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## The Impact of Bridge Program Participation on the Academic Success and Retention of Freshman Music Majors

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**THE IMPACT OF BRIDGE PROGRAM PARTICIPATION ON  
THE ACADEMIC SUCCESS AND RETENTION OF  
FRESHMAN MUSIC MAJORS**

A Dissertation

Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural and Mechanical College  
in partial fulfillment of the  
requirements for the degree of  
Doctor of Philosophy

in

The Department of Agricultural & Extension Education & Evaluation

by  
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December 2019

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## ACKNOWLEDGEMENTS

As I sit at my kitchen table editing this document on a Sunday afternoon, with the sounds of football in the background, I wonder if it is too soon for a glass of wine. It's not. It never is. This experience has not been a labor of love, but rather, a means to self-discovery, frustration, exhaustion, pride, triumph and too many "how am I going to get this finished" moments to count. I know I need to thank everyone, and I swore I wouldn't wax poetically in my acknowledgments like everyone else does, but now that I'm facing the point of closing this chapter, I see why it feels right to do so.

First, I must thank my family. My relentlessly loving and supportive parents, Frank and Debbie, without whose after-work phone calls of encouragement, I may not have kept going in some of the more frustrating times. To say they are the best parents in the world would be a pathetic understatement. I love you guys. So much. To my brother, Garrett, just know that I find you and the current adventure you are on to be one of the bravest things any of us has ever done. Hard to fly the coop when the coop is so safe. You are part of the reason I embarked on this journey, as it came to be only after we had a very long talk while walking the LSU lakes on a random Sunday several years ago. To G, just know that even though I don't call you nearly as often as I should, I felt your love every time I sat down to write. Just call me "Dr. Sheep."

To all of my friends and extended family who got tired of me "having to write" instead of partaking in the fun activities you all invited me to, thanks for your understanding. Now I have to find another excuse not to hang out with you. Kidding. Please still invite me to things. I'm about to have a ton of free time on my hands.

To Dr. Burnett, how you didn't get sick of my sarcasm and insistence that no, I didn't love analyzing data and writing this document, I'll never know. You are a guru, master, king of

patience, nerd of nerds, and honestly, one of the kindest people I've ever known. I'm happy you remembered me 14 years after the first time we met, and that you were still willing to take me on as a student, mentee, and friend. Thank you for all of your help. I can honestly say this document wouldn't exist had you not been there.

Finally, to Brian – where do I even begin? Thank you for coming into my life right at the time I was starting to tackle this beast of a “paper.” Thank you for being patient. Thank you for being the best possible distraction during what was arguably (and I hope decidedly) the most chaotic time in my professional and academic life. I went into last Spring knowing life was going to be crazy, but I had no idea that finding the love of my life would also get thrown into the mix. I love you like crazy and I can't wait for the next chapter.

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## ABSTRACT

The bridge program for incoming music majors at Louisiana State University, run by the School of Music, is a program in its sixth year of existence (2014-2019). The program is a 5 day pre-college orientation that seeks to “bridge the gaps” for incoming music majors through a variety of programming, including sessions on note taking and lectures (given by current music faculty), peer-led integration sessions, financial and time-management workshops presented by university staff, and panels with alumni and community arts leaders. This program was developed as a departmental response to the call to increase the academic success and retention of freshman music majors. This study presents a review of literature related to principles of student success and retention and current best practices in orientation programming. The researcher analyzed university data from 2014-2018, to gain insight into the freshman music majors at LSU, those who did not participate in the bridge program and those who did, to determine similarities and differences in the students’ demographic characteristics. The researcher used the demographic information and bridge program participation to determine what variables, if any, were impactful on first year GPA and first to second year retention.



## CHAPTER 1. INTRODUCTION

Music is everywhere. Studies show that whether we are consciously aware of it or not, on average, music is present in more than 15% of the average person's waking day (Rentfrow, 2012). From the alarm clock, to the daily commute, to background music in the elevator, office, hair salon, and mechanic's shop, music is quite literally everywhere. Beyond the mere presence of music in daily life, the music industry has a major impact on national and global economies. In 2010, the global digital music industry was worth approximately \$4.7 billion, an increase of more than 1000% from 2004 and with 50 million subscriptions to digital music services in 2018, music revenue grew at double-digit rates for the third year in a row (Glazier, 2019).

In a 2015 report, The Recording Industry Association of America (RIAA) cited the following industry statistics:

- Music industries receipts reached \$110.7 billion;
- Music industry employee earnings surpassed \$67.3 billion;
- Value added by the music industry to the U.S. economy reached \$133.2 billion;
- In the three year period 2012 – 2015, the U.S. music industry grew from \$97.0 billion to \$133.2 billion;
- During the period 2012-2015, music industry employment rose from 1,246,653 employees in to 1,758,930 employees;
- The simple average growth rate achieved by the music industry in the period 2012-2015 exceeded 41% (Friedlander, 2016).

Music has a global presence. The industry is vast and ever changing. The digital age is pushing for more specific technical training for musicians as well as demanding a faster production rate than ever before. The training of musicians, fostering creative growth and honing

technical skills are inextricably linked to the success of the music industry. It may be true that one does not have to have a formal music education to enter the music industry, but it is generally accepted that formal training in a post-secondary setting gives employees in this highly competitive field an advantage:

Many performers of classical music and opera have at least a bachelor's degree. Musicians and singers need extensive training and regular practice to acquire the skills and knowledge necessary to interpret music at a professional level...Broadcast and sound engineering technicians typically need postsecondary education (Bureau of Labor Statistics, US Department of Labor, 2018).

Continued training and education in music is impactful for producing classical musicians and for staffing the continued growth in music industry jobs. One might go so far as to say that without the continued production of trained musicians, technicians, and entrepreneurs in the industry, life as we know it would be very different.

In addition to staffing the performance-based music industry is a need to keep music education alive in schools. The impact of music education programs in K-12 schools and the benefits therein have been researched extensively. Many scholars support creativity as the best indicator of true cognition; that it is through the act of creation and production of art that students learn and bring forth the best within themselves (Lancelot, 1929; Taylor & Baker, 2003). In a study of middle school students, Baker (2011) found a statistically significant positive relationship between participation in music classes and standardized test scores. Music teachers producing these results do not appear out of thin air; rather, they are highly trained musicians and certified educators. Louisiana state certification standards, for example, require both music performance as well as traditional pedagogical training before certifying someone to teach music in schools (Louisiana Department of Education, 2019). The Music Education program at Louisiana State University, for example, constitutes over half of the undergraduate music major

population. Keeping pre-service music educators on this degree path, and eventually placing them into critical need areas in arts education should be of utmost importance.

Attempting to prove the value of music and music education in the world to justify keeping music programs in universities is not enough. In the face of the changing landscape of higher education in America, including consistent budget cuts, changing student demographics, and higher expectations for accountability, universities find themselves scrambling to make fiscal and philosophical ends meet. Non-STEM programs and arts programs are often the first targeted when administrators must make difficult decisions about what to maintain and what to eliminate in times of fiscal shortfalls. In a 2018 report, the Center for Advancing Art & Design presented eighteen universities that had researched cutting funding, or did cut funding, to an arts area, program, or faculty as a result of budget reductions. With performance-based budgeting as a norm, assessing institutional effectiveness on quantifiable data often determines which areas or programs in an institution will continue to be funded (Melkers & Willoughby, 1998). Many factors can be considered in these frameworks, including:

- average ACT/SAT of entering classes;
- first year retention rates;
- six-year graduation rates; and
- time to degree (Layzell, 1999).

In strategic planning, then, administrators must determine how to maximize these benchmark areas to avoid being the next program cut due to ‘underperformance.’

Adding to this current instability in non-STEM areas, Nathan Grawe has presented a new concern for higher education in his 2018 analysis and prediction of college-going population trends: the Higher Education Demand Index shows that there may be considerably fewer

students entering college by 2025 and the students who are attending college will be a non-White majority (Grawe, 2018, p. 45). These predictions, supported by census data, decline in White birth rates, and increases in non-White birth rates (specifically Hispanic and African-American) suggest that by 2025, more of the entering freshman cohorts will be considered at-risk. The populations that will be entering college in 2025 and beyond are predicted to be underserved in the K-12 system and are less likely to have a parent who attended college and attained a degree (Grawe, 2018). Because of this, universities will feel even more of a push to not only recruit more students, but also to address the issues of a new and ever-evolving student body. Supported by retention research, this would call for an even more pressing demand to provide additional resources and programs in student support areas, including facilitating the less-prepared students' transition into college.

To have sustained enrollment, a university program must have two things: students who are able to continue (typically determined by grade point average) and students who choose to continue (retention). Institutions nationwide are seeking more precise answers on how to increase retention rates while also improving the student experience such that it leads to greater student success (as indicated by increasing timely graduation rates).

One approach to increasing retention and student success is by focusing on pre-entry student characteristics and readiness both as a function of admissions standards as well as to identify at-risk students much earlier in the first semester or first year to attempt to combat student attrition. Student readiness can be thought of as two-fold: student demographics and a student's feelings of preparedness for college. Traditional demographic variables are often examined when predicting likelihood of student retention. Age, gender, ethnicity, high school grade point average, and standardized test scores are often found to be significant in studies

examining retention (Clark & Cundiff, 2011; Jamelske, 2009; Liu & Liu, 1999; Porter & Swing, 2006; Shivpuri, Schmitt, Oswald, & Kim, 2006). Preparedness, from a perception standpoint, can give additional insight into students' ability to persist when facing the challenges of the high school to college transition phase (Gaertner & McClarty, 2015). A positive self-perceived level of preparedness may simply be reflected in a student feeling natural levels of anxiety about the transition, but generally feeling prepared and excited. A student who has a negative self-perception of preparedness would exhibit a greater than normal level of anxiety or worry not only about the transition but also about non-academic factors affecting the transition such as financial concerns, familial pressures, and mental or physical health issues (Francis, Duke, Brigham & Demetro, 2018). While demographics cannot be bolstered as a student transitions into college, preparedness might be, with the right programming.

