in the Huerta, McDonough, and Allen study (2018) shared how they formed their college-bound identities in high school.

Marcia's four concepts (1980) explained how an individual will explore and experience a sense of crisis or commitment: (1) foreclosure, (2) identity achievement, (3), identity diffusion, and (4) moratorium. Here, crisis refers to an adolescent's period of engagement in choosing meaningful alternatives, while commitment refers to the degree of personal investment the individual exhibits (Marcia, 1966, p. 551). When adolescents are in a state of foreclosure, they conform to parents and trusted individuals and use their expectations of how they should act based on the context and environment. In this state, they might rule out going to college without receiving crucial information. When adolescents are in the identity diffusion state, they are easily influenced by peers and are unable to commit to an identity or opportunity. School personnel may view them as not being fully invested in the college process, and in turn, the students feel the planning process is too foreign for them to navigate. When students are in the moratorium phase, they have an identity crisis because joining the workforce, entering the military, or enrolling in college all seem like viable and equal options. They become confused and may try on various identities during this time. The final status is the achieved phase when an adolescent commits to building an identity after negotiating the various options (Huerta, McDonough & Allen, 2018, citing Marcia, 1980).

While all adolescents construct their identities through understanding their world, opportunities, and local environments, young men of color do not receive the same affordances as their white peers (Huerta et al., 2018 Hand & Gresalfi, 2017). Schools and counselors can support their students by creating small learning groups for ninth- and tenth grade-young men of

color. This allows upperclassmen or local college students to mentor their students and learn from older students about how to navigate the college process while sharing similar struggles, challenges, and backgrounds. By continuously involving college access programs or recruiters, schools are not putting the entire responsibility on students.

Existing literature on college readiness divides into two strands; the dominant strand defines college readiness as a set of skills, while the emergent strand views college readiness as a component of student identity (Duncheon & Relles, 2019, p. 3). Though research asks what it means for a student to be college ready or what indicates that students are ready for college, high schools can try to create college-bound identities for students while they are in high school. In this way, students do not view themselves as skills-deficient, but rather, that their identity can grow and expand to incorporate themselves as belonging at college. The schools, not the students, are therefore failing to promote “a national standard of high achievement” (Duncheon & Relles, 2019 p. 7). When using a figured world lens- which Duncheon & Relles, (2019) defined as how people come to understand themselves, “figuring out” who they are through the "worlds" in which they participate, and how they relate to others within and outside of these worlds. High school students use feedback loops within their school context to determine whether they are tracked toward college. All entering college students “will encounter new feedback loops that will require adjustment. Yet not all students will have to deconstruct their pre-college identities drastically in this process” (p. 27). High schools should therefore consider identity implications surrounding how students are treated, and which students receive access and information (in the form of feedback) that allow them to include themselves in the college-bound population (p. 27).

Based on social class and what he called “high school experiences,” McDonough (1997) examined which students go to college. Guidance counselors played a huge role in determining a student’s self-perception of college opportunities, and the decision-making process varied by the student’s social class and the structure and context for guidance that is available within the school (p. 2). Here, opportunity referred to prospects for mobility from the individual’s present position to a higher-level position. Using Hossler’s model (1987), McDonough referenced three stages in deciding about going to college, and in the first stage, predisposition, a student decides whether to attend college. Alexander and Cook (1979) found that intending to go to college before tenth grade increases the likelihood of going by 21%, compared with making that intention during senior year. Unfortunately, first-generation students think about going to college much later than students who have parents that went to college (Alexander & Cook, 1979). These thoughts become reality if school personnel deliver information and assist students with negotiating these plans.

The greatest form of access relates to the phrase *bounded rationality*, which refers to “behavior that is rational but limited by the cognitive constraints on decision making” (Alexander & Cook, 1979). Since high school seniors never considered all the possible college choices in the country, they selected college possibilities based on physical location, social networks, environmental stimuli, and their anticipated goals. They decide where to go by scanning the environment around them, and they use this bounded rationality to make decisions. When high schools provided educational equity and resources to all their students, some first-generation students made more comprehensive decisions and reached previously untenable goals.

Building a college identity as an early intervention to promote college retention and persistence has been researched and practiced for well over 30 years. In the San Bernardino City Unified School District, second-year high school students with high standardized test scores and low GPAs receive invitations to a Middle College High School program (Borsuk & Vest, 2002). This secondary intervention allows students to adopt a dual identity; they are college students in the morning and high school students in the afternoon. A major component of the program exposes students who never considered college as an option to engage with the college experience. AVID (Advancement Via Individual Determination)- a non-profit organization that provides professional learning for educators to close opportunity gaps- provides tutoring, mentoring, and individual guidance - and the teachers are on a first-name basis with students. This close contact develops trust and decreases the likelihood that students will drop out of school. There is a concerted effort to use college-provided student services, like the career center, writing center, and health services. The enrolled students also attend assemblies and field trips, promoting ownership and buy-in to the educational journey.

This program improved attendance and grades for its participants while allowing them to earn a high school diploma and an associate degree at the same time. “By selecting their college courses and even standing in line for their textbooks, the students must take responsibility for their education and their own success or failure” (p. 3). Students gained a level of respect not normally afforded them in high school, demonstrating that when students are provided with the right tools, they empower themselves to become responsible and successful.

Identity Building—College Retention

Any high school student transitioning to college is leaving behind an institution that has shaped them for the last four years. As they construct a new identity and acquire new traits and

characteristics, students are choosing between the identities available to them in each new situation. These decisions and connections dictate college readiness and retention. Gee (2001) conceptualized identity as being recognized as how a certain “kind of person” acts and interacts in each context (p. 99). Although people have multiple identities and notions about what it means to be considered a “certain kind of person,” Gee (2001) outlined four lenses through which identity can be viewed:

- Nature or “N-identity” - an identity people cannot control, one that comes from forces of nature. An example of this type of identity would be male or female. While the person has no control over the sex they were born with, this identity only means something because society and culture say this biological difference is important.
- Institutional or “I-identity” - an identity set by authorities within an institution. An example of an I-identity is a student, whose identity is defined by the school as an institution with rules and traditions the student must follow. Gee claims these I-identities can be something imposed on a person, such as being a prisoner or can be a choice, such as being a college professor.
- Discursive or “D-identity” - refers to an individual trait, such as caring. D-identities are a matter of social interaction that only become identities because “other people treat, talk about, and interact” with the person in ways that bring forth and reinforce the trait.
- Affinity or A-identities are built by shared experiences as part of an affinity group, which according to Gee is a group that shares “allegiance to, access to, and participation in specific practices” based on a chosen topic.

These identity perspectives manifest through time, depending on the source of power and how a person seeks out recognition and acceptance to be a certain kind of person. To develop an identity as part of an institution, a person needs to first have confidence and high self-perception in the Discourse realm or D-identity. To feel seen, understood, respected, and understood by a community of peers can only happen in conjunction with trust, modeling, and experimentation. “An official institution” does not need to recognize people in this way because this identity can develop and be supported once “rational individuals” accept the desired traits as part of the holistic self (p. 103). Gee argued further that one cannot have an identity without an interpretive

system to underwrite the recognition of that identity (citing Taylor, 1994). Access, networking, and experience impact whether personal identity is accepted or rejected by a specific community.

Turner et al. (1994) posed the question, is there a collective self? Using self-categorization theory, the authors defended the idea that there are both personal and social identities that are equally valid and authentic expressions of a person; therefore, the collective self includes the shared similarities with a group, as well as the personal unique traits that an individual possesses. Once comparison takes place, the individual is using a social context to derive meaning about oneself, and this can affect the identity positively or negatively, the interaction between self and the group contributes to the “relative accessibility” of identity because the perceiver uses evidence in the surrounding reality to determine whether their questioned identity fits the scene (p. 455). In unifying these ideas, self-categorization sees identity as “variable, fluid, and context-dependent” and not a “fixed, mental structure” (p. 458). Therefore, identity becomes a reflexive judgment in each situation, entirely dependent on the social context.

Stryker & Statham (1985) conceptualized self as a kind of hierarchy with different, accessible, internalized role definitions. When self-categorization theory is combined with social constructivism, the self is “constructed and negotiated through social interaction” (Turner et al., 1994, p. 459). This blended theory model indicates that self-categorization allows adaptive self-regulation, therefore causing behavioral and psychological flexibility. If the concept of self is truly this malleable, it may be possible to change the group population to improve one’s self-perception and self-esteem. The people around an individual directly impact how that person sees themselves, which includes the fluidity of the collective self.

Summer Bridge Programs - Learning and Identity

One common goal in summer bridge programs is to build self-esteem and confidence so the participants develop or strengthen existing learner identities (Odeleye & Santiago, 2019). The ability to see oneself as a learner with access to available resources is in itself the “joint accomplishment” (Hand & Gresalfi, 2017, p. 200) and may change the personal storyline or narrative. Individuals act differently once they are shaped by what they come to know, and their social interactions change and adapt to support this new identity. Learners ask themselves three distinct questions: Who am I here; who am I here versus there; and who can I become? This allows people to create separate identities depending on the context, activity, and community. Summer bridge programs establish an environment in which these new identities can be cultivated with academic, co-curricular, and social-emotional supports.

According to Raelin et al. (2015), self-efficacy can be a critical factor in student retention and persistence and can be broken down into three components: work, career, and academic self-efficacy. These efficacy attributes are sometimes developed before students transition from high school to college, especially for FGLI and minoritized students, which highlights the need for social-belonging intervention before students reach the latter stages of high school (Wolf et al., 2017).

Sense of Belonging—Academic Success and Retention

Connectedness, as defined by Rovai (2002), is the feeling of belonging and the creation of bonding relationships. This definition offers what can be considered an all-encompassing idea of connectedness, specifically, one that includes the students’ perspectives. Integration is defined as a student’s interaction in college activities beyond attending classes. Despite the importance of these factors in the lives of college students, research on connectedness and integration has

approached the concept from definitional perspectives rather than the perspective of students (Jorgenson et al., 2018).

Self-categorization theory (Turner, 1982, 1985) proposes that an individual's self-evaluation is partly a function of their group membership. In order for students to know how to feel about others, they must first define themselves through the self-categorization process (Turner, 1987). This involves classifying themselves and others into social categories using characteristics. Ultimately, an individual's self-image is based on group membership and noticing a difference between this affiliation and other groups (Tsui et al., 1992, p. 552). Turner conceptualized a psychological group as "a collection of people who share the same social identification or define themselves in terms of the same social category membership"; this sense of belonging does not require them to engage in interpersonal interaction with all the members of that group. This is an important finding because it means people can feel attached to a community or group without personally knowing all the members; it simply means that people feel welcome and included. Psychological groupings occur with relational demography- when individuals compare their demographic characteristics with the demographic composition of a social unit to determine if they are similar or dissimilar - because both ideas concentrate on personal attitudes as influenced by perceptions of the similarity or dissimilarity of others (p. 553). This membership causes people to attach themselves to organizational goals and messages, or in this case, perhaps the identity of being a college student. If, however, a student does not develop a sense of belonging or feel loyalty or membership to the group, they leave. This may be one of the reasons that some students drop out of college.

Turner et al. (1994) claimed that comparative and normative fit are inseparable when using self-categorization theory. People use observable dimensions as well as group dynamics

and background to determine whether they “fit” into the group. Often, self-categorization theory indicates that people prefer homogeneity and are more comfortable with those who are like them, hence a more natural sense of belonging. Self-perception may lead someone to “fit” within a population or instead, to feel uncomfortable when positioned to be perceived as different or “othered” from the rest of the group (p.457).

Turner and Reynolds (2012) found that when people consider themselves to be in the same group, a clue being when they say “us” rather than “them,” their similarity indicates that they tend to agree; they found this also creates an expectation that the group “ought to agree and respond in the same way” (p. 12). Turner (1987b) suggested that through time, individuals define themselves as members of a distinctive social category by learning or developing the appropriate behaviors that cause inclusion in group membership. People then assign the given norms or attributes of the category to themselves through internalization, all while depersonalizing and self-stereotyping to become more alike. This behavior becomes normative while their category membership is more permanent and solidified. Social influence impacts one’s sense of belonging because a person either accepts or rejects membership by mimicking the desired behavior, attitudes, reactions, and/or judgments. Of note here is that character traits and actions are used to measure belonging, not physical, racial, or socioeconomic factors.

As people define themselves as group members, they are more likely to act in line with these norms and be influenced by strong members or the perceived leader. Turner and Reynolds’ project (2012) aimed to affect core aspects of individual functioning by challenging the norms and making changes to the norms. They hoped that “interventions” and messages from the school staff could affect one’s psychological connection to the school and what it means to be a school member. By changing these norms, they hoped to increase connection and membership,

ultimately impacting school outcome measures (p. 16). They used strategies like “clarify[ing] the school’s (organization’s) shared mission,” highlighting the differences between their school and others to be a more unified “us,” and increasing student participation in decisions that affected them. These strategies influence members’ identification with the group by increasing ownership and a sense of belonging.

Bean’s (1985) student persistence model identified academic, social-psychological, and environmental factors that likely affect student socialization, closely related to sense of belonging. Successful socialization included “institutional fit, college academic performance, and institutional commitment, all of which were hypothesized to affect persistence” (Hausmann et al., 2007, p. 805). Bean described institutional fit as the extent to which students felt they “fit in” at the university and is comparative to students’ sense of belonging.