Promising programming exists on many campuses that intends to bridge the gap as students make the transition from high school to college. These *bridge programs* are designed with the specific goal of allowing students to transition more smoothly (and presumably successfully) into their freshman year of college. Based on retention research, a better transition may mean higher likelihood of being retained into the second year of college. These programs typically allow students to connect with peers, faculty, experiences and environment in a more relaxed fashion before the pressures of full-time enrollment begin (Garcia & Paz, 2009; Woosley, 2003).

### **Purpose of the Study**

The primary purpose of this study was to determine the influence of participation in the music bridge program and select demographic and academic characteristics on the academic

success and retention of freshmen music majors at a large research university in the southern portion of the United States.

### **Objectives**

This study attempted to determine if a bridge program focused on fostering peer relationships, academic preparation and support strategies affected the transition period for incoming music freshmen, specifically as it related to first year GPA earned and first to second year retention.

To examine the above, the study had the following objectives:

1. Describe the incoming music freshmen who participated in the bridge program in the Louisiana State University (LSU) School of Music for the selected five years based on the following demographic and academic characteristics:
  - a. Age;
  - b. Race;
  - c. Gender;
  - d. High School Grade Point Average (HS GPA);
  - e. Standardized test scores (ACT/SAT);
  - f. Louisiana Residency/Non-residency.
  
2. Describe the incoming music freshmen who did not participate in the bridge program in the LSU School of Music for the selected five years based on the following demographic and academic characteristics:
  - a. Age;
  - b. Race;
  - c. Gender;

- d. High School Grade Point Average (GPA);
  - e. Standardized test scores (ACT/SAT);
  - f. Louisiana Residency/Non-residency.
3. Compare the incoming music students who participated in the School of Music bridge program to those who did not on the following demographic and academic characteristics:
  - a. Age;
  - b. Race;
  - c. Gender;
  - d. High School Grade Point Average (GPA);
  - e. Standardized test scores (ACT/SAT);
  - f. Louisiana Residency/Non-residency.
4. Determine if a relationship exists between first year GPA and the following demographic and academic characteristics for students who participated in the School of Music bridge program:
  - a. Age;
  - b. Race;
  - c. Gender;
  - d. High School Grade Point Average (GPA);
  - e. Standardized test scores (ACT/SAT);
  - f. Louisiana Residency/Non-residency.
5. Determine if a relationship exists between first year GPA and the following demographic and academic characteristics for students who did not participate in the School of Music bridge program:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency.

6. Determine if a relationship exists between first to second year retention and the following demographic and academic characteristics for students who participated in the School of Music bridge program:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency.

7. Determine if a relationship exists between first to second year retention and the following demographic and academic characteristics for students who did not participate in the School of Music bridge program:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);



f. Louisiana Residency/Non-residency.

8. Determine if a model exists explaining a significant portion of the variance in first year

GPA among music majors from the following demographic and academic characteristics:

a. Age;

b. Race;

c. Gender;

d. High School Grade Point Average (GPA);

e. Standardized test scores (ACT/SAT);

f. Louisiana Residency/Non-residency;

g. Participation in music bridge program.

9. Determine if a model exists that significantly increases the researcher's ability to

correctly classify music majors on retention from the first to second year of study from the

following demographic and academic characteristics:

a. Age;

b. Race;

c. Gender;

d. High School Grade Point Average (GPA);

e. Standardized test scores (ACT/SAT);

f. Louisiana Residency/Non-residency;

g. Participation in music bridge program;

h. First year GPA.

## **Significance of the Study**

The layers of retention are many: one of which being the expected experience and goals of the individual student. How those expectations and goals align with the program and university the student has chosen may play a role in a student's decision to leave the university (Longden, 2006). In certain majors, much of the unknown of the collegiate experience may be reduced due to the student's exposure to the environment before they make their decision. One might think of this much like a highly recruited student athlete, who has had college football coaches visiting his games and practices since his sophomore year in high school, has visited several campuses, and has had the opportunity to visit the potential universities he is considering. His expectations for his first year on campus will be much closer to reality than his non-recruited counterpart who has yet to visit a college campus or engage with the staff.

Music majors often have a similar experience as student-athletes. These students typically engage with the university faculty and environment prior to their first day of classes through performance opportunities, recruitment, and the audition process. The process of selective admissions for music students allows the university faculty and staff to fully assess a student and vice versa (Lehmann, 2014; Schmidt, Zdzinski, & Ballard, 2006). While there are many factors unique to music majors, there is not an abundance of research to be found on content specific bridge programming for music students. Research specific to bridge programming for music majors is largely unavailable to the researcher. The lack of findings in this area may indicate a research gap area that needs further development. This study sought to fill that gap by investigating the impact of a bridge program on music major academic success and retention.

## CHAPTER 2. REVIEW OF RELATED LITERATURE

Nationwide, university student first-to-second year retention currently sits at a rate of 77% (ACT, 2018). That number plagues higher education researchers, policy makers, and practitioners, all of whom seek answers for why universities struggle to increase retention rates, what programming impacts retention rates and ultimately, even in the presence of said programming, why some students still leave. Research shows academic measures (e.g., ACT/SAT, high school GPA) are effective determinants of retention probability when considering entering cohort groups of first year students but remains less effective when considering individual students (Kalsbeek, 2013). As such, higher education professionals continue to seek reasons for student departure, as well as effective programming to combat it. This chapter reviews the theoretical framework for this study and presents an overview of related literature on student retention and orientation programming.

### **Theoretical Framework**

This study was guided by the work of two prevalent researchers of student retention: Tinto's (1993) Theory of Institutional Departure and Bean's (1990) longitudinal model of factors that affect retention decisions. Tinto's theory draws from studies of tribal societies and rites of passage therein. Tinto (1993) equated a student's collegiate life cycle, where a student moves from high school to college, to that of the rites of passage in tribal societies. Within that transition, students face leaving one community and assimilating (or not) into another. Tinto's (1993) focus was on the student's transition to, and adjustment in, these communities and the problem spots that may arise through those transitions. Tinto (1993) asserted it is these problem spots that drive a student's decision to return to the university. Bean's (1990) research presented factors that affect a student's decision to return to an institution, by highlighting a student's

social, academic, and organizational engagement with the institution. This engagement influences a student's perception of and satisfaction with their choice of institution. If a student is satisfied with their experience, they are more likely to return (Bean, 1990).

Tinto's (1993) institutional departure theory is based on five variables that all contribute to the departure decision (See Figure 1). In this theory, three phases are also presented: Separation, Transition, and Incorporation. Each of these phases are intertwined with the five variables presented in the visual framework.

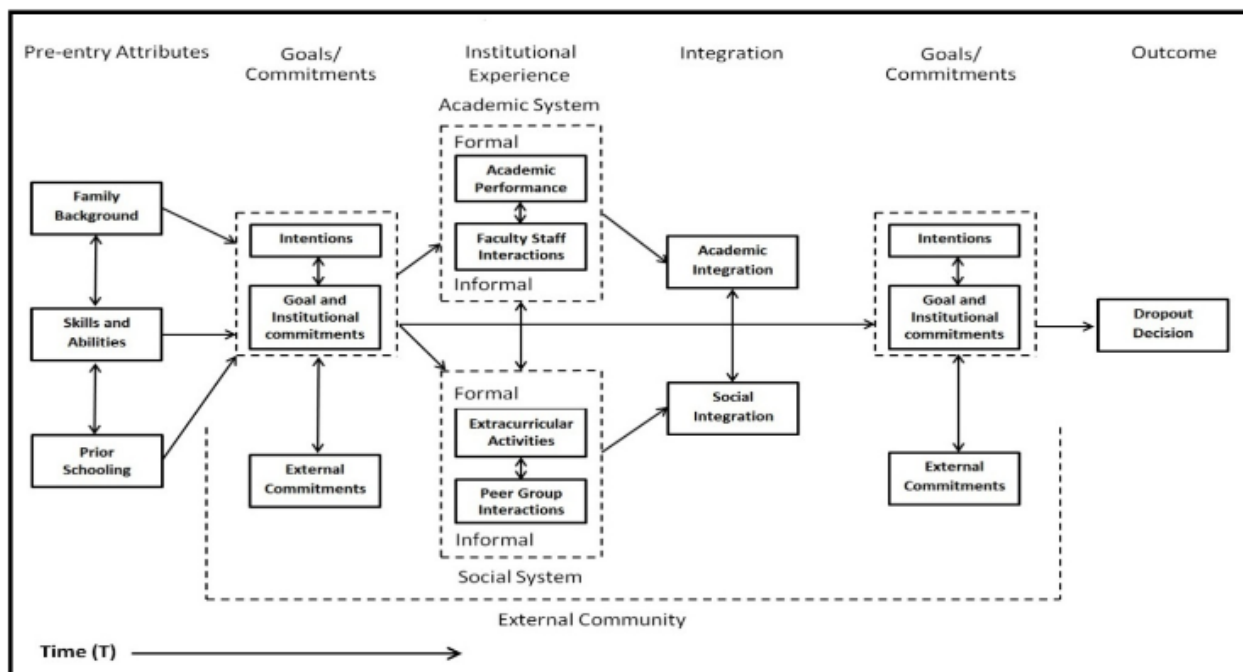


Figure 2.1. Tinto's Theory of Institutional Departure (1993)

The first phase, separation, calls for a student to disassociate from their family, past communities, and area of residence (Tinto, 1993). In this stage, a student must begin to separate himself from his established networks to set out on his own, create new networks and accept new people, customs, and places as his new 'normal.' The stresses of this physical separation from the 'old' and transition to the 'new' can be very overwhelming for the first-time college student (Tinto, 1993).