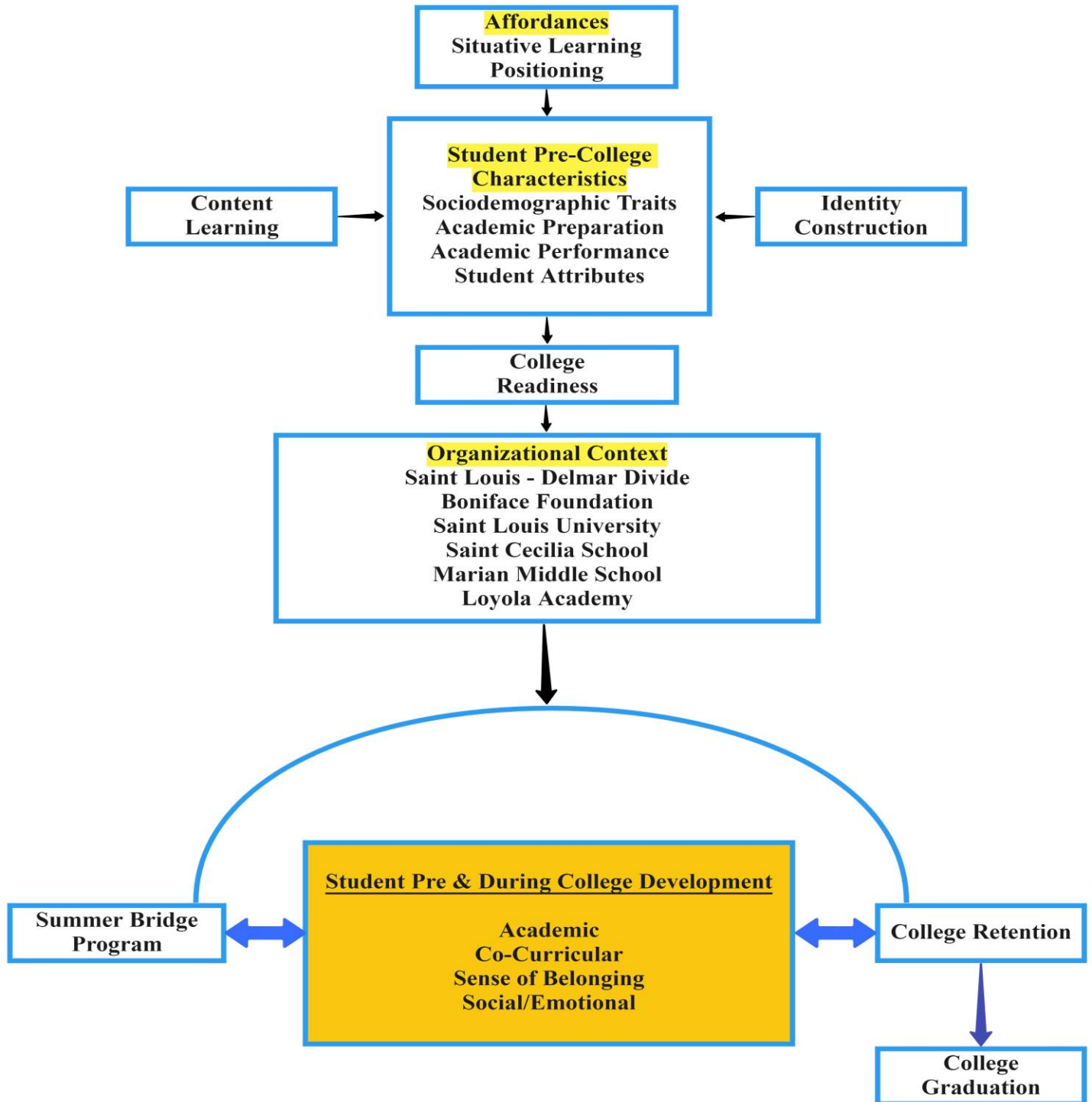
Rarely does research focus on sense of belonging as an independent variable, instead noting it as a secondary or resulting factor. Zea et al. (1997) assessed the idea of collective self-esteem (Luhtanen and Crocker, 1992), which students derive from their sense of belonging to the university community. This 1997 study found that students with more “collective self-esteem” were less likely to want to leave the university. This perhaps indicates a correlation between sense of belonging and student persistence.

Hausmann et al. (2007) conducted a study examining student persistence, specifically focused on students’ sense of belonging to their college or university. Here, belonging was conceptualized as “the psychological sense that one is a valued member of the college community” (p. 804). Their research had two objectives: first, to examine the role of sense of belonging in predicting college students’ intentions to persist; second, to test the effects of interventions designed to increase students’ sense of belonging. Using two control groups and

one experimental group, first-year students were given a survey at the beginning of their first and second semesters. The experimental group received gifts that were university specific, as well as communication from university staff that mentioned they were valuable members of the university community. One control group received non-specific gifts and communication solely from a staff member in the Psychology department. The second control group received no communication or gifts.

The study found that students in the experimental group did lose some of their sense of belonging, but less compared with students who received no gifts and with students in both control groups combined. The interventions (communication about being valued and university-specific gear) were successful in that in general, they caused students to feel included and as if they belonged to the institution. It is interesting to note that all the students in this study lost some amount of belonging from the beginning of the first semester. This suggests that outside factors cause a sense of belonging before academics begin, possibly derived from peer relationships, as well as group interactions and parental support. Sense of belonging was significantly associated with institutional commitment and even with “student background, integration, and support variables in the model, sense of belonging and institutional commitment were the only two significant predictors of intentions to persist at the start of the academic year” (p. 834).

Conceptual Framework



Situative Learning, Affordances, Positioning and Identity Formation

In this project, we conceptualized college retention as the outcome of participation in the activities of particular and overlapping social groups, groups with particular practices, norms, and expectations. In so doing, we drew on a situative view of learning that assumes all human activity and development are inextricably connected to the resources and interactions of environments (Greeno, 1998). Arguing that analyses of student abilities have long overemphasized individual contributions, Gresalfi (2004) noted that “the ways that systems of competence are constructed—the ways that agency and accountability are distributed- develops student identity as a part of the interactions and learning that occur within that system.” In short, understanding whether a student stays in college and why requires a unit of analysis that considers an individual student within a system of affordances that enable participation in the valued practices demanded by college life (Green & Gresalfi, 2007). Using this lens, one can consider teachers, students, administrators, and anyone else within a structured school setting as a potentially relevant member of that system. Such systems of activity offer students interactions as affordances to participate in particular ways that may be more or less productive for persisting as a college student.

In considering a summer bridge program as an activity system with macro-level positioning – described by Martin (2008) as context which includes broader societal level institutions such as democracy, capitalism, entrenched systems of social class, poverty, and exclusion, as well as local-level institutions-. one priority must be understanding the way in which certain minoritized populations are positioned within their educational contexts before their interaction with any program intended to increase retention and persistence. According to Valeras, Martin, and Kane (2012), learning involves a dialectical relationship of agency and

structure, which, in turn, are influenced by the sociohistorical, collective experience of a group of people who share aspects of a particular social identity, such as racial group membership.

Learning and participation are cultural, cognitive, and social, and with non-white participants, they include racialized experiences (Martin, 2006). For example, Martin (2009) addressed how Black students interact with the dominant storyline that exists in mainstream society regarding their performance. They face racism, educational tracking, systemic negation, and devaluation of their history, resulting in their positioning at the bottom of “a racial hierarchy of mathematics ability” (Martin, 2009a, 2009c, 2009d). Similarly, both St. Louis and national educational landscapes have shaped systems in which minoritized and FGLI students face a characterization as deficient college students in the context of SLU.

Macro-level factors mediate students’ persistence in college. Group-level, or mezzo-level, factors also contribute to college retention (Larnell, 2016). In describing the impact of mezzo-level positioning, Anderson described “the ways of knowing and being” of individuals within social groups, which she called “kinds” (2009, p. 291, 293) of students who, over time, performed as characters in storylines with presumed duties and predictable meanings of their actions.

Affordances

Gresalfi’s “systems of competence” (2004) and Anderson’s “kinds” of people (2009) operate within institutions, including educational settings, which therefore create affordances and barriers for student identities. Content learning and identity creation, or what the authors referred to as CLIC (Varelas, Martin, & Kane, 2012), are both considerations for any summer bridge program that aims to increase college retention.

Gibson (1977) defined affordance as what is available to an individual in an environment to support participation in some valued practice. Greeno & Grasalfi expanded on that definition and noted that something can only be afforded if it is recognized and acted on. What makes an affordance actionable, then, is inherently a dynamic relationship between the environment and person (2008). In this view, learning by an individual in a community is conceptualized as a trajectory of that person's participation in the community - a path with a past and present, shaping possibilities for future participation.

By integrating micro (individual level) meso (group level) and macro (community level), learning is connected to identity, and the levels are not isolated. Martin cited Schoenfeld's original framework, which consisted of four components - knowledge base, heuristics, metacognition, and beliefs - and this allowed micro-analysis of student learning (1985). Schoenfeld updated the framework to include practices to account for the specific mathematical communities where students learn and the cultural practices that were present in those communities (1992). This combined micro- and meso-level concerns into content development. Martin furthered these points by suggesting that these frameworks are helpful for all students while supporting minoritized and or FGLI students.

College Retention

College retention is often framed in terms of individual characteristics; however, in their work studying why students leave college, Tinto and Reason (1975 & 2009) created a model that disrupted these assumptions and placed the onus of retention on the institution rather than the individual students. They argued that only focusing on "student attributes" associated college retention with the "students failing, not the organization." Their models attended to the affordances available, including academic interventions but also intentional design of

extracurricular activities and social and emotional support that may be necessary to promote college retention.

PROJECT QUESTIONS

This capstone project was guided by the following questions:

Research Question (RQ) #1: What affordances intended to promote student retention currently exist in the SLU/Boniface summer bridge program? In what ways do these affordances demonstrate evidence-based elements that promote student retention?

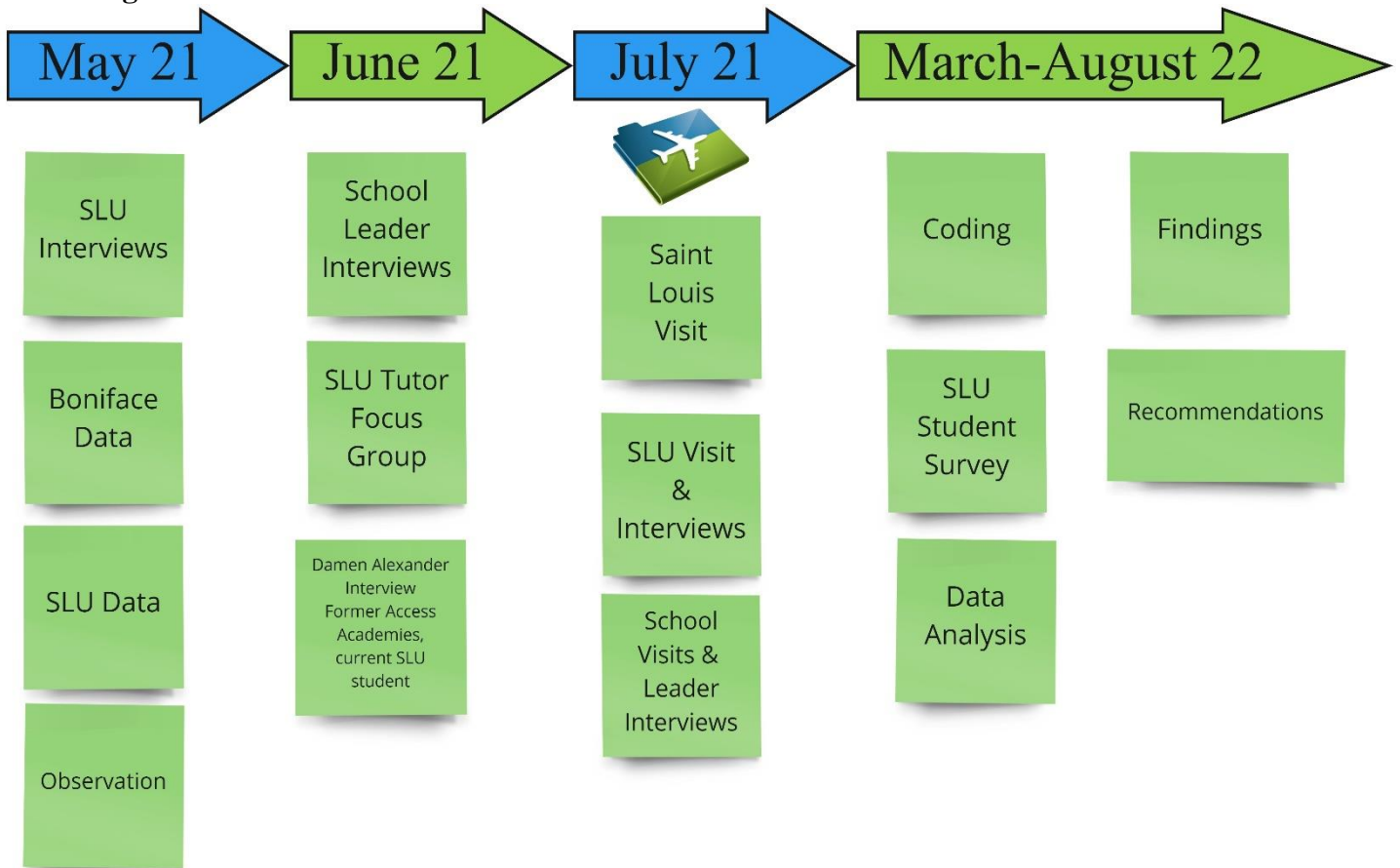
Research Question (RQ) #2: What evidence-based elements are currently missing from the SLU/Boniface summer bridge program?

Research Question (RQ) #3: How can the SLU/Boniface bridge program and its stakeholders build capacity in developing the SBP program to address elements identified in RQ2?

PROJECT DESIGN

To answer our three research questions, we drew on a wide range of data that featured interviews with building principals, guidance counselors, school tutors, SLU staff, and students. We reported to Josh Goldman bi-monthly on our work and prepared updates for Dean Ritter and Kelly Wetzler before our trip to St. Louis in July 2021. We identified which schools and leaders we would visit in person and selected Ashley Chapman, principal at Loyola Academy; Sandra Morton, principal at St. Louis Catholic Academy; and Sarah Walker, principal at Marian Middle School. While in St. Louis, we also connected with Emily Roth, principal at St. Cecilia Academy. It was important for us to learn more about the students and the supports they would need in our summer bridge program. We also examined the middle school data that examined college retention, as well as collected secondary survey results from current SLU students. Figure 6 details the timeline for our data collection process.

Figure 6



Interviews - School Leaders (See Appendix A)

We constructed questions for the building leaders (See Appendix G - Loyola, Appendix H - Marian, and Appendix I - St. Cecilia) and met with principals, graduate support directors, and school presidents. These interviews indicated the different hierarchical structures of the schools. Our questions probed the schools on their policies, curriculum decisions, and opportunities for student voice. We also asked about their students, their tracking and data collection methods, and their benchmarks for success. In total, we spoke to six different schools and attempted to identify what affordances, if any, the schools offered. In addition, we wanted to identify affordances missing in these schools that are a part of evidence-based programs intended to increase the retention of FGLI and/or minoritized students.