In the second stage of Tinto's (1993) theory, a student is making the transition between communities. This happens during and after the separation stage. Students find themselves in a stage of passage between their old and new communities, having not completely separated from the old, and not entirely adopted the new (Tinto, 1993). The more different the student's background is from that of the new institution, the more likely they are to struggle in the transition stage (Tinto, 1987, 1993). More specifically, students whose background has not afforded them the social and intellectual skills to successfully participate in the new community may struggle. According to Tinto (1993), examples of groups of students who may be more widely affected by this transition stage are minorities, older students, physically handicapped students, and students from rural backgrounds who attend large residential colleges. The development of transition focused programming, such as freshman orientation, is the result of institutional recognition of this difficult stage in the student life cycle.

The third stage of Tinto's (1993) framework is incorporation into the college society. The incorporation stage occurs after a student has passed through the first two stages, separation and transition, which typically happen very early in a student's college career. The challenge faced by the student in the incorporation stage is to become fully integrated into the college community (Tinto, 1993). While many institutions offer some form of first year programming to assist students with incorporation, much of the onus is still on the student to navigate the waters of finding his place in the new community (Tinto, 1993). Without external assistance, many students will not reach full incorporation, and even with assistance, many students will never feel fully incorporated, which may lead to a departure decision (Tinto, 1993). The inability to incorporate into the institutional community may signal a mismatch between the student's and

the institution's values or an inability of the student to successfully navigate the campus structures (Tinto, 1988).

Moving into the concept of voluntary departure from the institution, brings a deeper dive into the factors that affect the success or failure of a student in the incorporation stage. Tinto (1993) asserted that colleges are made up of social and academic structures, which include formal and informal communities of students, staff and faculty. Students are formally educated (academic structure) at the university but also have consistent social interactions in residence halls, cafeterias, and other meeting places (social structure). The experiences students have in these structures may lead to departure from the institution (Tinto, 1993). It is in these experiences that Bean's (1990) research begins to provide additional context for this study. Bean (1990) identified organizational variables, academic and social integration, and environmental pull as factors affecting retention decisions (in Bean & Eaton, 2000). These factors, then, may determine a student's departure (See Figure 2).

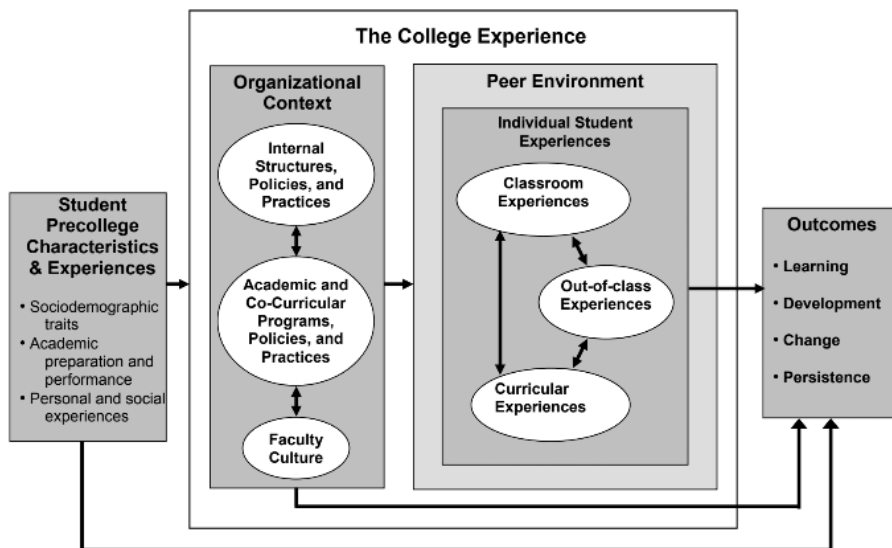


Figure 2.2. The College Experience. Based on Bean, J.P. (1990). Why students leave: Insights from research. Terenzini, P.T. & Reason, R.D. (2005). *Parsing the first year of college: A conceptual framework for studying college impacts*. Paper presented at the 2005 meeting of the Association for the Study of Higher Education.

Organizational variables are defined as the various interactions a student may have with the physical characteristics of the college, including: admissions, classes, schedules, policies and procedures, campus services, and financial aid (Bean, 1990). Academic integration examines the student's study skills, declaration of a major, class attendance, experiential learning opportunities and engagement with the faculty (Bean & Eaton, 2000). Organizational factors, as well as the peer environment may affect a student's feelings of satisfaction within an institution (Bean, 1990). A student's peer environment encompasses relationships with peers, faculty and student support systems (Bean, 1990; Terenzini & Reason, 2005). The impact of peers on student behaviors, actions, and decisions cannot be ignored (Terenzini & Reason, 2005). Having friends on campus, interacting with faculty in informal settings and having a strong support system can make a student feel a stronger sense of community and fit in the institution (Bean, 1990; Tinto, 1993). A student's attitude about college (being excited before arrival) may positively impact their attitude toward their college experience and positive interactions would likely bolster that positive attitude and lead to a higher sense of satisfaction with their institution (Bean, 1990). The more at home a student feels at their institution and the more they feel they matter to the university and faculty, the more likely they are to remain enrolled (Schreiner, 2009).

These decisions to leave or stay, this satisfaction with the institution, can also be affected by a student's sense of fit and loyalty (Bean, 1990). Loyalty is a sense of attachment to the institution that may be the result of a student's family and friends holding the institution in high regard, extolling its virtues, and supporting its athletic teams. A student who develops emotional ties and a sense of attachment to the institution is less likely to leave (Bean, 1990). A sense of fit with the institution can be bolstered by institutional loyalty. Universities often engage in rituals,

traditions and ceremonies to foster the sense of belonging (loyalty) and community (fit) (Bean, 1990).

Environmental pulls, or external forces, may affect a student's retention decision. These may include a lack of financial resources, work and/or family responsibilities, or a long-distance romantic relationship (Bean, 1990; Tinto, 1993). For many students, balancing college and external commitments can alter their commitment to the university (Tinto, 1993). These factors may counteract any positive benefits the organization and peer environment provide and can influence the student's ability to persist and decisions to depart from the institution (Tinto, 1993).

While institutional structures can affect student departure decisions, characteristics of the student himself also affect decisions to leave. A student's personal attributes can predispose him to respond in a particular way to a given situation or condition (Tinto, 1987, 1993). Bean (1990) listed the following characteristics as potential impactors: educational plans/goals, high school grade point average, high school rank, high school class rigor, high school involvement, college preparation, family support, socioeconomic status, gender, age, ethnicity, and general skills and abilities. Tinto (1975) identified pre-college characteristics, family background, parent's education, race, gender, age, academic preparation and personal skills as potential impactors in students' decisions to leave. Tinto's "Longitudinal Model of Departure from Institutions of Higher Education" described the longitudinal process by which a student makes the decision to leave, specifically highlighting how interactions among various persons and university characteristics affect student withdrawal:

Individual departure from institutions can be viewed as arising out of a longitudinal process of interactions between an individual with given attributes, skills, financial resources, prior educational experiences, and dispositions (intentions and commitments) and other members of the academic and social systems of the institution. The individual's experience in those systems, as indicated by his/her intellectual



(academic) and social (personal) integrations, continually modifies his or her intentions and commitments (Tinto, 1993, p.113).

Each personal characteristic of a student affects his departure decisions and plays an ongoing role in his continuing commitment and future at the institution (Tinto, 1993). These personal characteristics steer the actions and beliefs of the student, affect his interactions and experiences with the larger campus community and, in turn, affect the student's decision to stay (Skipper, 2005). Academic skills and ability, a pre-entry characteristic identified by most practitioners as integral to student retention may affect successful incorporation into the institution. A student not academically prepared, who faces academic difficulties too great to overcome is at risk for departure just as a student who is bored because the academic system is not challenging enough may be (Tinto, 1993). Tinto (1993) described academic dismissal as a form of voluntary departure since the student made the decision not to commit the time and energy necessary for academic success. The more engaged a student is academically, the more likely he may be to persist (Tinto, 1975, 1987, 1993). Formal and informal interactions with faculty and staff can influence a student's perception of the university and its commitment to student welfare. Positive interactions with faculty, such as assisting with research or engaging in discussions with faculty outside of class, lead to higher student satisfaction (Astin, 1993). This is supported by the notion that faculty, too, play a role in student integration into the institutional community, both socially and academically and can lead to improved student retention (Astin, 1993, Bean, 1990, Terenzini & Reason, 2005, Tinto, 1993). Tinto (1993) explained that students who became engaged in the classroom were more likely to seek out faculty outside of class and that this type of interaction may bolster students' involvement in other aspects of the campus community, thus accelerating their integration into the informal social system of the institution.

Tinto (1993) and Bean (1990) present the theoretical framework for understanding student departure as examined in this study. Reasons for student departure are many and rarely can a student's decision to leave an institution be blamed squarely on one factor. The relationship between a student's goals and commitments, some of which are predetermined personal characteristics, and that of the institution's structure and personnel will determine a student's satisfaction, fit and persistence at the institution (Bean, 1990; Tinto, 1993) When seeking to address student departure, universities should carefully examine the different reasons for which students leave and should not treat all departures with a similar policy or action (Tinto, 1993).