Interviews - St. Louis University

We interviewed Ryan Wilson, Will Perkins, and Lindsay Gonterman, all from SLU, to ask preliminary questions about how summer programs developed on campus. We wanted to understand the process, scope, and people who recruited and supported the various campus programs for SLU students. During this time, we requested data about college retention and graduation, especially tied to bridge program participation. An early inquiry centered on whether a pipeline existed for students from middle school to high school and beyond. One of our final interviews was with Damen Alexander (See Appendix C), a current SLU junior and a former Access Academies student. Ryan Wilson recommended that we speak to Damen Alexander and Dean Ritter encouraged us to work with Damen. We had not considered interviewing Damen before this, but his firsthand experience as an SLU student, Access Academies graduate, and St. Louis resident was promising.

Focus Group - Student Tutors

Ryan Wilson arranged a meeting for us with several current SLU tutors, and we created questions and ran a focus group (see Appendix B). We specifically wanted to learn about their experience as tutors and learn why they were participating in the Access Academies summer program. We also wanted to hear what recommendations they would make for their programs, so we could anticipate any challenges while designing our final SBP recommendations.

Boniface Data

Boniface Foundation, the main source of funding for the schools and the summer bridge program, supplied data examining secondary and post-secondary outcomes for FGLI and/or minoritized students enrolled at faith or values-based middle schools in St. Louis. They began with five middle schools (Loyola Academy, Marian Middle School, and three Access

Academies–supported Archdiocesan elementary schools) and focused on their eighth-grade students. The data examined their attendance, enrollment, grades, goals, and high school plans. This data tracks students through middle school, high school, and college graduation.

Observations on Current Summer Program

We observed the orientation meeting for the teachers and tutors before the June 2021 start date to better understand the academic goals for the virtual program. Galicia Guerrero, the graduate support director from St. Cecilia Academy, conducted the Zoom meeting. This summer program operated on Monday, Wednesday, and Friday mornings for four weeks. Incoming 9th and 10th-grade students attended virtually with their math teachers and reading tutors. We also gained access to the materials and paperwork that the students, teachers, and tutors received.

Secondary Survey - St. Louis University Students, Pre-College Programs

Since we could not speak to current college students who went through any of the partner schools, we needed to identify students with similar socio-demographics who currently attend SLU. Lindsay Gonterman, SLU's program director for Student Opportunity for Achievement & Resources (SOAR), had access to all current SLU students who received Pell Grants. We created a short survey using Qualtrics asking multiple-choice questions about sense of belonging, summer bridge programs, and students' connections to their professors and peers. Ms. Gonterman agreed to send the survey on our behalf and included a link in the monthly SOAR newsletter, which went out in March and April 2022. The survey was open for three weeks, leading into SLU's spring break. Approximately 130 people received the survey, and we had 27 respondents. Since two of them were college graduates at the time of the survey, we eliminated them from the overall pool and only analyzed the data from the students who were still in college.

Data Analysis and Coding

Interviews

Leading up to our St. Louis trip, we recorded all our interviews on Zoom and transcribed the responses, occasionally asking follow-up questions that pertained to their answers. Even though we typed and took notes and uploaded the transcripts to Otter. When we traveled to St. Louis, toured the schools, and met with the school leaders in-person, their feedback and suggestions helped create our summer bridge template. We recorded the in-person interviews on a phone and uploaded the recordings to Otter. The words and phrases that we discovered most frequently from the building leaders were:

- support
- wrap-around
- identity
- connection

When speaking with St. Louis University staff members, the words and phrases that we discovered most frequently were:

- pipeline
- identity-building
- not just academics

After the school leader interviews (See Appendix A), we made notes about their ideas, input, and requests for the summer bridge program.

Focus Groups

Ryan Wilson invited tutors to a focus group session, and we recorded this on Zoom. The focus group with the tutors allowed us to better understand their motivations and reasons for serving as tutors. Their responses helped us when writing job descriptions for the types of student leaders we would need for the summer bridge program. This was necessary information

for recruitment purposes and let us meet some St. Louis University undergraduate students. Understanding that they were working in a virtual space in June 2021 while we were crafting an in-person bridge program, we gained insight into how they developed rapport with the students and how they encouraged them to ask for help when they didn't understand a concept or idea.

Boniface Data

Figure 7 shows that Loyola has a much higher percentage of post-secondary graduates enrolled or graduated from an accredited four-year college, when compared with Marian and Access Academies. Based on the partner school's own college retention and graduation data, while the Boniface/Access students outperformed the national average by an approximately three to one margin for FGLI students (30% versus 11%), their graduation rates are well below the averages for SLU students in the same demographic. Since 2015, the six-year college graduation rate for Access/Boniface students was 32%.

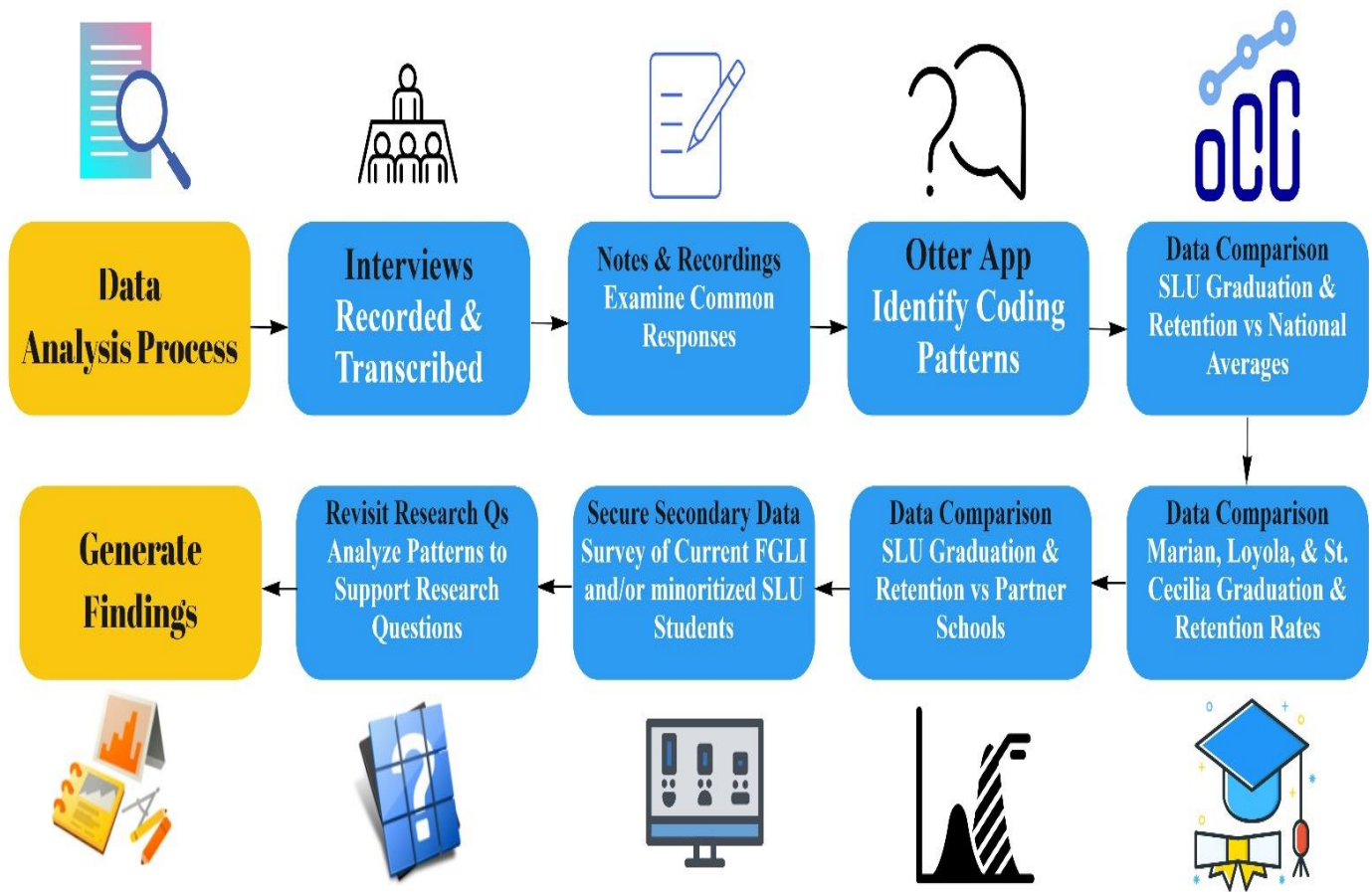
Figure 7

Percentage of post-secondary graduates (since 2015) currently enrolled or graduated from an accredited 4-year college.

| | 2019 | Spring 2020 | Fall 2020 |
|-----------------------------------|-------------|--------------------|------------------|
| Loyola | 56.8 | 67.6 | 67.6 |
| Marian | 41.3 | 35.6 | 44.7 |
| Access Academies | 25.8 | 31.3 | 32.1 |
| Avg. for all three schools | 41.3 | 44.8 | 48.1 |

Figure 8 shows the process of our data gathering and analysis methods:

Figure 8

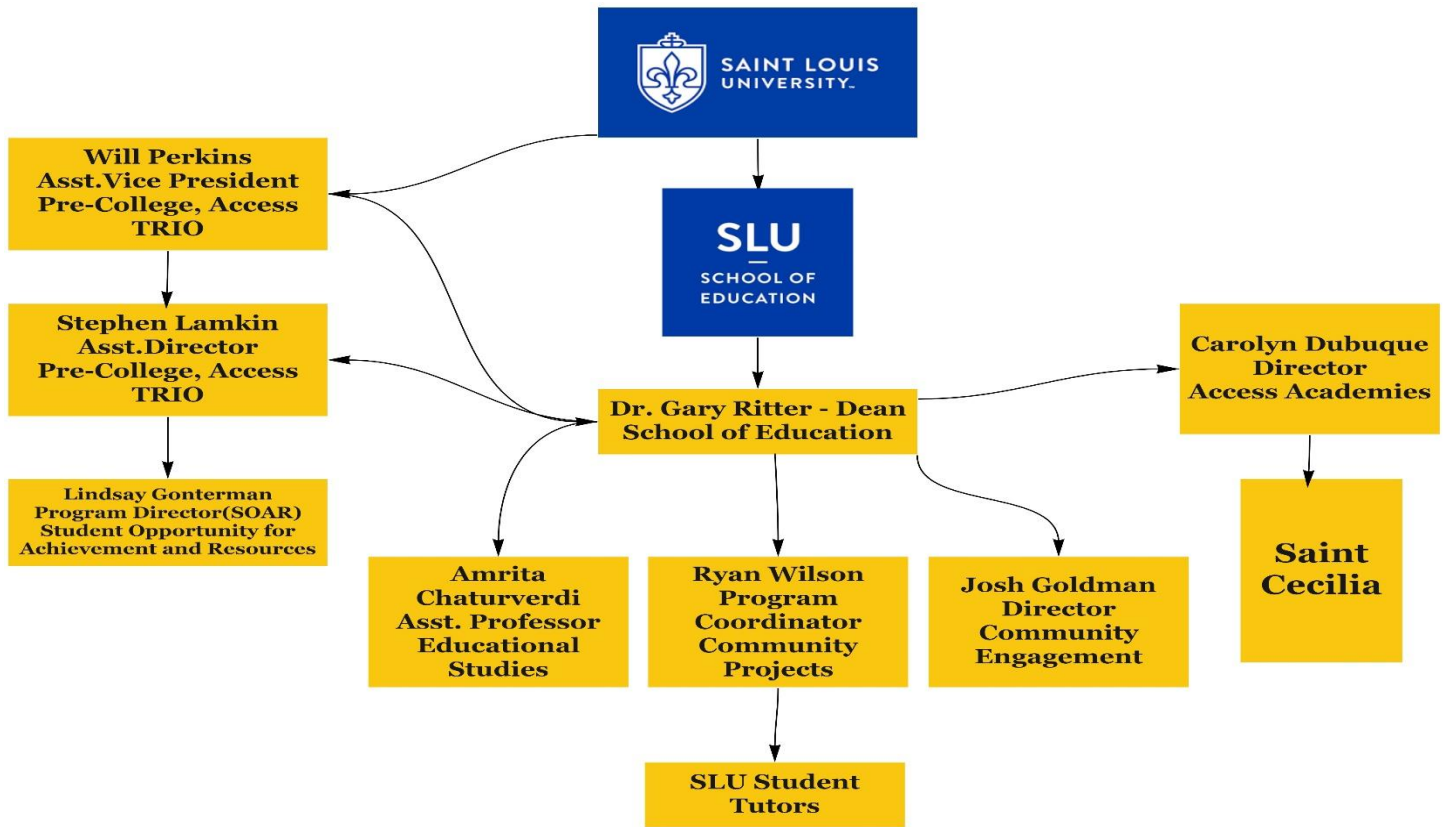


Complications

There were several complications in completing this project. One, the organizational structure at St. Louis University (see Figure 9) created silos of information to which we were not privy until we asked the correct question or happened to interview the correct person.

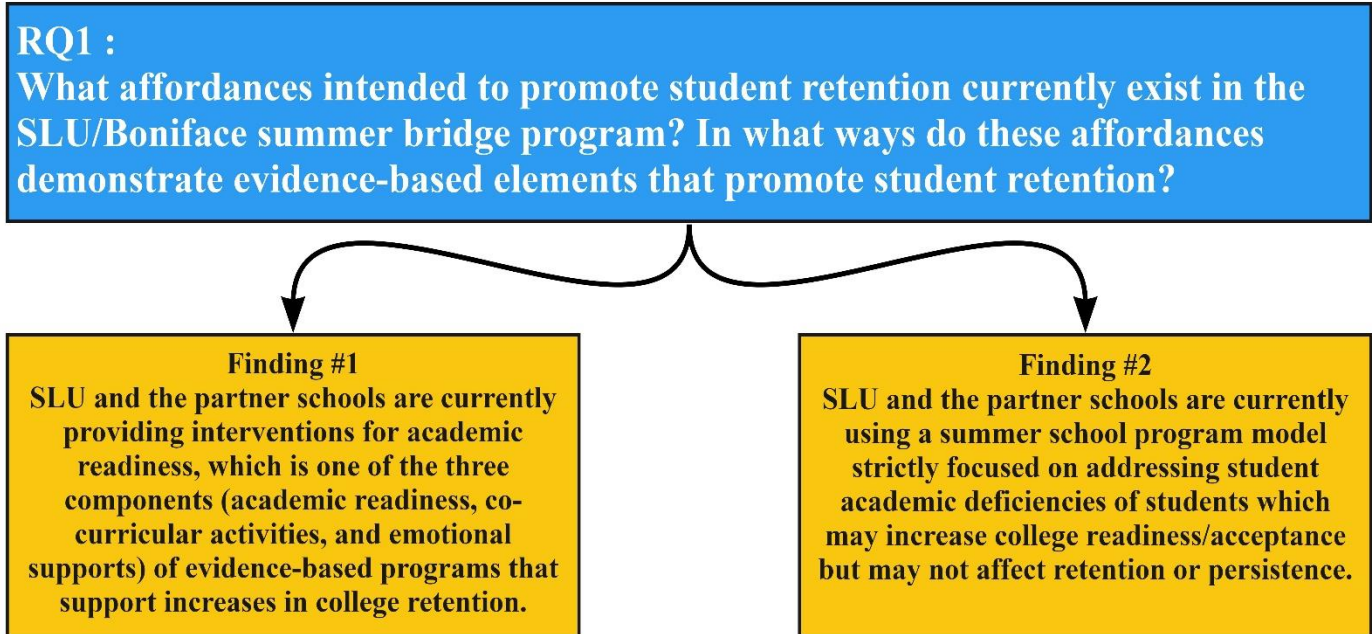
In addition, our direct line of communication went through SLU’s director of community engagement. However, the decisions were made by the dean of the School of Education and the CFO of the Boniface Foundation. On multiple occasions, we received contradictory information and were not able to resolve the contradictions due to our inability to communicate directly with the primary decision-makers.

Figure 9



Additionally, when we presented our early findings and recommended some of the evidence-based changes requests from stakeholders became contradictory. They requested elements that clashed with the findings and research. One stakeholder, in particular, was opposed to modifying any of the academic requirements of the existing summer program even though we assured everyone that we would be adding to the program and not taking anything away. Ultimately, due to these stakeholder concerns, our communication line with Boniface broke down. In January of 2022, we learned from Josh Goldman and Dean Ritter that the current summer programs would continue but the SBP discussion was “tabled.” We continued to generate findings, but SLU and the partner schools discontinued their communications and

consequently, we never had the opportunity to present our findings and recommendations to Boniface or SLU.



FINDINGS

Finding #1: SLU and the partner schools are currently providing interventions for academic readiness, which is one of the three components (academic readiness, co-curricular activities, and emotional supports) of evidence-based programs that support increases in college retention.

Finding #2: Saint Louis University and the partner schools are currently using a summer school program model strictly focused on addressing student academic deficiencies of students which may increase college readiness/acceptance but may not affect retention or persistence.

The entire summer curriculum for the Boniface program is focused on Algebra I, English, and writing because the students are viewed as deficient, based on GPA. These remedial classes act as primary “gatekeepers” for college access, readiness, and retention. The students who take these classes are truly enrolled in summer school, though it is labeled as a bridge program. When programs only focus on academic readiness and ignore the co-curricular and emotional supports, and other components, we cannot see a correlation to improved college retention. According to

Fredricks, Blumenfield, and Paris (2004), persistence and commitment to academics that a student learns in high school follow through to college and increase the probability of retention.

They were successful with their benchmarks and enrollment, as shown by some of the data they shared. Boniface Foundation met its benchmarks for student success in middle school as evidenced by their students’ performance in high school—defined by Boniface as students gaining admission to private high schools and maintaining at least a 2.5 GPA. In addition, Boniface met its benchmarks for access to college as evidenced by the rate of “college attendance” for their students: 71.2% and defined by currently enrolled in a post-secondary education program (4Y college, 2Y college, vocational school, military) AND on-track to complete the program “on-time,” which they define as within 150% of the allotted time. Unfortunately, when the stakeholders pushed back against our initial findings and recommendations, Boniface/SLU decided to retain the summer school model.

RQ2 :
What evidence-based elements are currently missing from the SLU/Boniface summer bridge program?

Finding #3

SLU and the partner schools are not including social/emotional or co-curricular supports in their SBP.

Finding #4:

Although SLU/Boniface reported conducting an SBPs- survey respondents did not report participating in an SBP and did not report a sense of belonging or feel connected to the SLU campus, faculty, or their peers.

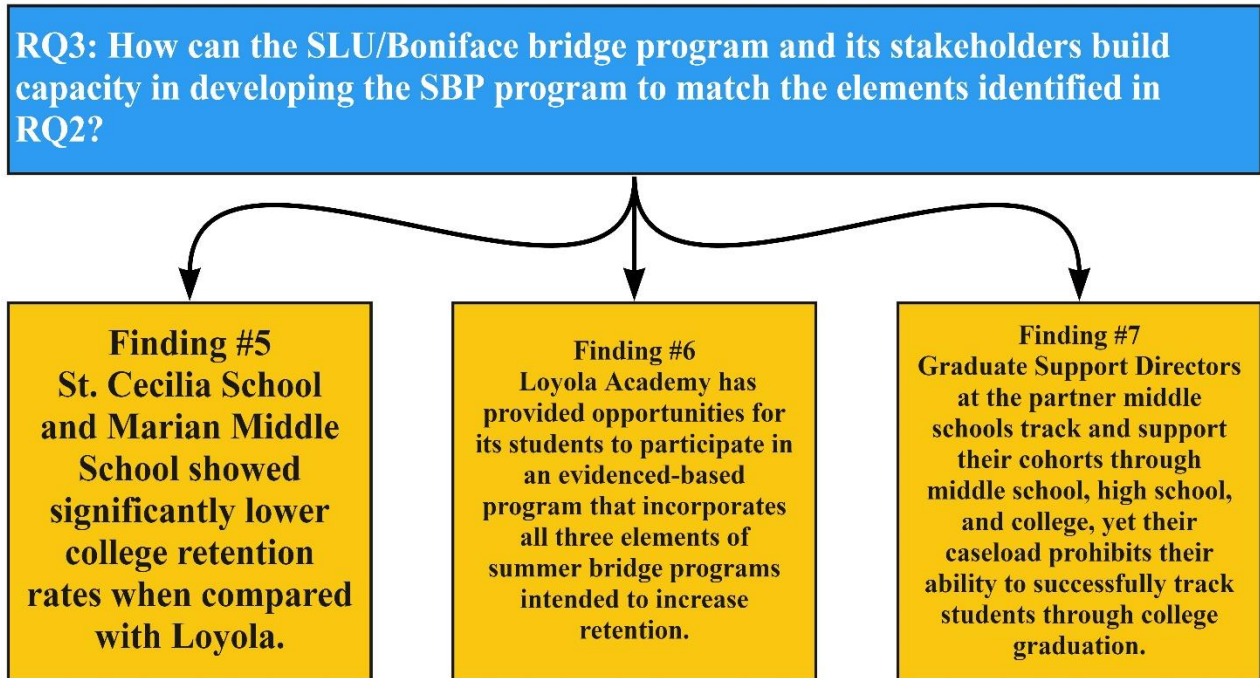
Finding #3: SLU and the partner schools are not including social/emotional or co-curricular supports in their SBP.

When Kelly Wetzler and Dean Ritter approached us to hear strategies to improve retention, initially they were open to adding social/emotional supports and co-curricular activities. Our research showed that evidence-based summer bridge programs correlating to college retention and overall persistence included academic readiness, social/emotional supports, and co-curricular activities. Our interviews and observations indicated that the current summer programs at SLU/Partner schools did not include co-curricular and social/emotional supports.

Finding #4: Although SLU/Boniface reported conducting SBPs- survey respondents did not report participating in an SBP and did not report a sense of belonging or feeling connected to the SLU campus, faculty, or their peers.

We asked current SLU students-all of whom self-identified as first generation and are considered low-income due to their participation in the Pell Grant program (See Appendix L) - about their sense of belonging on campus, as well as whether they remembered participating in any kind of bridge program. Although 84% of the survey respondents recognized that there were students “similar to them” at SLU, 80% also reported “feeling somewhat” or “completely detached” from campus, faculty, and their peers. (See Appendix M) Despite SLU reporting that they operated a summer bridge program specifically for FGLI and minoritized students, all our survey respondents who are current SLU students reported that they did not participate in any bridge programs (See Appendix N).

Approximately 130 people received the survey (Appendix O) and 27 responded an approximately 21% response rate. While these responses provided interesting findings, due to the small sample size and low response rate, we did not feel that a statistical analysis would be valid or reliable.



Finding #5: St. Cecilia School and Marian Middle School showed significantly lower college retention rates when compared with Loyola.

Although Marian and St. Cecilia offered some wrap-around supports, they did not measure up to the same level as Loyola, as revealed in their student data. We also found Damen Alexander's interview to be pivotal in our research because as an alum of Access Academies, he mentioned not only the division and socioeconomic stratification within the city but also the clash that he felt when encountering his peers in high school. Damen voiced feeling like an outsider to his elite, wealthy classmates, and admitted that he wasn't the best student, though he tried and worked hard. He developed skills to seek out information himself and found support from other students, while acknowledging he was not like many of his fellow high school students. Damen truly had no sense of belonging to middle school or high school but longed to have one. He finally made connections at SLU but did so on his own. Based on our research, this is unusual because many FGLI students who enroll in college needed institutional support to create a sense

of belonging. If our other partner schools adopted Loyola's model, we believe that they would improve their college retention results. Our summer bridge model attempted to be a starting point for our partner schools.

Finding #6: Loyola Academy has provided opportunities for its students to participate in an evidenced-based program that incorporates all three elements of summer bridge programs intended to increase retention.

When we interviewed Loyola Academy's principal, Ashley Chapman, she shared several programs and strategies that the school employed to create a sense of ownership and belonging for its all-male student body. the students. When asked about student success, Chapman responded, "We bring a family into our family" and that they focus on the four core values:

- Being a man for others.
- Doing your best and having God as your foundation.
- Academics.
- Service and leadership.

Students receive conduct and effort scores every quarter, and these scores may reflect how a student grows in other areas, outside of academics. They feature a robust house program, to which students are first assigned when they come to Loyola. These mixed-age cohort groups work together on community service and have house discussions. They also compete for a "House Cup" in different programs and areas. Ms. Chapman and her team of teachers regularly survey the students, and when asked how she makes decisions for her students, she stated, "We do whatever it takes to get done what we need to get done. This is what makes us successful as a team." During monthly meetings, students make suggestions and give feedback to the staff on what they need. This teaches them presentation, negotiation, and self-advocacy skills.

Loyola provides much more than academics, and school leaders emphasize their ability to offer wrap-around services. They have extended days for students, but also assist with housing, rental assistance, food resources, student job searches, uniforms, and school supplies. They pride themselves on being individualized and personalized for student needs. Additionally, they offer classes on baking, robotics, gaming, lacrosse, filmmaking, Latin, drumming, dance, and yoga. By concentrating on the holistic self, they strive for students to feel connected to the school and their educational experience. According to Chapman, this is incredibly powerful and meaningful for the FGLI and low-income students that attend Loyola. We noted a correlation between Loyola's emphasis on creating a sense of belonging and the higher rates of college retention and graduation for their students. This is a finding that required additional research and tracking.

Finding #7: Graduate Support Directors at the partner middle schools track and support their cohorts through middle school, high school, and college, yet their caseload minimizes their ability to successfully track students through college graduation.

Our school leader interviews identified several prominent gaps in the services provided to the students at the partner schools. The schools, although connected and related, did not network or share ideas, resulting in very different experiences for students attending each school. There did not appear to be much support for students once they were in college, and some of the middle school supports disappeared during high school. Tinto (1993) and Reason (2009) identify seven components for college retention, but our interviews revealed that the schools were only focused on academic readiness. Although there are graduate support directors at each middle school, they are unable to complete all of their job responsibilities. For example, Loyola Academy's website advertises that their students will be supported through three years of middle school, four years of high school, and four years of college. Additionally, they claim that the graduate directors will visit each high school every month and check in with the alumni, so they stay on track for

academic success. Our interviews with school staff revealed this was not happening, yet the stakeholders viewed our observations as criticism. We were acknowledging the large responsibility of their job expectations because it would be difficult to monitor and support current students, while also tracking and sustaining former students. There was little/no oversight in tracking their duties, and when we spoke to Damen Alexander, a former Access student, he shared that he lost touch with his graduate support director early in his high school career.

We believe that there needs to be a designated position for this data collection and tracking, separate from the graduate support directors. This would assist in creating a pipeline and communication network for the students as they advance academically. Currently, there is not a sustainable or identifiable pipeline between middle school, high school, and college, despite the graduate support directors having the job description to monitor these students. The lack of a clear tracking pipeline of the students in college after they go through the Access/Boniface programs makes obtaining specific data difficult. Therefore, we tried to establish parameters with the available data and with the data we obtained. Loyola Academy met or exceeded the national retention and graduation statistics for demographically similar students while Marian and St. Cecilia were below national averages. We noticed that Loyola and Marian had the higher numbers in the group, which was expected, because our interviews revealed those students were more prepared for high school than the students from St. Cecilia.

Even when we examined the organizational structure at St. Louis University, we noticed that several offices conducted similar work in a disconnected and isolated way. The Program Coordinator for Community Projects had a broad position and managed many areas at SLU, which overlapped with some of the work conducted by the SOAR and Pre-college offices- however, there was no evidence of coordination between these entities. The Program

Coordinator for Community Projects also oversaw the tutors at SLU. When the Program Coordinator for Community Projects arranged our focus group with the tutors, the students reported that tutoring was a positive experience and that they felt valued. The Program Coordinator clearly had a relationship with them, but he hand-selected those students and they were not connected to any other SLU programs. The Director of SOAR and Assistant Director of Pre-College, TRIO, and Access did not speak frequently, even though they all conducted similar student support systems. We never developed a clear understanding of how their work was determined, monitored, or evaluated.

RECOMMENDATIONS

To address the problem of practice we recommended implementing a summer bridge program with interventions that create a community of practice in which students' institutional and discursive identities transform into "college student" identities. On a macro level, SLU's efforts at supporting these students have created a structure within which content necessary for college access and readiness, specifically Algebra I, is provided for a targeted population of mostly minoritized and FGLI college students. However, content learning and identity construction (Valeras, Martin, and Kane, 2012) should be complementary components of a program aimed at college retention. As St. Louis University explored effective practices for designing an SBP to increase college retention, wrap-around services that consider content and identity are essential in the design and execution of the program.