### **Student Characteristics and Retention**

Numerous studies have considered the impact of individual characteristics on student retention or attrition prior to degree completion. Many characteristics, including age, gender, ethnicity, high school academics, family background, and degree or career aspirations have been shown to impact retention in several studies (Adleman, 1999; Astin, 1975; Bean & Metzner, 1985; Jamelske, 2009; Liu & Liu, 1999; Singell, 2004). These, coupled with institutional fit and academic and social integration, may provide further insight into the ever-elusive question of student retention.

#### Age

Studies evaluating age as a factor in student retention have shown mixed results. Bean and Metzner (1985) determined that older students had higher rates of attrition due to the likelihood that they often had familial and work obligations that younger students did not have. Berger (1992) found a negative relationship between age and retention of commuter students. Fike and Fike (2008) found a negative correlation between student retention and age. However, other studies have shown no significant relationship between retention and age (McGrath &

Braunstein, 1997). Most practitioners agree that age may be the quantifiable variable, but it is likely the outside commitments that come with age (e.g., family, work, etc.) that actually impact retention (Liu & Liu, 1999; Ryland, Riordan, & Brack, 1994).

## Gender

Research on gender remains mixed, as several studies found that females drop out at higher rates than males (Jamelske, 2009; Johnson, 1997) while others found that males were more likely to drop out (Astin, Korn, & Green, 1987; Porter & Swing, 2006; Voorhes, 1987). Still other studies found no significant gender effects (Berger, 1992; Liu & Liu, 1999; McGrath & Braunstein, 1997). Milem and Berger (1997) found that female identification positively predicted a student's commitment to the institution and their retention. This may be the result of females being more accepting of support systems and willing to participate in social organizations of the university. Bynum and Thompson (1983) suggested that the unbalanced gender representation of a freshman class may be what influences retention, as gender majorities appeared to drop out at a higher rate than the gender minority.

## Race

Race has been shown to be a significant predictor of student retention, however, those results may call for further exploration (Liu & Liu, 1999; Murtaugh, Burns, & Schuster, 1999; Reason, 2009). On the surface, the results show that minority students are less likely to be retained, however, in those same studies, when other variables are controlled, the race variable was less (or no longer) significant (Fike, 2008; Murtaugh, et al., 1999; Reason, 2009). In other words, because minority students are more likely to have lower high school achievement and/or parents with lower education levels, two variables directly related to retention, it stands to reason that their retention rates would be lower. However, when those variables are controlled,

race is not an accurate predictor of student retention. In fact, Murtaugh, et al. (1999) found, after controlling such variables, that African American students were more likely to be retained than their White counterparts. Research on student persistence shows that the transition to college may be more difficult for minority students (Allen, 1999). It may also be true that the institution's racial makeup can affect minority students' decisions to persist. At predominately White universities, African American students are more likely to drop out, which could be due to feelings of social isolation or lack of fit (Galicki & McEwen, 1989; Guloyan, 1986; Madrazo-Peterson & Rodriguez, 1978).

### High School Academics

Many studies have shown high school GPA, class rank, and standardized admission test scores to be statistically significant predictors (independently and/or combined) of college retention (Adelman, 1999; Allen 1999; Astin et al., 1987; Bean 1986; DeBeard, Spelman & Julka, 2004; Perrine & Spain, 2008). High school grade point average has also been found to be a significant predictor of college academic achievement (Bean, 1986; Clark & Cundiff, 2011, Milem & Berger, 1997). Contemporary research has consistently shown high school grades to be one of the strongest predictors of college retention (Atkinson & Geiser, 2009; Radunzel & Noble, 2012; Robbins et al., 2004). Further, experiencing early academic success in college may affect a student's satisfaction and desire to persist at the university, which would positively influence retention (Allen, 1999). Some studies have shown higher standardized test scores as a significant predictor of college success (Shivpuri, Schmitt, Oswald, & Kim, 2006). However, in another study, even when students were identified as at-risk based on standardized test scores, there was not a significant difference in the retention rates of the at-risk students and those not identified as at-risk (Potts & Schultz, 2008). The impact of college admissions scores alone is not

as strong a predictive variable and typically should be considered only in combination with high school achievement (Astin et al., 1987; Clark & Cundiff, 2011; Jamelske, 2009; Perrine & Spain, 2008). Universities with higher selection criteria for admissions are more likely to have higher retention, likely because their admitted students had higher academic achievement prior to arriving at college, a variable positively correlated with retention (Levitz & Richter, 1999). It should be noted, however, that there are significant limitations with the use of high school GPA as a consistent predictor of student success. First, high school GPA is subject to inflation or deflation and may not accurately reflect a student's true academic ability (Zhang & Sanchez, 2013). Second, high school GPA is not standardized across schools and are based on varying grading scales and standards. Finally, students do not take the same courses through high school, so the GPA may not be reflective of the breadth and depth of knowledge attained. It may be these exact limitations that justify the use of high school GPA in conjunction with standardized test scores as the best predictor of student success in college (Schmitt et al., 2009).

#### Family Background

Prior to enrolling in college, a student's likelihood of success may be dependent on his or her family's post-secondary experience. Having a parent who has a basic understanding of the expectations, processes and procedures of post-secondary institutions may give a student an advantage in college (Astin, 1975). It is also reasonable to assume that during the institution selection phase, the "support, encouragement and analysis" a parent provides a student is an advantage (Longden, 2006). Longden (2006) found with a 5% level of significance, that an immediate family member's "personal direct experience with higher education" would result in a lower rate of non-completion (p. 178-179). Family income has also been found to be a significant predictor of student persistence (Astin, 1975; Bean, 1996). The higher a parent's

income, and the higher the parent's level of education, the more likely a student was to be retained at an institution, (Astin, 1975). For many students with one or more parent who has a college degree, degree completion is not an option, but a requirement (Hall & Quinn, 2014). The setting of one's upbringing may also affect retention, as early studies showed that being raised in a small town (as opposed to a city or suburb) was positively correlated with higher dropout rates (Astin, 1975).

### Financial Aid

Cost may be a prohibitive factor for many students when considering college attendance. Financial aid impacts a student's choice to enroll, and subsequently continue, in college (Pascarella & Terenzini, 2005; Singell, 2004). Low income students, in particular, benefit from financial aid, which positively impacts their decision to remain enrolled (Pascarella & Terenzini, 2005). Types of aid may also affect student retention, as aid that does not require re-payment or a future work commitment was found to be more desirable and associated with a stronger commitment from its recipients (Singell, 2004). In that same study at the University of Oregon, Singell (2004) found that the act of applying for aid early indicated an interest in remaining at the university and that costs associated with transferring schools may deter students from withdrawing from their current institution, both factors that would increase retention rates. In a study of the effects of the discontinuation of the Social Security Student Benefit Program for students who had a deceased parent, Dynaski (2003) found a correlation between the loss of benefits and college enrollment. Even though these students typically were eligible for other forms of aid, the removal of this additional aid source negatively affected their likelihood to enroll. Matters of financial concern are real and understandable and the decision to enter into debt in exchange for a college degree is one that students are not taking lightly.

## Degree Aspirations

A student's personal career or degree attainment goals may impact their persistence (and retention) in college (Allen, 1999; Astin, 1975; Levitz & Richter, 1999; Longden, 2006; Tinto, 1975, 2012). Tinto (1975) found that students who enter college with the goal of completing a degree were more likely to do so because they had a focused expectation of finishing school. Astin (1975) studied students in college who had an expressed desire to obtain at least a bachelor's degree and these students, who aspired to achieve a master's degree or beyond, were more likely to persist than their peers only working toward a bachelor's degree. It is intuitive that the student who enters the university with a commitment to earning a degree would be more likely to do so than those who enter unsure, or without the motivation to persist to degree completion (Allen, 1999; Tinto, 1975). A lack of clarity over future career(s) can also affect students' ability to persist (Longden, 2006). For this reason, preparation in high school, and exposure to career options may be an oft overlooked imperative.

### **Non-Cognitive Factors and Retention**

The initial transition phase in college, often considered to be the first few weeks, semester, or year, is of utmost importance to student retention (Astin, 1975; Bean, 1986; Tinto, 1975). The interaction between the student's personal characteristics and their experience at the institution can further explain decisions to leave or remain. The following are three commonly discussed non-cognitive factors that affect retention.

#### Social Integration

Longden (2006) determined that four constructs comprised the social engagement possibilities at a university:

- practical engagement with others in the creative or expressive arts;

- spiritual and religious engagement;
- passive engagement in cultural events; and
- dependence on publicly available cultural events.

Other researchers define social engagement more broadly and included peer interactions in the construct (Roberts & Styron, 2010; Tinto, 2000). Student involvement in extra-curricular activities such as intramurals, greek life and student organization meetings increases the likelihood of retention (Bean, 1986; Kuh et al., 2008; Roberts & Styron, 2010). As Wachen, Pretlow and Dixon (2018) stated, “A highly involved student spends energy on studying for classes, spends time on campus, participates in extracurricular activities...” (p. 121). A student involved in such activities, assuming it does not negatively impact their academics, is more likely to feel a strong sense of belonging with their chosen institution and be less likely to leave.