Based on our findings as well as literature review of college retention and effective summer bridge programs, we created the following recommendations:

| |
|--|
| <p>Recommendation #1: To create a sense of belonging by providing students with the opportunity to live on campus, which helps build a cohesive learning community, Boniface/SLU should create a summer bridge program that takes place on SLU's campus.</p> |
| <p>Recommendation #2: To build a learning community that reinforces a sense of belonging, SLU/Boniface should select faculty for the on-campus SBP program and ensure the instructors are trained and ready to interact with adolescents in their college courses.</p> |
| <p>Recommendation #3: To build social/emotional supports, provide models for SBP students and reinforce the importance of the summer bridge program, SLU should recruit undergraduate students—especially those from Boniface/Partner schools—to serve as leaders/mentors in the SBP program.</p> |
| <p>Recommendation #4: To maximize opportunities to build a learning community, The SBP should create groups from St. Cecelia, Marian Middle, and Loyola Academy to progress through the program in mixed cohorts.</p> |
| <p>Recommendation #5: To minimize the focus on deficiencies beyond the students' control and create a sense of belonging, SBP should provide clothes, meals, and all other necessary supplies for all students during the three weeks of SBP.</p> |
| <p>Recommendation #6: To decrease the workload of graduate support directors and create a more equitable tracking mechanism, The SBP at SLU should be directed by an individual not affiliated with Boniface or any of its partner schools.</p> |
| <p>Recommendation #7: To minimize the additional workload for partner school staff, Boniface/SLU should create a group of 10 to 12 stakeholders, which would include the SBP director and selected mentors, to form a committee that elicits feedback, evaluates, plans, and makes changes to the SBP as necessary.</p> |
| <p>Recommendation #8: To ensure proper tracking of long-term student retention and graduation statistics, SLU should create an infrastructure for collecting qualitative and quantitative data after each SBP cycle.</p> |

Finding #1

SLU and the partner schools are currently providing interventions for academic readiness, which is one of the three components (academic readiness, co-curricular activities, and emotional supports) of evidence-based programs that support increases in college retention.

Finding #2

SLU and the partner schools are currently using a summer school program model strictly focused on addressing student academic deficiencies of students which may increase college readiness/acceptance but may not affect retention or persistence.

Recommendation #1

To create a sense of belonging and providing students with the opportunity to live on campus, which helps build a cohesive learning community, Boniface/SLU should create a summer bridge program that takes place on SLU’s campus.

Recommendation #2

To build a learning community which reinforces a sense of belonging, SLU/Boniface should select faculty for the on-campus SBP program and ensure the instructors are trained and ready to interact with adolescents in their college courses.

Finding #1: SLU and the partner schools are currently providing interventions for academic readiness, which is one of the three components (academic readiness, co-curricular activities, and emotional supports) of evidence-based programs that support increases in college retention.

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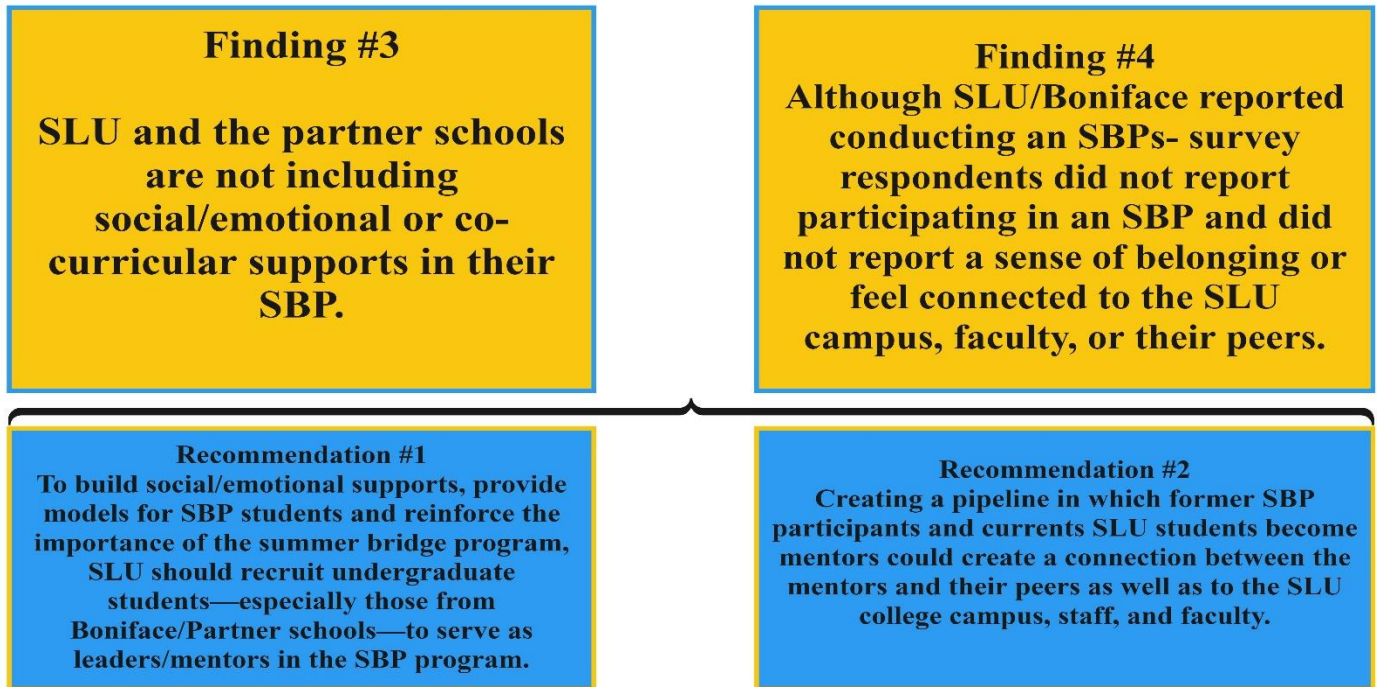
- **Recommendation #1: To create a sense of belonging and provide students with the opportunity to live on campus, which helps build a cohesive learning community, Boniface/SLU should create a summer bridge program that takes place on SLU’s campus.**

We recommend the three-week portion of the wrap-around SBP be located on the SLU campus. While the staff and faculty at all the partner schools support the students in a variety of ways during the school year, the students must experience their identity in a “college

context” and experience social-emotional and co-curricular supports in a college environment. A common refrain in discussion with all the school leaders was “You can’t be what you can’t see.” This recommendation aims to create a connection between the students and college even if SLU is not eventually an option for them. The only way to start that process is to have students on campus and to provide all three components of a summer bridge program.

- **Recommendation #2: To build a learning community that reinforces a sense of belonging, SLU/Boniface should select faculty for the on-campus SBP program and ensure the instructors are trained and ready to interact with adolescents in their college courses.**

We recommend that SLU faculty that express interest in teaching in the SBP be evaluated for their ability to deal with younger students in a less-structured program. While the academic portion of the college experience is important, it is essential that the professors of the SBP courses present the material with the message that “This is hard, but I know you can do it,” rather than reinforcing a negative self-image for the SBP students. In addition, the faculty selected for the SBP should be willing to interact with the students outside the classroom setting. These characteristics are important components in building a sense of belonging and a college student identity.



Finding #3: SLU and the partner schools are not including social/emotional or co-curricular supports in their SBP.

Finding #4: Although SLU/Boniface reported conducting an SBP- survey respondents did not report participating in an SBP and did not feel connected to the SLU campus, faculty, or their peers.

- **Recommendation #1:** To provide models for the students, St. Louis University should recruit undergraduate students—especially those from Boniface/Partner schools—to serve as leaders/mentors in the SBP program.

We recommend recruiting undergraduate students for two main reasons. As previously mentioned, the SBP students must see themselves as “college students.” One of the best ways to reinforce that image is to recruit students from similar backgrounds to serve as counselors/mentors. In addition, research indicated (Kiyama, et. al., 2014) an improvement in the academic and social development of peer mentors who worked in a summer retention program and suggested that peer mentors developed a greater sense of belonging, new skills, and an understanding of institutional structures, theories, and people that promote their success as students.

Ultimately, mentoring not only helps the students being mentored but also increases the sense of belonging and positive self-image of the mentors. This recommendation will also reinforce the saying – “you can’t be what you can’t see”- with which all the partner school students are familiar.

- **Recommendation #2: Creating a pipeline in which former SBP participants become mentors could create a connection between the mentors and their peers as well as to the SLU college campus, staff, and faculty.**

Research indicated that discussing college with mentors, especially those who have attended themselves, can generate interest in going to college among students whose parents have not gone to college in addition to increasing the retention rates for the mentors themselves (DuBois et. al., 2002)

Finding #5

St. Cecilia School and Marian Middle School showed significantly lower college retention rates when compared with Loyola.

Finding #6

Loyola Academy has provided opportunities for its students to participate in an evidenced-based program that incorporates all three elements of summer bridge programs intended to increase retention.

Recommendation #1

To maximize opportunities to build a learning community, the SBP should create groups from St. Cecilia, Marian Middle, and Loyola Academy progress through the program in mixed cohorts.

Recommendation #2

To minimize the focus on deficiencies beyond the students control and create a sense of belonging, SBP should provide clothes, meals, and all other necessary supplies for all students during the SBP.

Finding #5: St. Cecilia School and Marian Middle School showed significantly lower college retention rates when compared with Loyola.

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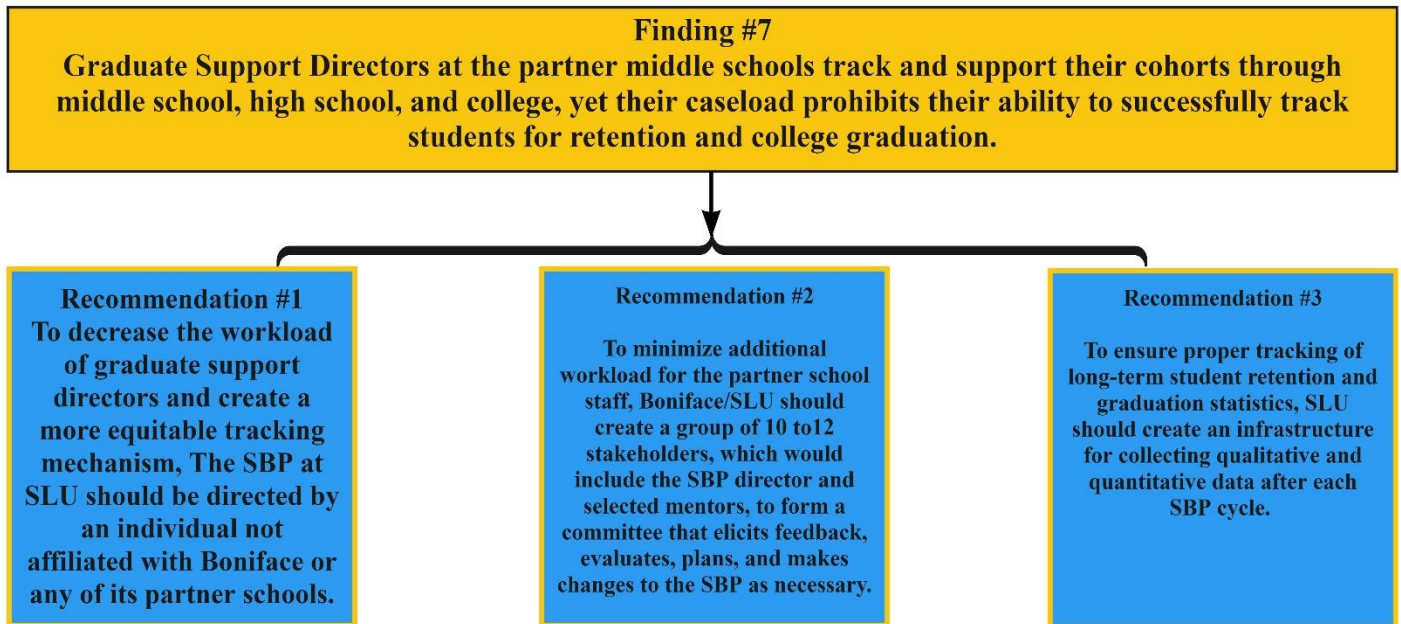
- **Recommendation #1: To maximize opportunities to build a learning community, The SBP should create groups from St. Cecelia, Marian Middle, and Loyola Academy to progress through the program in mixed cohorts.**

We recommend that the director of the SBP and the school-based staff mix students from all the partner schools to create college campus cohorts for the duration of the SBP. Although these students share FGLI and minoritized backgrounds, it is important to create a structure that encourages them to work with people with whom they are not familiar. It is important to attempt to allow these students to create a sense of belonging in new settings and with new people. Since students from Loyola Academy are accustomed to institutional factors that create a sense of belonging, it would be beneficial to leverage their experiences and have them mix with the students from Marian and St. Cecilia. This experience may translate to an easier transition when the students are acclimating to their experiences in college.

- **Recommendation #2: To minimize the focus on deficiencies beyond the students' control and create a sense of belonging, SBP should provide clothes, meals, and all other necessary supplies for all students during the three weeks of SBP.**

It is important to note that all three partner schools currently provide a variety of financial and resource support to the students at their schools. We recommend that funds from the budget be allocated to provide summer bridge program uniforms - shorts, t-shirts, a jacket, etc. - in addition to personal care/grooming products. All meals should also be included, in addition to daily snacks in between meals, and after dinner. Since many of the students suffer from food insecurity and the stigma of not having necessary resources, the SBP should ensure these necessities are provided for all participants. This

recommendation will help minimize the highlighting of “deficiencies” and help establish a safe environment in which the students can focus on creating a sense of belonging.



Finding #7: Graduate Support Directors at the partner middle schools track and support their cohorts through middle school, high school, and college, yet their caseload prohibits their ability to successfully track students for retention and college graduation.

- **Recommendation #1: To decrease the workload of graduate support directors and create a more equitable tracking mechanism, The SBP at SLU should be directed by an individual not affiliated with Boniface or any of its partner schools.**

We recommend that SLU either hire a director for the summer bridge program or reorganize the job description/salary of a current SLU staff member to lead the SBP. This suggestion will alleviate two concerns with the structure of the program. One, additional responsibilities would not be added to the middle school and high school staff who are finishing their school year as the SBP gets started. Two, a director of SBP who is independent of all partner middle and high schools will eliminate bias or perception of bias in the selection process for the program.

- **Recommendation #2: To minimize the additional workload for the partner school staff, Boniface/SLU should create a group of 10 to 12 stakeholders, which would include the SBP director and selected mentors, to form a committee that elicits feedback, evaluates, plans, and makes changes to the SBP as necessary.**

We recommend establishing a group to evaluate the SBP to minimize the “one-size-fits-all” mentality that often permeates educational settings. Each cohort of students selected for the SBP will have unique needs. This means that the program must be evaluated and revised based on qualitative and quantitative data. The infrastructure required for this type of program evaluation should not be the responsibility of school staff who are already tasked with tracking the students.

- **Recommendation #3: To ensure proper tracking of long-term student retention and graduation statistics, SLU should create an infrastructure for collecting qualitative and quantitative data after each SBP cycle.**

We recommend the data collection be centralized at SLU. This will streamline the process, make data more readily available, and alleviate additional responsibilities for partner schools. This also fosters an impartial analysis of the data and provides an opportunity for research-based improvements.

Conclusion

By simply viewing students as deficient or lacking skills, we ignore the systematic problems and institutional responsibilities. FGLI students do not receive the same affordances or opportunities during their educational journey causing them to view a college degree as unattainable. By providing wrap-around supports in a summer bridge program these students can be exposed to a college campus which can change their self-perception at an earlier age, ultimately influencing them to apply to college, stay in college, and graduate. We believe that students need an invitation to believe in themselves. By providing them opportunities to see

themselves as successful and supporting them while they navigate difficult situations and challenges, students understand their own potential and possible opportunities.

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Appendix A - Interview Questions for Building Leaders

1. How would you define “success” for your student population in high school?
2. How would you define success for them after high school?
3. What benchmarks do you have established for measuring success while they attend your school?
4. How does this affect your decision-making and implementing changes based on scores/results?
5. Thinking beyond academic readiness, what challenges do you think your students face?
6. What support structures has your school implemented to address these challenges?
7. What do you think are the goals of your extended day/extended year programs? How are those goals measured?
8. How often/frequently do you communicate with other school building leaders? What, if any, other networking channels do you use?
9. How do you hear from your students in terms of what they need to be successful?
10. Can you describe the hierarchical power structure in your school and how decisions are made using the model?
11. If money was no object, what change would you make in your school starting tomorrow to help students?

Appendix B - Interview Questions for SLU Tutors Focus Group

1. What made you decide to participate in the SLU tutoring program?
2. Describe your prior experience working with adolescents. Is your current role in the tutoring program similar or different from the past?
3. Can you tell us about your tutoring duties and how you are helping students? What does a day in your life look like as a tutor?
4. What do you find challenging as a tutor?
5. What are you enjoying as a tutor?
6. Money and time are not an object. How would you set up the tutoring program?

Appendix C - Questions for Damen Alexander Former Access Academies and Current SLU Student

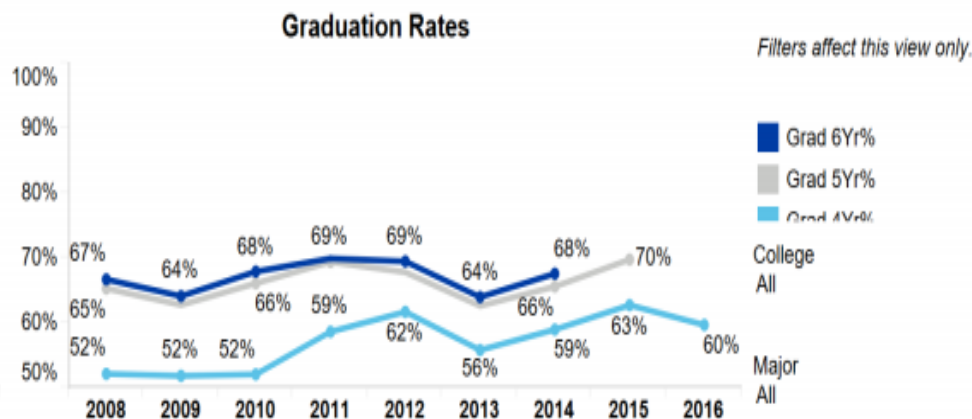
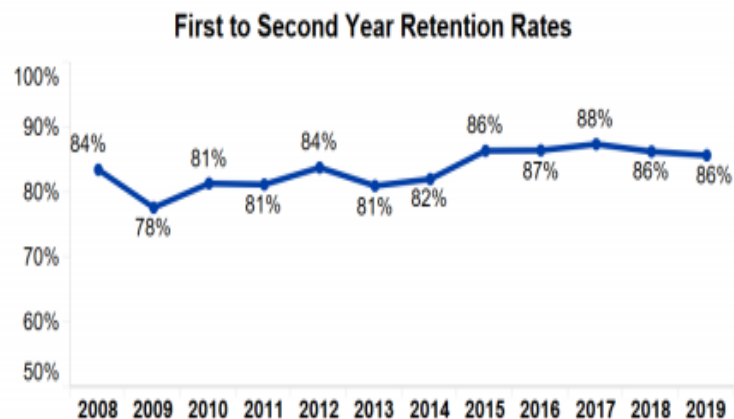
- 1.** Can you tell us about your educational past?
- 2.** Describe your childhood and the focus on education in your family.
- 3.** If you can think back to middle school, do you remember a pipeline that sort of led you from Access onto high school and then SLU?
- 4.** Did you have a time when you thought, “I’m going to college”?
- 5.** What were some of the restrictions or challenges you faced?
- 6.** Were there other students like you?
- 7.** What were some of the allowances or reasons that allowed you to prosper/flourish?
- 8.** What were some non-academic supports?
- 9.** How do you think you got to where you are now?
- 10.** What are your future goals?
- 11.** Are there other people who share your experiences with whom we should discuss these questions?
- 12.** If there is a Damen at Access middle schools, what program would you create so that he gets to where you are now?

Appendix D - First-Generation Student Retention and Graduation Rates



Freshman Retention and Graduation Rates

Cohorts Are Adjusted for Allowable Exclusions



First to Second Year Retention Rates

| Fall Cohort | Retention Cohort | Fall2 Return | Fall2 Return % |
|-------------|------------------|--------------|----------------|
| 2011 | | | |
| 2012 | 180 | 151 | 83.9% |
| 2013 | 148 | 120 | 81.1% |
| 2014 | 151 | 124 | 82.1% |
| 2015 | 185 | 160 | 86.5% |
| 2016 | 171 | 148 | 86.5% |
| 2017 | 152 | 133 | 87.5% |
| 2018 | 154 | 133 | 86.4% |
| 2019 | 204 | 175 | 85.8% |

Graduation Rates

| Fall Cohort | Grad Cohort | Grad 4yr | Grad 4Yr% | Grad 5Yr | Grad 5Yr% | Grad 6Yr | Grad 6Yr% |
|-------------|-------------|----------|-----------|----------|-----------|----------|-----------|
| 2009 | 220 | 114 | 51.0% | 130 | 62.7% | 141 | 64.1% |
| 2010 | 221 | 115 | 52.0% | 146 | 66.1% | 150 | 67.9% |
| 2011 | 186 | 109 | 58.6% | 129 | 69.4% | 130 | 69.9% |
| 2012 | 180 | 111 | 61.7% | 122 | 67.8% | 125 | 69.4% |
| 2013 | 147 | 82 | 55.8% | 92 | 62.6% | 94 | 63.9% |
| 2014 | 151 | 89 | 58.9% | 99 | 65.6% | 102 | 67.5% |
| 2015 | 185 | 116 | 62.7% | 129 | 69.7% | | |
| 2016 | 171 | 102 | 59.6% | | | | |

Filters: College All, Major All, Gender All, Race/Ethnicity All, Pell Recipient All, First Generation Yes

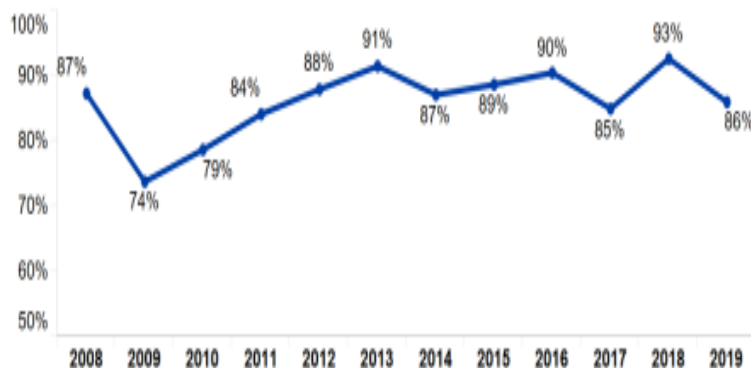
Appendix E - Hispanic/Latino Student Retention and Graduation Rates



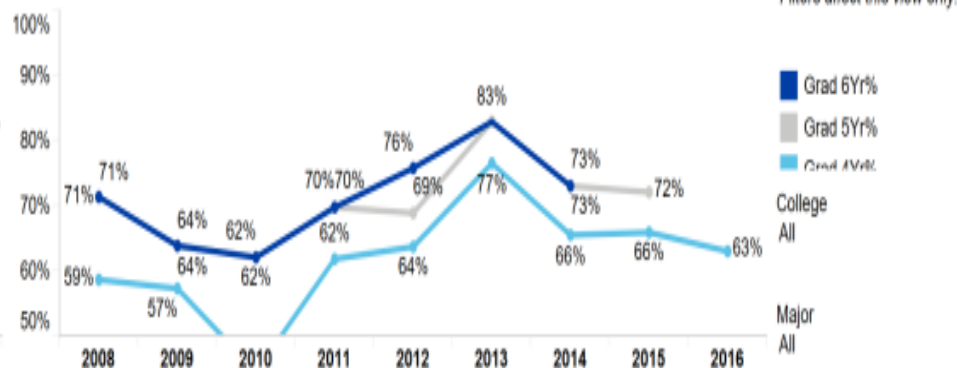
Freshman Retention and Graduation Rates

Cohorts Are Adjusted for Allowable Exclusions

First to Second Year Retention Rates



Graduation Rates



Filters affect this view only.

First to Second Year Retention Rates

| Fall Cohort | Retention Cohort | Fall2 Return | Fall2 Return % |
|-------------|------------------|--------------|----------------|
| 2011 | | | |
| 2012 | 58 | 51 | 87.9% |
| 2013 | 47 | 43 | 91.5% |
| 2014 | 93 | 81 | 87.1% |
| 2015 | 97 | 86 | 88.7% |
| 2016 | 84 | 76 | 90.5% |
| 2017 | 113 | 96 | 85.0% |
| 2018 | 95 | 88 | 92.6% |
| 2019 | 164 | 141 | 86.0% |

Graduation Rates

| Fall Cohort | Grad Cohort | Grad 4yr | Grad 4Yr% | Grad 5Yr | Grad 5Yr% | Grad 6Yr | Grad 6Yr% |
|-------------|-------------|----------|-----------|----------|-----------|----------|-----------|
| 2009 | 51 | 30 | 58.8% | 33 | 64.7% | 33 | 64.7% |
| 2010 | 74 | 33 | 44.6% | 46 | 62.2% | 46 | 62.2% |
| 2011 | 63 | 39 | 61.9% | 44 | 69.8% | 44 | 69.8% |
| 2012 | 58 | 37 | 63.8% | 40 | 69.0% | 44 | 75.9% |
| 2013 | 47 | 36 | 76.6% | 39 | 83.0% | 39 | 83.0% |
| 2014 | 93 | 61 | 65.6% | 68 | 73.1% | 68 | 73.1% |
| 2015 | 97 | 64 | 66.0% | 70 | 72.2% | | |
| 2016 | 84 | 53 | 63.1% | | | | |

Gender All

Race/Ethnicity Hispanic or Latino

Pell Recipient All

First Generation All

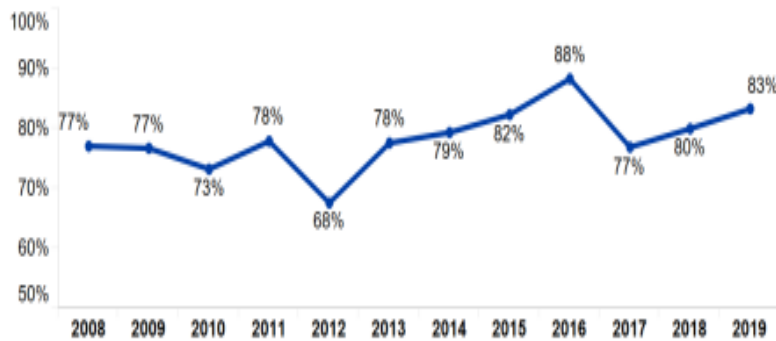
Appendix F – Black or African American Student Retention and Graduation Rates



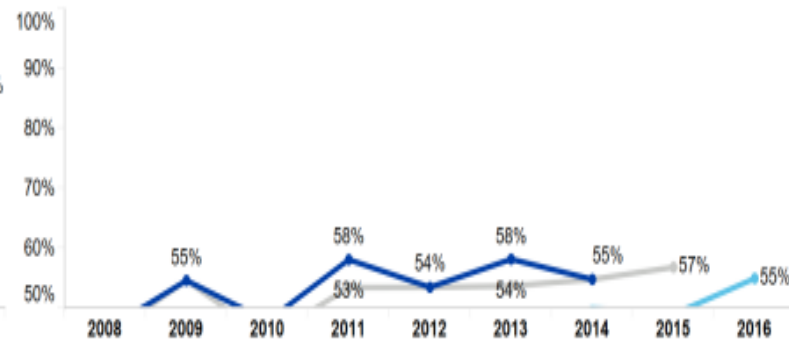
Freshman Retention and Graduation Rates

Cohorts Are Adjusted for Allowable Exclusions

First to Second Year Retention Rates



Graduation Rates



Filters affect this view only.