Social activities beyond the classroom allow students to build peer relationships, find support systems and find their place in their new university community (Bean, 1986). An important, but less discussed expectation of college is for the student to develop him or herself there as a social being (Roberts & Styron, 2010). Making friends and establishing a peer network creates a sense of security within the university and may help students to persevere when faced with challenges or setbacks (Morrow & Ackermann, 2012; Roberts & Styron, 2010). Failure to participate in activities outside the classroom is likely to result in a student feeling isolated, lacking peer relationships, and generally feeling overlooked, each of which can contribute to decisions to leave the university (Bean, 1986; Roberts & Styron, 2010). Research calls for institutions to consider the role of social engagement in student retention; stretching resources beyond traditional academic foci to better integrate first year students (Terenzini & Reason, 2005).



There is an advantage to be had for smaller populations within the university setting, specifically students who by choice, or curriculum, participate in a creative group endeavor. In a 2008 study, Sablo found that participation in a gospel choir increased African American students' feelings of social integration and decreased feelings of marginalization at a predominately White university. Eason and Johnson (2013) concluded that any level of participation in music was associated with higher engagement and achievement in college. Crowe (2015) investigated the relationship between participation in music ensembles during the freshman year and the continued retention of those students. The results of that study showed that the students enrolled in music ensembles returned for the subsequent three years at a significantly greater rate than those students who had not participated in an ensemble (Crowe, 2015). Crowe's (2015) conclusion was that music ensembles were both academic and social in nature and, as an integral part of music major's course of study, provided those students with an on-going integrated academic and social experience, desirable for student retention.

#### Faculty Interactions

The role of faculty should not be overlooked in any discussion of retention. The quality of interactions with faculty have been shown to determine student satisfaction with the university and, ultimately, their decision to re-enroll (Pascarella & Terenzini, 1981). In an earlier study, Pascarella and Terenzini (1979) looked specifically at the relationship between withdrawal from college and student-faculty interactions. In this study, it was found that conversations with faculty around academic topics, but outside of the classroom, were the largest contributor to student retention (Pascarella & Terenzini, 1979). Informal or social communication with faculty was a significant predictor of retention for women, and career-oriented communication with faculty was a significant predictor for men (Pascarella & Terenzini, 1979). While some of that

result may be attributed to the different intentions of men and women during that time, it was true that any meaningful interaction had a positive result on retention. In addition to specific discourse, the demeanor of faculty is important to retention. Roberts and Styron (2010) found that approachability of faculty was necessary for students and faculty to build quality relationships. That approachability could be increased by faculty being willing to participate in out of classroom activities, having consistent office hours and sharing their email and/or cell phone numbers with students (Roberts & Styron, 2010). Students' sense of being cared about, as evidenced by faculty availability and interactions caused students to think more positively about the institution. Faculty actions, both in and out of the classroom, have the ability to affect a student's decision to remain at an institution (Tinto, 2000). Early faculty interactions may be of utmost importance, as students seek to establish their sense of belonging (Milem & Berger, 1997; Tinto, 2000). A lack of involvement with faculty members was cited as one reason for student departure in a study of social alienation in the university setting by Levitz and Richter (1999).

#### Institutional Fit

There is growing concern, especially with changing demographic trends, that students come to college with inaccurate expectations of what their college experience will be (Grawe, 2018). As such, the potential exists for students to feel misled, disappointed and even woefully underprepared for college life. This perception of "institutional fit" was most notably examined by Milem and Berger (1997). The researchers conducted a longitudinal study of both Tinto and Astin's retention theories as they related to a student's perception of fit at a highly selective, private institution, and found the following:

When a student entered the institution, they engaged in the university environment at a number of levels and in a number of ways. Through these interactions, they developed their own idea of whether or not the institution was supportive of their transition, both academically and socially. These perceptions influenced the continued involvement of

the student, which in turn determined how well the student integrated into the university community. The more integrated the student was with the institutional environment, the better the fit and the more likely they were to remain enrolled (Milem & Berger, 1997, as summarized in Korduner, 2013, p. 50).

Longden (2006) described problems with institutional expectations as a potential conflict between promotional efforts and the reality of “how it actually is” (p. 184). It is understandable that a student with misaligned expectations may feel very discouraged upon enrolling at the university. Morrow and Ackermann (2012) found sense of belonging (fit) to be related to both academic progress and academic achievement.

### **Principles of Effective Retention**

“An enduring commitment to student welfare, a broader commitment to the education, not mere retention, of all students, and an emphasis upon the importance of social and intellectual community in the education of students” -Vincent Tinto (1993, p. 145).

If the above quote is the goal for an institution that wishes to create an environment in which students can be successful, the programs and policies of the institution must create support systems as varied as the students who need to utilize them. Determining appropriate retention strategies is an on-going challenge for institutions of higher education. Tinto listed the principles of effective retention as:

- Effective retention programs are committed to the students they serve. They put student welfare ahead of other institutional goals;
- Effective retention programs are first and foremost committed to the education of all, not just some, of their students; and
- Effective retention programs are committed to the development of supportive social and educational communities in which all students are integrated as competent members. (Tinto, 1993, p. 146-147).

In order to guide institutions in the successful implementation of these three principles, Tinto provided a second set of principles for effective implementation:

- Institutions should provide resources for program development and incentives for program participation that reach out to faculty and staff alike;
- Institutions should commit themselves to a long-term process of program development;
- Institutions should place ownership for institutional change in the hands of those across the campus who have to implement the change;
- Institutional actions should be coordinated in a collaborative fashion to insure a systematic, campus wide approach to student retention;
- Institutions should act to insure that faculty and staff possess the skills needed to assist and educate their students;
- Institutions should frontload their efforts on behalf of student retention; and
- Institutions and programs should continually assess their actions with an eye toward improvement (Tinto, 1993, p. 148-152).

Tinto's (1993) suggestion for institutions was to help first year students in their transition to college, especially in the first semester or quarter when the adjustment period is most critical. These transition-focused programs should be designed to assist students when either academic or social difficulties arise during the transition period. A discussion of orientation and bridge programming follows.

### Orientation Programming

There is a noted lack of research available on the role of institutional policies and practices in student retention (Hossler & Bontrager, 2015). Where most practitioners agree that

some form of orientation programming is valuable in the student transition phase, there is little agreement on the type, implementation and duration of the ideal orientation program (Upcraft, Gardner & Barefoot, 2005). The preceding issues aside, the goals of most orientation programming are to help students make the transition to college, form a strong relationship with the institution, and gain an understanding of how to succeed and complete a degree at the institution (Hossler & Bontrager, 2015).

Most institutions in the country conduct some form of orientation programming for first year students (College Board, 2011). These programs provide students, and often families and/or siblings as well, an opportunity to learn about the resources of the university, the support systems, opportunities for campus involvement, and faculty expectations (Miller & Pope, 2003). Gentry, Kuhnert, Johnson, and Cox (2006) found evidence that participation in a weekend orientation program had a positive effect on a student's decision to get involved in college and the likelihood of their being connected to their faculty outside of the classroom, participating in extracurricular activities and joining student organizations. Researchers found, in a qualitative study of transfer and students of color, that participation in an orientation program assisted new students to develop friendships that aided in their social adjustment to college (Mayhew, Stipeck, & Dorow, 2011). As previously noted, the type of orientation programming varies widely across institutions. Of particular interest in this study, is a type of orientation programming known as bridge programming. Bridge programs traditionally have been used to help underprepared students transition into college (Walpole et al., 2008). However, more recently, the term has broadened to include extended, often residential, orientation programming for all or small cohort groups of students. Bridge programs bridge the gap for students, no matter what that gap may be (academic, social, skill-specific).

Drawing on Tinto's (1975, 1987) and Bean's (1990) retention research, the concept of bridge programming emerged as a promising early intervention strategy to combat retention concerns. Bridge programs typically immerse students in the university experience before it counts; allowing the students to connect with peers, faculty, experiences, and environments in a more relaxed fashion before the pressures of full-time enrollment begin (Garcia & Paz, 2009; Woosley, 2003). The question remains, however, as to the effectiveness of these programs to influence students to succeed and persist (Rankin & Reason, 2008). Early studies showed bridge programs assisted students (especially underrepresented and low-income populations) in making their transition to college, but ultimately did not affect retention (Ackermann, 1999; Tukibayeva & Gonyea, 2014).

This should not be an indictment of bridge programming though, as most higher education professionals argue that retaining a student is a complex venture without a one-size-fits-all approach. If a bridge program achieves its mission of combatting the two most common factors for student attrition: inadequate academic preparation and creating academic momentum, then it should positively contribute to the goal of student retention (Adelman, 2006; Attewell, Heil, & Reisel, 2012; Douglas & Attewell, 2014).

#### Examples of Successful Programs

Studies have shown positive effects as a result of participating in a bridge program, including (a) earning higher grades, (b) staying in school longer, and (c) higher completion rates as compared to nonparticipants (Evans, 1999; Garcia, 1991, Pascarella & Terenzini, 2005; Walpole et al., 2008). Non-cognitive factors appear to benefit from participation in bridge programming as well. Ackermann (1991) found that students who participated in bridge programming had an increased sense of control, confidence, and self-esteem; characteristics

needed to face the challenges of the first year of college. Students in bridge programming are also often exposed to faculty and other students in their program, forming relationships that carry with them throughout their first year and positively impact their likelihood of retention (Ackermann, 1991; Garcia, 1991; Suhr, 1980; Walpole et al., 2008).