Grad 6Yr%
Grad 5Yr%
Grad 4Yr%
College
All

Major
All

Gender
All

First to Second Year Retention Rates

| Fall Cohort | Retention Cohort | Fall2 Return | Fall2 Return % |
|-------------|------------------|--------------|----------------|
| 2011 | | | |
| 2012 | 71 | 48 | 67.6% |
| 2013 | 67 | 52 | 77.6% |
| 2014 | 63 | 50 | 79.4% |
| 2015 | 51 | 42 | 82.4% |
| 2016 | 60 | 53 | 88.3% |
| 2017 | 52 | 40 | 76.9% |
| 2018 | 60 | 48 | 80.0% |
| 2019 | 96 | 80 | 83.3% |

Graduation Rates

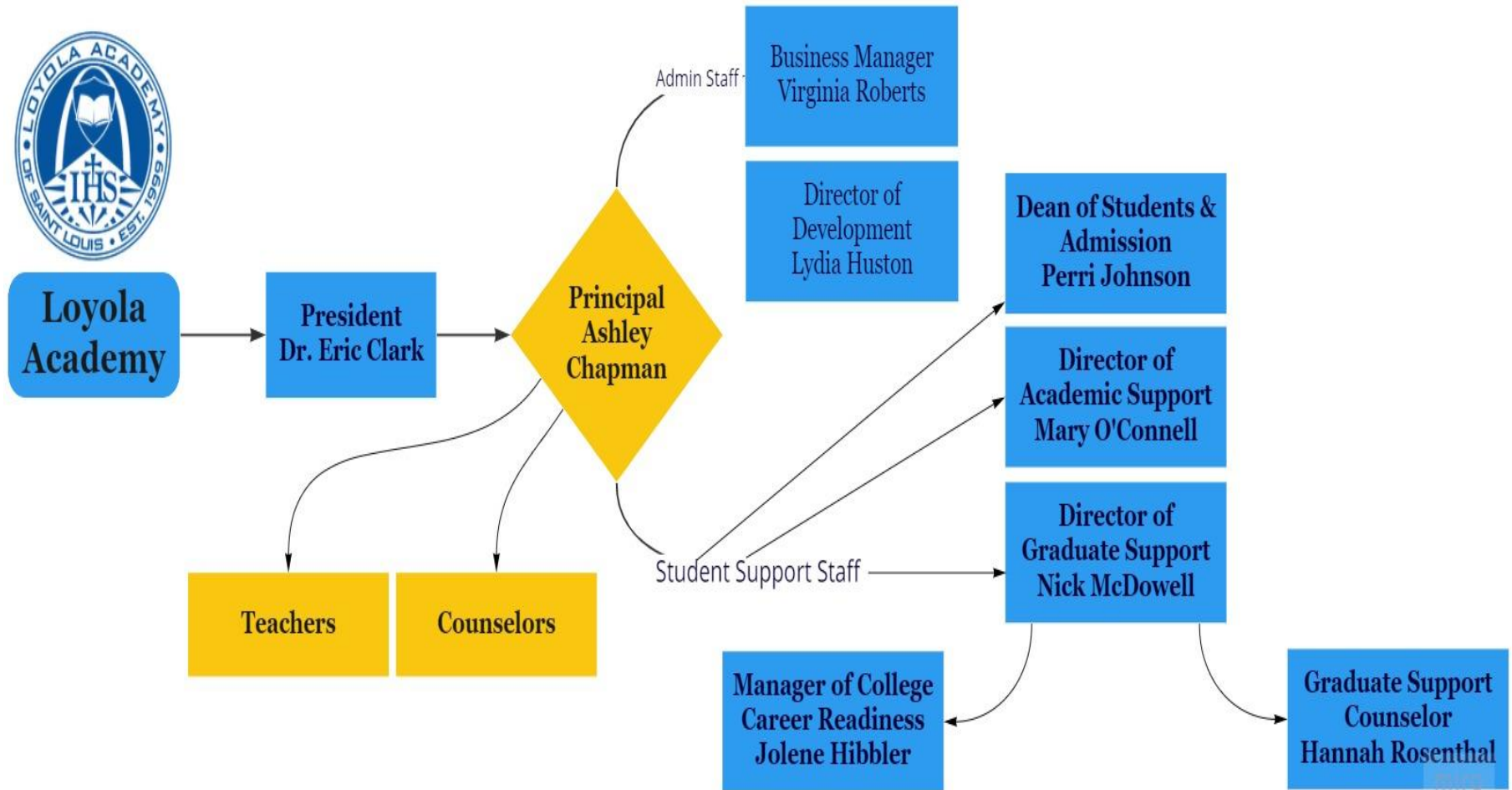
| Fall Cohort | Grad Cohort | Grad 4yr | Grad 4Yr% | Grad 5Yr | Grad 5Yr% | Grad 6Yr | Grad 6Yr% |
|-------------|-------------|----------|-----------|----------|-----------|----------|-----------|
| 2009 | 60 | 34 | 57.2% | 47 | 78.3% | 47 | 78.3% |
| 2010 | 71 | 18 | 25.4% | 32 | 45.1% | 34 | 47.9% |
| 2011 | 86 | 35 | 40.7% | 46 | 53.5% | 50 | 58.1% |
| 2012 | 71 | 27 | 38.0% | 38 | 53.5% | 38 | 53.5% |
| 2013 | 67 | 31 | 46.3% | 36 | 53.7% | 39 | 58.2% |
| 2014 | 62 | 31 | 50.0% | 34 | 54.8% | 34 | 54.8% |
| 2015 | 51 | 25 | 49.0% | 29 | 56.9% | | |
| 2016 | 60 | 33 | 55.0% | | | | |

Race/Ethnicity
Black or African American

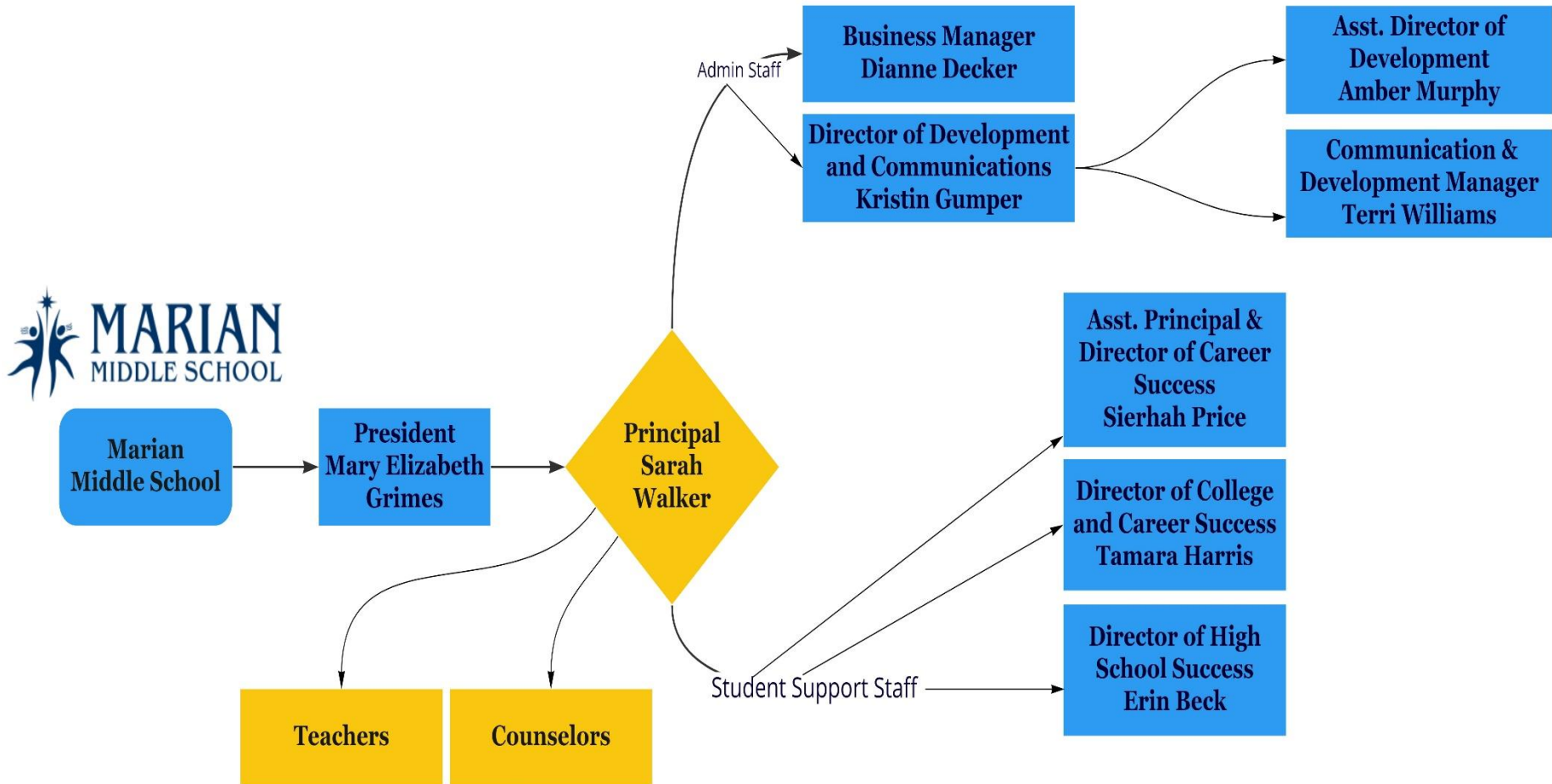
Pell Recipient
All

First Generation
All

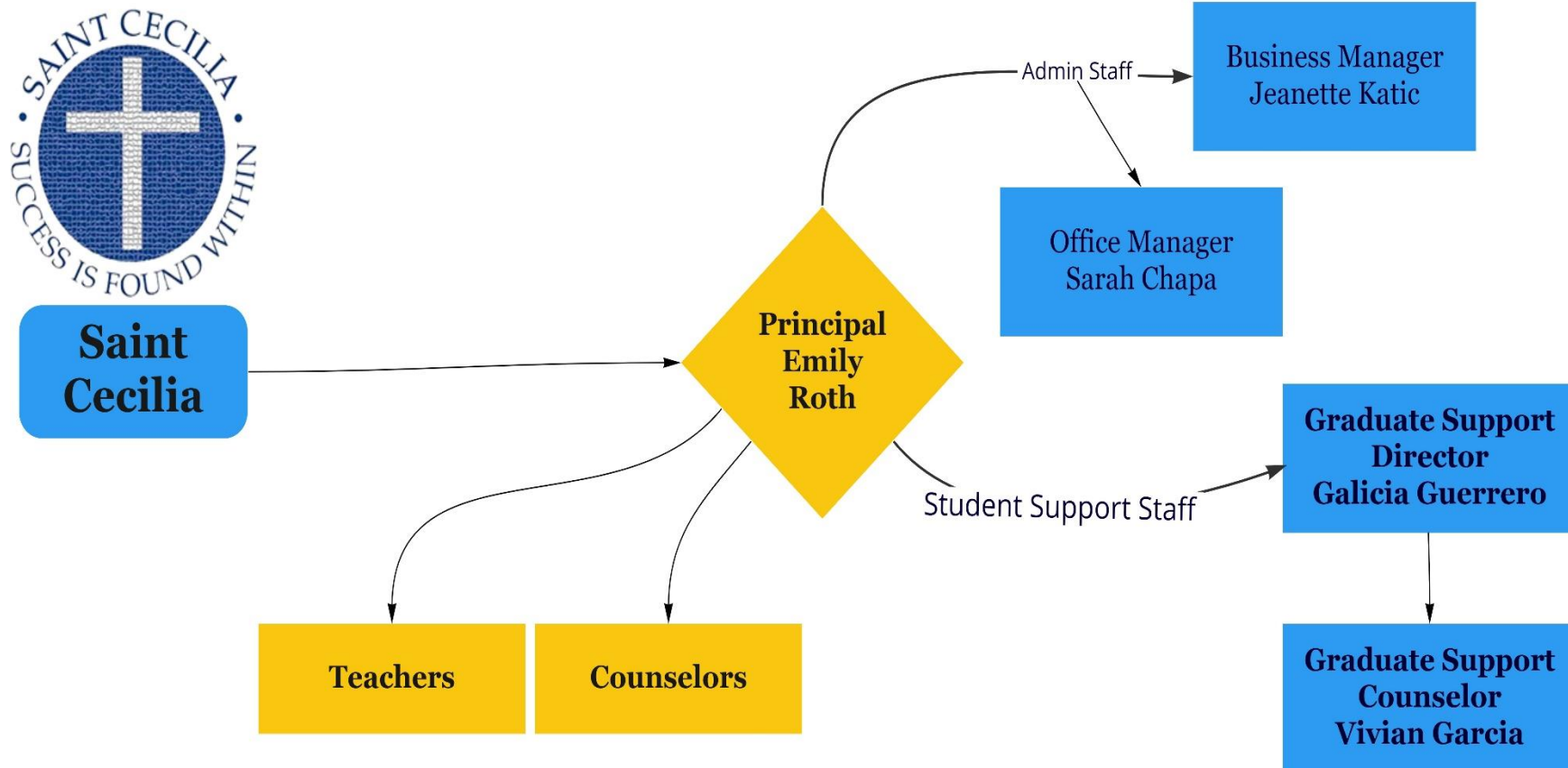
Appendix G - Loyola Academy Organizational Structure



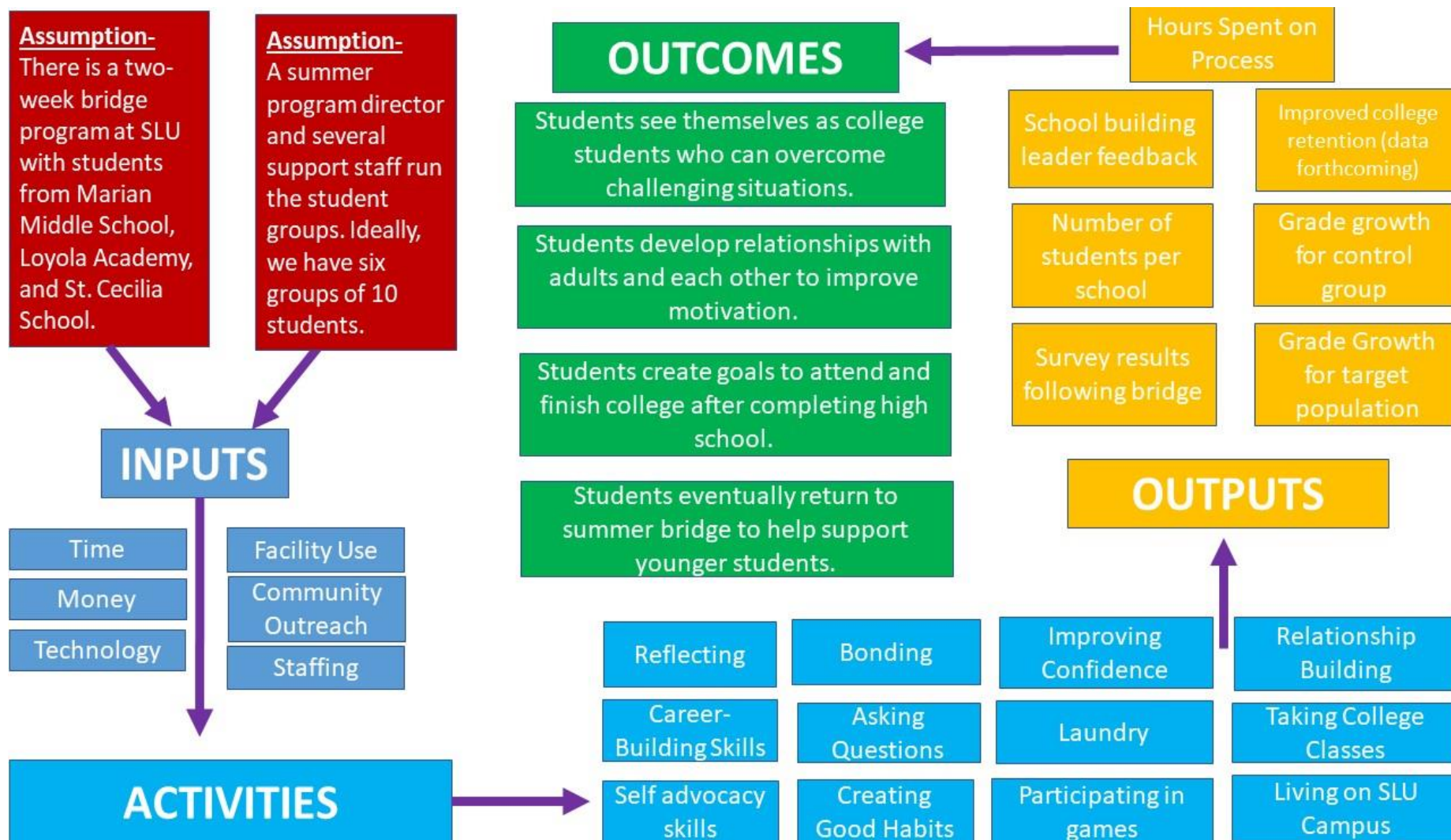
Appendix H - Marian Middle School Organizational Structure