Many studies have evaluated bridge programs at individual institutions. Vinson (2008) considered bridge program participation as a factor in first semester GPA and retention. Several variables were evaluated, including gender, race, high school GPA, ACT/SAT scores, enrollment status, first semester GPA and first year GPA (Vinson, 2008). The results indicated that there was not a significant difference between program participants and their nonparticipating peers. While that may lead one to assume the program did not have a measurable effect, Vinson (2008) asserted that in fact, the program was successful as it mitigated the pre-existing gap in student preparedness and the program was able to improve the academic skills of the participants.

Walpole et al. (2008) conducted a study of conditionally admitted students to a public four year predominately White institution. These students qualified for the program because they were either low income or believed to have high potential, despite low high school grades (Walpole et al., 2008). Results showed that the program participants earned significantly fewer credits in their first year of college but had higher retention rates than the control group by their junior year (Walpole et al., 2008). This study highlighted the potential need for ongoing support and resources for students who are capable of degree completion but may not match the expected rate of completion (Walpole et al., 2008).

Strayhorn (2011) measured the effect of bridge program participation on academic self-efficacy, sense of belonging, academic and social skills and the influence of those factors on first semester GPA. Results showed that bridge program participation was positively associated with

the students' academic self-efficacy and academic skills and that academic self-efficacy positively predicted first semester GPAs (Strayhorn, 2011).

A study conducted at Louisiana State University examined the effects of an extended orientation program for biology majors, who were not identified as at risk or underprepared. The study investigated the participation in an academic boot camp and the effect on student success and retention (Wischusen, 2009). Wischusen (2009) found that students who participated in the boot camp were more likely to have higher grades in their biology courses in the first two years of college as well as were more likely to be retained as a biology major than their nonparticipant peers.

In addition to single institution case studies, several studies have examined programs across multiple institutions. These studies sought to compare program participants to control or comparison groups of similar students (Wachen et al., 2018). Wathington, Pretlow, and Barnett (2016) used an experimental design to compare participants of eight summer bridge programs to a control group and tracked persistence, credits earned, and course progression in reading, writing and math. Through the first two years of college, researchers found a statistically significant impact on student success in math and writing courses, but no effect on the number credits earned or student persistence (Wathington et al., 2016).

In an aggregate study, Douglas and Attewell (2014) created a national sample using the Beginning Post-Secondary Student Longitudinal Survey and data from six community colleges to estimate the impact of summer bridge programs. In this study, program participation had a positive impact on degree completion and participants had significantly higher graduation rates across all racial groups. Additionally, the community college participants made better progress toward degrees in their first two years of college (Douglas & Attewell, 2014).



For every study that showed positive results of bridge programming, there is a study that showed mixed or no significant results (Douglas & Attewell, 2104; Strayhorn, 2011; Vinson, 2008; Wachen et al., 2018; Wathington, et al., 2016; Wischusen, 2008). It can be said that the research is mixed and there is a need for additional research on the impact of these programs. Scholars recommend that colleges and practitioners engage in ongoing evaluation of bridge programming and build a larger body of evidence on the impact of these programs to better guide policy moving forward (Douglas & Attewell, 2014; Sablan, 2014; Wachen et al., 2018).

### **Implications for Music Majors**

The layers of retention are many; one of which being the expected experience and goals of the individual student. How those expectations and goals align with the program and university the student has chosen may play a role in a student's decision to leave the university (Longden, 2006). In certain majors, some of the 'unknown' of the collegiate experience is reduced due to the student's exposure to the university environment before they make their decision to enroll. One might think of this much like a highly recruited student athlete, who has been recruited by college football coaches since his sophomore year in high school, and has visited the potential universities he is considering attending. His expectations for his first year on campus will be much closer to reality than his non-recruited counterpart who has yet to visit a college campus or engage with the staff. Music majors often have a similar experience. These students typically engage with the university faculty and environment prior to their first day of classes through performance opportunities, recruitment, and the audition process. The process of selective admissions for music students allows the university faculty and staff to fully assess a student and vice versa. (Lehmann, 2014; Schmidt, Zdzinski, & Ballard, 2006). While there are many factors unique to music majors, there is not an abundance of research to be found on

content specific bridge programming for music students. Crowe's (2015) research on ensemble participation showed a positive relationship between retention and music ensemble participation, however, research specific to bridge programming for music majors is largely unavailable to the researcher. The lack of findings in this area may indicate a research gap area that needs further development.

### **Summary**

Much research exists concerning retention, as would make sense given the national focus on retention rates. The vast majority of studies are focused on the predictors of student success as the traditional entry standard measures of high school GPA and standardized test scores on national exams. Most institutions still use these as the most heavily weighted variables for admission, and there is logical basis for that; however, calls exist to consider the entire body of work of a student to predict his or her success rather than just one test score (Maree, Pretorius, & Eiselen, 2003).

Foundational research of student retention by Tinto (1975, 1987) and Bean (1990) offered several considerations for the causes and prevention of student attrition. Growing research suggests that student success (and retention) is, at its core, very individualized and nearly impossible to predict using *any* standardized markers. Larose, Robertson, Roy, and Legault (1998) stated that “three personal systems intervene in the learning process for students, regardless of their intellectual aptitudes: the belief system, the behavioral system and the emotional system” (p. 278). Each of these personal systems, or non-intellectual factors, can play a role in student retention. These non-intellectual factors, according to the research, can be affected by early and targeted experiences for first-semester students that help them improve in these areas and thus, help them better deal with the stressors of the transition from high school to

college (Larose et al., 1998). Can students adjust to a new environment, what is their personal motivation regarding their learning and career goals, and how well do they get along with peers and faculty? Questions like these are an integral part to student success and the typical entering freshman faces these challenges with little to no preparation or understanding of how best to meet them.

In an attempt to combat these issues, many schools are implementing bridge programs to help first semester students transition from high school to college. These programs typically expose participants to some of the largest stressors they face, but in a controlled environment where they feel comfortable asking questions, are able to meet and forge friendships with peers and get a chance to physically be in the spaces where their classes will take place in the upcoming semester. Opportunities to meet and work with peers have shown to be effective in helping students adapt and integrate to the new college environment as well as buffer negative effects of the transition to college (Collings, Swanson, & Watkins, 2014). While not enough evidence exists on the “successes” of these programs, they have shown promise. “Despite wide implementation of summer bridge programs, empirical studies [of summer bridge programs] have remained largely descriptive and in short supply” (Strayhorn, 2011, p. 142).

Consideration should also be given to bridge programs that are narrowed down to a cohort of students who have chosen a very specific, non-academic driven curriculum, such as music performance. Students in these curricula may face a different set of adjustment challenges and therefore benefit from a major-specific bridge program.

Sedlacek and Adams-Gaston (1992) suggested that student-athletes should be considered non-traditional students and much like athletes, many music majors are recruited to come to college and offered large scholarships for doing so, given the expected contribution their talents

will make to the school. They are placed into a microcosm of the university as they perform together and practice together as a team (in ensembles) on a daily basis. The bulk of their curriculum (and time) is spent in the music facilities, with their fellow musicians, taking courses with music faculty most of the time they attend the university. There is little research that considers non-cognitive factors when assessing pre-entry characteristics to predict music student success and/or retention. The unique characteristics of incoming music majors leads the author to believe that they may benefit from a major-specific bridge program that provides early exposure to the academic and social systems of the university in which they plan to enroll.

It is in this vein that the present study seeks better answers to the question of how to improve retention among a specific cohort of freshmen students. What impact, if any, will a pre-college bridge program have on the academic success and retention of music majors at a research university in the southern portion of the United States?

## CHAPTER 3. METHODOLOGY

### **Purpose of the Study**

The primary purpose of this study was to determine the influence of participation in the music bridge program and select demographic and academic characteristics on the academic success and retention of freshmen music majors at a large research university in the southern portion of the United States.

### **Objectives**

1. Describe the incoming music freshmen who participated in the bridge program in the LSU School of Music for the selected five years based on the following demographic and academic characteristics:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (HS GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency.

2. Describe the incoming music freshmen who did not participate in the School of Music bridge program in the LSU School of Music for the selected five years based on the following demographic and academic characteristics:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);

- e. Standardized test scores (ACT/SAT);
  - f. Louisiana Residency/Non-residency.
3. Compare the incoming music students who participated in the School of Music bridge program to those who did not on the following demographic and academic characteristics:
- a. Age;
  - b. Race;
  - c. Gender;
  - d. High School Grade Point Average (GPA);
  - e. Standardized test scores (ACT/SAT);
  - f. Louisiana Residency/Non-residency.
4. Determine if a relationship exists between first year GPA and the following demographic and academic characteristics for students who participated in the School of Music bridge program:
- a. Age;
  - b. Race;
  - c. Gender;
  - d. High School Grade Point Average (GPA);
  - e. Standardized test scores (ACT/SAT);
  - f. Louisiana Residency/Non-residency.
5. Determine if a relationship exists between first year GPA and the following demographic and academic characteristics for students who did not participate in the School of Music bridge program:
- a. Age;

- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency.

6. Determine if a relationship exists between first to second year retention and the following demographic and academic characteristics for students who participated in the School of Music bridge program:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT)
- f. Louisiana Residency/Non-residency.

7. Determine if a relationship exists between first to second year retention and the following demographic and academic characteristics for students who did not participate in the School of Music bridge program:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency.

8. Determine if a model exists explaining a significant portion of the variance in first year GPA among music majors from the following demographic and academic characteristics:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency;
- g. Participation in music bridge program.

9. Determine if a model exists that significantly increases the researcher's ability to correctly classify music majors on retention from the first to second year of study from the following demographic and academic characteristics:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency;
- g. Participation in music bridge program;
- h. First year Grade Point Average (GPA).