Appendix I - Saint Cecilia Organizational Structure



Appendix J - Logic Model

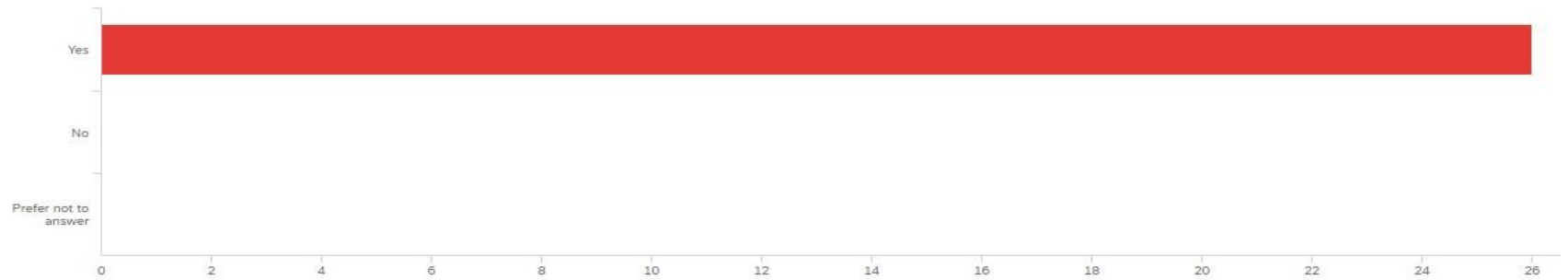


Appendix K – Research Chart

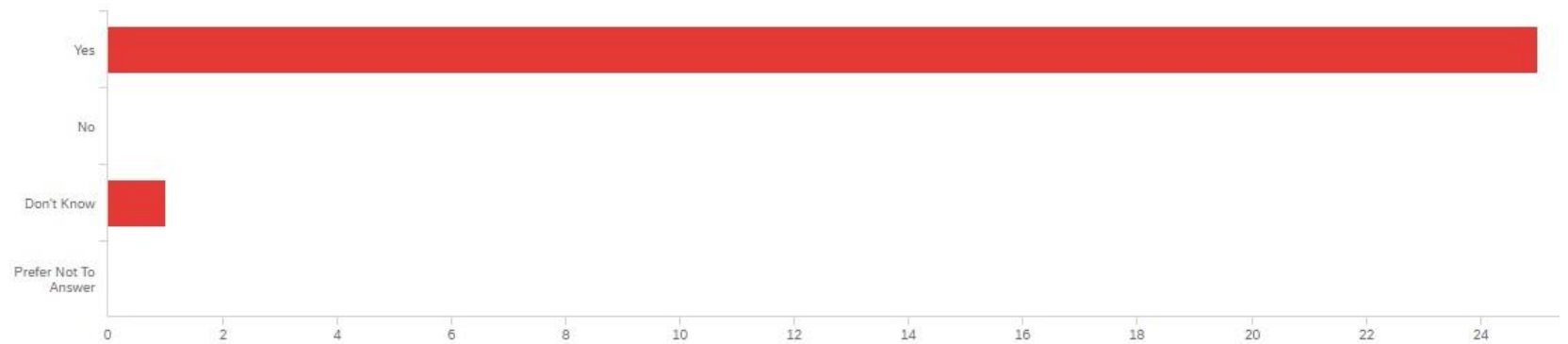
| Research Question | Concept | Method of Data Collection |
|---|--|---|
| <p>RQ1: What affordances intended to promote student retention currently exist in the SLU summer bridge program? In what ways do these affordances demonstrate evidence-based elements that promote student retention?</p> | <p>Content Learning & Identity Construction</p> <p>Social Support Theories</p> <p>Situative Learning/ Affordances/Positioning</p> <p>Self-Theories</p> <p>Identity Theory</p> | <p>Standardized/Open-Ended Interviews with these Stakeholders:</p> <p>Middle School Presidents, Principals, and Graduation Advisors</p> <p>High School Principals and Guidance Counselors</p> <p>Interview with Damen Alexander- Former Access Academies student and current junior at SLU.</p> |
| <p>RQ2: What evidence-based elements are currently missing from the SLU summer bridge program?</p> | <p>Content Learning & Identity Construction</p> <p>Social Support Theories</p> <p>Situative Learning/ Affordances/Positioning</p> <p>Relational Demography and Organizational Attachment</p> | <p>Standardized/Open-Ended Interviews</p> <p>Focus Group—SLU Undergraduate Students who are Working in the Current SBP</p> <p>Boniface Data—Provided</p> <p>SLU Data—Provided</p> |
| <p>RQ3: How can the SLU bridge program and its stakeholders build capacity in developing the SBP to match the elements identified in RQ2?</p> | <p>Identity Theory</p> <p>Sense of Belonging</p> <p>Networking/Professional Development/ Pipeline of Information</p> <p>Co-Curricular Activities</p> | <p>Standardized/Open-Ended Interviews with SLU Staff, Including Will Perkins, Ryan Wilson, Lindsay Gonterman</p> <p>SLU Data—Graduation and Retention Rates for Cohorts Starting in 2008–2009 through 2019</p> <p>Middle School Presidents, Principals, and Graduation Advisors</p> <p>High School Principals and Guidance Counselors</p> |

Appendix L – Self-reported FGLI Indicators

Q8 - Are you a first generation college student?



Q10 - At any time in college, did you qualify for a Pell Grant?

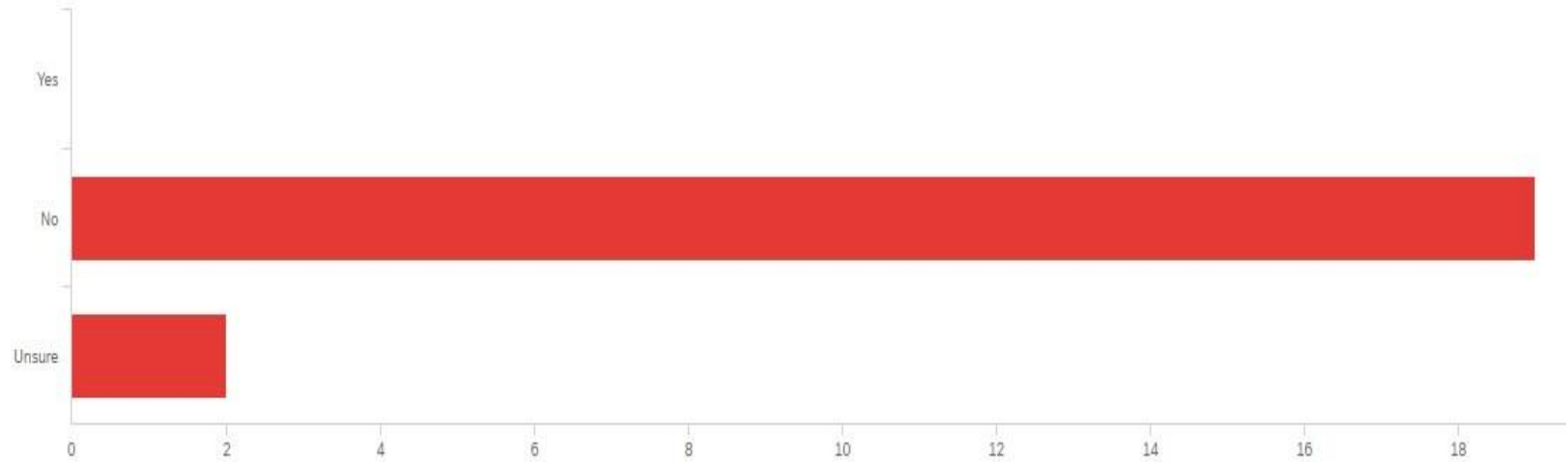


Appendix M – Self-reported Similarity and Sense of Connection

| Age | Gender | How do you identify? | How strong is your sense of connectedness with students on campus? | People similar to me go to my current college. |
|-----|----------------------|--------------------------|--|--|
| 19 | Male | White | Feel Completely Detached | Agree |
| 19 | Female | White | Feel Completely Detached | Agree |
| 19 | Female | Black | Feel Somewhat Detached | Agree |
| 20 | Female | White | Feel Somewhat Detached | Agree |
| 19 | Female | Black | Feel Somewhat Detached | Agree |
| 20 | Male | Hispanic/Lat in American | Feel Somewhat Detached | Agree |
| 19 | Female | Hispanic/Lat in American | Feel Somewhat Detached | Agree |
| 19 | Male | Black | Feel Somewhat Detached | Agree |
| 18 | Female | Black | Feel Neither Connected or Disconnected | Agree |
| 19 | Female | Hispanic/Lat in American | Feel Somewhat Detached | Agree |
| 19 | Male | Black | Feel Somewhat Connected | Agree |
| 20 | Female | White | | |
| 19 | Female | Black | Feel Somewhat Detached | Agree |
| 25 | Female | White | | |
| 25 | Prefer Not to Answer | Prefer not to answer | | |
| 22 | Prefer Not to Answer | Prefer not to answer | Feel Somewhat Connected | Disagree |
| 20 | Male | Hispanic/Lat in American | | |
| 20 | Female | Black | Feel Somewhat Detached | Agree |
| 19 | Female | Hispanic/Lat in American | Feel Somewhat Detached | Agree |
| 20 | Female | Hispanic/Lat in American | Feel Somewhat Detached | Agree |
| 20 | Male | Black | Feel Somewhat Detached | Agree |
| 19 | Female | 2 or More Races | Feel Somewhat Detached | Agree |
| 19 | Male | Hispanic/Lat in American | Feel Somewhat Detached | Agree |
| 20 | Female | Black | Feel Somewhat Detached | Agree |
| 21 | Male | 2 or More Races | Feel Somewhat Detached | Agree |
| 19 | Female | Hispanic/Lat in American | Feel Somewhat Detached | Agree |

Appendix N – Self-reported Participation in Summer Bridge Programs

Q15 - Did your college provide any transitional services/ programs (not including freshman orientation) prior to your first year in college?



Appendix O – SLU FGLI and/or Minoritized Student Survey Questions

| | | | | | | |
|----|--|--------------------------------|-----------------------------|--|-----------------------|----------------------------|
| 1 | Age | | | | | |
| 2 | Gender | | | | | |
| 3 | How do you identify? | American Indian/Alaskan Native | Asian | Black/African American | Hispanic/Latino | White |
| 4 | Home City, State (Please list Country if Not in the United States) | | | | | |
| 5 | Name of High School from which you graduated (Please list Country if Not in the United States). | | | | | |
| 6 | Name of first college you attended. | | | | | |
| 7 | Are you a first generation college student? | Y | N | | | |
| 8 | How many years have you been a college student? | 1 | 2 | 3 | 4 | More than 4 |
| 9 | At any time in college, did you qualify for a Pell Grant? | Y | N | | | |
| 10 | Are you currently an Undergraduate Student? | Y | N | | | |
| 11 | Are you currently attending the college you selected as a 1st year student? (Skip Logic would take respondents to Q23 if N) | Y | N | | | |
| 12 | When did you start seeing yourself as a college student? | Before I started School | Elementary School | Middle School/ Junior High | High School | |
| 13 | What were some reasons for selecting your college?(Check all that apply) | Cost of Attendance | Family Influence | Major/Academic | Peer/Social Influence | Proximity to Home |
| 14 | Did your college provide any transitional services/ programs (not including freshman orientation) prior to your first year in college? | Y | N | | | |
| 15 | During your time in college, did you participate in any extracurricular activities? | Y | N | | | |
| 16 | How strong is your sense of connectedness with faculty and staff on campus? | Strongly Connected | Somewhat Connected | Feel Neither Connected or Disconnected | Somewhat Detached | Completely Detached |
| 17 | How strong is your sense of connectedness with students on campus? | Strongly Connected | Somewhat Connected | Feel Neither Connected or Disconnected | Somewhat Detached | Completely Detached |
| 18 | There are People similar to me go to my current college. | Agree | Disagree | | | |
| 19 | How much do you think you have in common with other students at your college? | No Commonality | Little Commonality | Neither Common or Uncommon | Some Commonality | Strong Commonality |
| 20 | In college, when/if I am struggling with an academic or personal issue, I reach out to: (Check all that apply) | Academic Advisor | Campus Assistance Resources | Family/Friends | Professor/Teacher | None of the options listed |
| 21 | If you are willing to meet with us for a 30-minute Zoom conversation, please include your email below: | | | | | |
| 22 | What was the primary reason that you are no longer enrolled in college/at your original college?(Check one)(If N for #11) | Academic | Cost of Attendance | Family Concerns | Graduation | Other |
| 23 | Prior to your first year in college, did your college provide any transitional services / programs (not including freshman orientation)? | Y | N | | | |
| 24 | During your time in college, did you participate in any extracurricular activities?2 | Y | N | | | |
| 25 | Did you use any of these institutional support(s) before deciding to leave school? Select all that apply | Academic Advisor | Campus Assistance Resources | Professor/Teacher | Other | None of the options listed |