### **Population and Sample**

The target population for this study is all incoming freshman music majors at large universities. The accessible population was all incoming freshmen at Louisiana State University



in the fall semesters of 2014-2018 who were admitted to the School of Music and declared their intended major in music (including Bachelor of Arts in Music, Bachelor of Music and Bachelor of Music Education). For this accessible population, the focus was on the students' participation (or non-participation) in the bridge program offered by the School of Music for incoming freshmen music majors.

For the purposes of this study, several demographic and academic variables were considered including age, race, gender, high school GPA, standardized test scores (ACT/SAT), and home state residency. For this study, SAT scores were converted to an ACT score equivalent, as determined by a standard conversion chart (Appendix A).

The sampling plan consisted of the following steps:

1. Participants in this study were students who passed an audition to be admitted to the School of Music. Once admitted, incoming students were informed about the bridge program (Music Boot Camp) in several ways:

- a. upon admission, students were sent a welcome email that referenced the bridge program (Appendix B);

- b. during the university's orientation sessions, staff spoke to incoming students and parents about the program; and

- c. through mass e-mails sent to all incoming music freshmen who passed their music audition and attended an orientation session (Bachelor of Arts in Music, Bachelor of Music and Bachelor of Music Education) (Appendix C).

The School of Music obtained contact information for all students participating in the audition process from the music application embedded in the LSU application process. The

emails referenced previously each included a brief description of the bridge program and a link to the website. (Appendix D)

2. Participants in the bridge program registered through the registration portal on the program website. There was no selection process by the department. The program accommodated as many students as chose to participate.

3. Participants must be music majors at the time of program registration. This information was verified by School of Music staff upon receipt of each registration.

4. There was a \$50 fee charged for participation in the camp. This fee paid for a program t-shirt, two meals for the student and administrative costs for the school. The school recognizes that the cost may be prohibitive for participation and has waived the fee in the past when a student was able to demonstrate inability to pay and a strong desire to participate.

5. The control group consisted of all incoming freshmen music majors who did not participate in the bridge program.

### **Instrumentation**

The instrument that was used to collect data for this study consisted of a researcher-designed, computerized recording form into which information for the treatment and control groups was transferred from university enrollment data and academic mainframe data housed within the School of Music student records. No individual identifiers remained with the data when it was transferred.

Data for both groups included the following items:

- a. Age;
- b. Race;
- c. Gender;

- d. High School GPA;
- e. ACT/Converted SAT Score;
- f. Louisiana residency/Non-residency;
- g. Participation (yes/no) in the Bridge Program;
- h. First Year GPA;
- i. First to Second Year Retention (Defined as students enrolled in the Fall of their Sophomore year).

### **Data Collection**

Data collection involved the use of institutional demographic data, collected by the university upon admission and recorded in census data each semester. Bridge program attendees were determined from lists provided by the School of Music. Data from these lists were recoded into a computerized recording form designed by the researcher. The demographic and academic data (age, race, gender, high school GPA, ACT score, residency) were collected from university records for each student labeled as a music major at the start of their first semester for each of the years from 2014-2018. First year GPA's and retention data were collected from the subsequent years' university census data and recorded in the form. Any SAT standardized test scores were converted to an ACT score equivalent prior to entry into the recording form using the conversion chart (Appendix A). For any student having both ACT and SAT scores on file, the SAT score was converted and the higher of the two scores was used.

### **Treatment**

The music bridge program is an optional (students self-select) pre-college preparatory camp designed to ease the transition in the first semester. This camp is a 5-day program that takes place the week before classes start and is run by peer mentors (juniors and seniors in the

School of Music) and School of Music staff. The program involves sessions on note taking and lectures (presented by current music faculty), peer-led integration sessions, financial and time-management workshops presented by university staff, and panels with alumni and community arts leaders. All sessions are designed to help students feel comfortable with the school and faculty as well as provide them with personal development tools to help them feel more prepared to start the semester. The camp does have a registration fee, but waivers are available for financial hardship cases.

### **Data Analysis**

Analysis techniques were applied to each objective in the study as follows:

Objective 1: Describe the incoming music freshmen who participated in the bridge program in the LSU School of Music for the selected five years based on the following demographic and academic characteristics.

Descriptive statistics were employed. Variables measured on a continuous scale were summarized using means and standard deviations. Those on a categorical scale were summarized using frequencies and percentages in categories.

Continuous variables: Age, HS GPA, ACT/SAT

Categorical variables: Race, Gender

Objective 2: Describe the incoming music freshmen who did not participate in the bridge program in the LSU School of Music for the selected five years based on the following demographic and academic characteristics.

Descriptive statistics were used. Variables measured on a continuous scale were summarized using means and standard deviations. Those on a categorical scale were summarized using frequencies and percentages in categories.

Continuous variables: Age, HS GPA, ACT/SAT

Categorical variables: Race, Gender

Objective 3: Compare the incoming music students who participated in the School of Music bridge program to those who did not on the following demographic and academic characteristics.

Comparisons were made for continuous variables using independent t-tests and for categorical variables by using Chi-square tests of independence.

Continuous variables: Age, HS GPA, ACT/SAT

Categorical variables: Race, Gender

Objective 4: Determine if a relationship exists between first year GPA and the following demographic and academic characteristics for students who participated in the School of Music bridge program.

The possibility of a relationship between each continuous variable and first year GPA was tested by computing a Pearson's Product Moment correlation coefficient. The possibility of a relationship between each categorical variable and first year GPA was tested by comparing categories using independent t-tests.

Continuous variables: Age, HS GPA, ACT/SAT

Categorical variables: Race, Gender

Objective 5: Determine if a relationship exists between first year GPA and the following demographic and academic characteristics for students who did not participate in the School of Music bridge program.

The possibility of a relationship between each continuous variable and first year GPA was tested by computing a Pearson's Product Moment correlation coefficient. The possibility of

a relationship between each categorical variable and first year GPA was tested by comparing categories using independent t-tests.

Continuous variables: Age, HS GPA, ACT/SAT

Categorical variables: Race, Gender

Objective 6: Determine if a relationship exists between first to second year retention and the following demographic and academic characteristics for students who participated in the School of Music bridge program,

The possibility of a relationship between each continuous variable and first to second year retention was tested using independent t-tests. Chi-square tests of independence were used to test for the possibility of a relationship between each categorical variable and first to second year retention.

Continuous variables: Age, HS GPA, ACT/SAT

Categorical variables: Race, Gender

Objective 7: Determine if a relationship exists between first to second year retention and the following demographic and academic characteristics for students who did not participate in the School of Music bridge program.

The possibility of a relationship between each continuous variable and first to second year retention was tested using independent t-tests. Chi-square tests of independence were used to test for the possibility of a relationship between each categorical variable and first to second year retention.

Continuous variables: Age, HS GPA, ACT/SAT

Categorical variables: Race, Gender

Objective 8: Determine if a model exists explaining a significant portion of the variance in first year GPA among music majors from the following demographic and academic characteristics.

A multiple regression analysis was used to examine the variance in first year GPA. Since the bridge program was the primary variable of investigation in the study, the researcher entered this variable into the analysis first. Following this, the other variables were entered into the analysis on a stepwise basis. In this regression analysis, three of the variables were categorical in nature, two of which (gender and residency) were dichotomous. Since race was not dichotomous, it was prepared as a series of dichotomous variables prior to being entered into the analysis. Each category of the variable was established as a separate variable such that all subjects were classified as either possessing that trait or not possessing that trait. For example, all study subjects were classified as either African American or not African American. This was repeated for each of the categories of the race variable. Each of these categories was then entered into the regression analysis with the stipulation that a category must be represented by at least 10 subjects to be included as a separate variable. For example, if the race category of “Multi-Racial” contained only four subjects, this category would be omitted as a separate variable of investigation. All remaining variables were continuous in nature and were entered directly into the analysis. All variables that entered the model were retained if they added one percent or more to the explanatory model with the stipulation that the overall model remained significant.

The first step in conducting the regression analysis was to examine the variables for the presence of excess multicollinearity. This was accomplished by examining the tolerance values. A tolerance value of .10 (VIF of 10) was used as a cutoff as recommended by Hair, Anderson, Tatham, and Black (2006). Bivariate correlations between each independent variable and first

year GPA were examined, and to maximize the parsimony of the analysis, any variables that had very small correlations with the dependent variable were considered for elimination from the regression analysis.

Objective 9: Determine if a model exists that significantly increases the researcher's ability to correctly classify music majors on retention from the first to second year of study from the following demographic and academic characteristics.

A discriminant analysis was used to determine if the independent variables of investigation could significantly improve the researcher's ability to correctly classify music majors in the study on whether or not they were retained from their first to second year of study. As in objective eight, stepwise entry of the independent variables was utilized due to the exploratory nature of the study. Using the same procedure as in the regression analysis in objective eight, the researcher created binary coded independent variables from each of the analyzable categories of the race variable. Other than gender, residency and race, all of the independent variables included in the study were continuous in nature and were entered directly into the analysis.

The first step that was accomplished in conducting the discriminant analysis was to examine the variables for the presence of excess multicollinearity. This was accomplished by examining the inter-correlations among the independent variables. Independent variables that had a coefficient of determination of less than .90 were considered acceptable for inclusion in the analysis. If a coefficient of determination was identified that exceeded .90, the variable that had the higher correlation with the dependent variable would be included in the analysis and the other would be eliminated. Each of the independent variables were then compared by categories of the dependent variable to determine potential bivariate impact of the independent variable on



the dependent variable. Independent variables that had little or no difference by categories of the dependent variable were considered for elimination to maximize the parsimony of the analysis.

### **Institutional Review Board Approval**

The researcher has completed the NCI “Protecting Human Research Participants” online course and the study has been approved by the LSU Institutional Review Board, IRB #11727 (Appendix E).

## CHAPTER 4. RESULTS OF THE STUDY

The primary purpose of this study was to determine the influence of participation in the music bridge program and select demographic and academic characteristics on the academic success and retention of freshmen music majors at a large research university in the southern portion of the United States.

For the years 2014-2018, the School of Music at Louisiana State University had a total of 273 incoming freshmen. Eighty-one students participated in the music bridge program and 192 did not. Two students of the 192 non-participants were removed from this study, as they were international students and were not eligible to participate in the bridge program due to other required university programming.

### **Objective One Results**

The first objective of this study was to describe the incoming music freshmen who participated in the bridge program in the LSU School of Music based on the following demographic and academic characteristics:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (HS GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency.

There were 81 students who met the criteria of this objective. The results for each of these variables are as follows:

## Age

The ages of students examined for this objective were divided into categories and examined for frequencies. The students examined for this objective were all first-semester college freshmen, and, as such, most students fell in the 18.01-19.00 year old range ( $n = 68$ , 83.9%), but there were students aged 18 years old or less ( $n = 9$ , 11.1%) and greater than 19 years old ( $n = 4$ , 4.9%) (See Table 4.1).

Table 4.1 Age of Music Bridge Program Participants at a Large Research University in the South

Age	Frequency	Percent
18 or less	9	11.1
18.01 to 18.50	44	54.3
18.51 to 19.00	24	29.6
19.01 to 19.50	3	3.7
19.51 or Older	1	1.2
Total	81	100.0

## Race

The next variable on which subjects were described was their race. Of the 81 students, all identified themselves as belonging to one of the following categories: Asian, African American, Hispanic, Multi-Racial, or White. The majority ( $n = 59$ , 72.8%) of the 81 students identified themselves as White. The second largest group were students who identified as African American ( $n = 11$ , 13.6%) (See Table 4.2).

Table 4.2. Race of Music Bridge Program Participants at a Large Research University in the South

Race	Frequency	Percent
White	59	72.8
African American	11	13.6
Hispanic	7	8.6
Asian	2	2.5
Multi-Racial	2	2.5
Total	81	100.0

## Gender

Another variable on which the students were described was gender. Of the 81 students who attended the music bridge program, 44 students (54.3%) were identified as female and 37 students (45.7%) were identified as male.

## High School GPA

High School GPA's for the music bridge program participants ranged from a low of 2.35 to a high of 4.00. High School GPA's were divided into categories and examined for frequencies. The mean GPA for this group was a 3.54 ( $SD = .412$ ). Ten students (12.4%) in the group had a 4.00 GPA (See Table 4.3).

Table 4.3. High School GPA of Music Bridge Program Participants at a Large Research University in the South

HS GPA	Frequency	Percent
2.50 or Less	1	1.2
2.51 to 3.00	9	11.1
3.01 to 3.50	25	30.9
3.51 to 3.99	36	44.4
4.00 or Higher	10	12.4
Total	81	100.0

*Note.* High School GPA:  $M = 3.54$ ,  $SD = .412$ .

## ACT Score

Student ACT scores for the bridge program participants ranged from a low score of 19 to a high score of 35. The mean ACT composite score of this group was 27.60. ACT scores were divided into categories and examined for frequencies. Of the 81 students, 5 (6.2%) had an ACT score of less than 21 and 21 (25.9%) scored 31 or higher (See Table 4.4).

## Residency

Of the 81 students examined in this objective, 38 (46.9%) were out-of-state residents and 43 (54.3%) were Louisiana residents.

Table 4.4. ACT Scores of Music Bridge Program Participants at a Large Research University in the South

ACT Score	Frequency	Percent
21 or Lower	5	6.2
22 to 26	27	33.3
27 to 30	28	34.6
31 or Higher	21	25.9
Total	81	100.0

Note. ACT Score:  $M = 27.60$ ,  $SD = 3.856$

### Objective Two Results

The second objective of this study was to describe the incoming music freshmen who did not participate in the bridge program in the LSU School of Music based on the following demographic and academic characteristics:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency.

There were 190 students who met the criteria of this objective. The results for each of the variables are as follows:

#### Age

The ages of students examined in this objective were divided into categories and examined for frequencies. The students examined for this objective were first-semester college freshmen and most students fell in the 18.01-19.00 age range ( $n = 157$ , 82.6%), but there were students aged 18 years old or less ( $n = 25$ , 13.2%) and 19 years old or greater ( $n = 8$ , 4.2%) (See Table 4.5).

Table 4.5. Age of Non-Participants in Music Bridge Program at a Large Research University in the South

Age	Frequency	Percent
18 or less	25	13.2
18.01 to 18.50	82	43.2
18.51 to 19.00	75	39.5
19.01 to 19.50	6	3.2
19.51 or Older	2	1.0
Total	190	100.0

#### Race

The next variable on which subjects were described was their race. Of the 190 students, all identified themselves as belonging to one of the following categories: American Indian, Asian, African American, Hispanic, Native Hawaiian/Pacific Islander, Multi-Racial, or White. White was the largest racial group, with 141 of the 190 (74.2%) students. African American and Hispanic students made up the next largest groups with 19 (10.0%) and 16 (8.4%) students respectively (See Table 4.6).

Table 4.6. Race of Non-Participants in Music Bridge Program at a Large Research University in the South

Race	Frequency	Percent
White	141	74.2
African American	19	10.0
Hispanic	16	8.4
Multi-Racial	7	3.7
Asian	5	2.6
Nat. Hawaiian/Pac. Islander	1	.5
American Indian	1	.5
Total	190	100.0

#### Gender

The next variable on which the students were described was gender. Of the 190 students who did not participate in the music bridge program, 75 students (39.5%) were identified as female and 115 students (60.5%) were identified as male.

## High School GPA

High School GPA's for the students who did not participate in the music bridge program ranged from a low of 2.21 to a high of 4.00. High School GPA's were divided into categories and examined for frequencies. The mean GPA for this group was a 3.45 ( $SD = .401$ ). Thirteen students (6.9%) in the group had a 4.00 or higher GPA (See Table 4.7).

Table 4.7. High School GPA Frequencies for Non-Participants in the Music Bridge Program at a Large Research University in the South

HS GPA	Frequency	Percent
2.50 or Less	4	2.1
2.51 to 3.00	18	9.5
3.01 to 3.50	74	38.9
3.51 to 3.99	81	42.6
4.00 or Higher	13	6.9
Total	190	100.0

Note. High School GPA:  $M = 3.45$ ,  $SD = .401$

## ACT Score

Non-participants' ACT scores ranged from a low score of 18 to a high score of 35. The mean ACT composite score of this group was 26.22 ( $SD = 3.850$ ). ACT scores were divided into categories and examined for frequencies. Of the 190 students examined, 19 (10.0%) had an ACT Composite of less than 21, and 29 (15.3%) scored 31 or higher (See Table 4.8).

Table 4.8. ACT Score Ranges of Non-Participants in Music Bridge Program at a Large Research University in the South

ACT Score	Frequency	Percent
21 or Lower	19	10.0
22 to 26	82	43.2
27 to 30	60	31.6
31 or Higher	29	15.3
Total	190	100.0

Note. ACT Score:  $M = 26.22$ ,  $SD = 3.850$

## Residency

Of the 190 incoming music majors who did not participate in the bridge program, 60 (31.6%) were out-of-state residents and 130 (68.4%) were Louisiana residents.

### **Objective Three Results**

The third objective of this study was to compare the incoming music freshmen who participated in the bridge program to those who did not participate in the bridge program in the LSU School of Music based on the following demographic and academic characteristics:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency.

The statistical procedure that was used to accomplish this objective was based on the level of measurement of the variable being examined. The demographic variables measured on a continuous scale of measurement were compared by whether or not the incoming freshman students participated in the bridge program using the independent samples t-test.

## Continuous Variables

Prior to reporting the results of the comparisons using independent t-tests, the researcher examined the data to determine if the homogeneity of variance assumption was violated. This was determined using Levene's Equality of Variance tests. Results of these tests revealed that for all three of the analyses, the homogeneity of variance assumption was not violated. Therefore, the t-test values computed using the pooled variance estimates are reported. Results of these



analyses are presented in Table 9. Of these three variables, only one was found to be significantly different by categories of whether or not the students participated in the bridge program. This variable was ACT composite score ( $t_{269} = 2.718, p = .007$ ). The mean ACT score of the participant group was 27.60 ( $SD = 3.856$ ) while the mean ACT score for the non-participant group was 26.22 ( $SD = 3.850$ ) (See Table 4.9).

Table 4.9. Comparison of Music Bridge Program Participants to Non-Participants on Selected Demographic and Academic Characteristics at a Large Research University in the South

Variable		<i>M/SD</i>	t	df	p
ACT	Non-Participant	26.22/3.850	2.718	269	.007
	Participant	27.60/3.856			
HS GPA	Non-Participant	3.45/.401	1.652	269	.100
	Participant	3.54/.412			
Age	Non-Participant	18.44/.409	.211	269	.833
	Participant	18.43/.421			

#### Categorical Variables

A Chi-square test of independence was used to compare the demographic variables that were measured on a categorical scale by whether or not the students participated in the bridge program. Results of these tests indicated that the variables residency and gender were not independent from bridge program participation (See Table 4.10).

Initial analyses of the variable of race determined that several groups had insufficient numbers in order to examine each group in terms of its relationship with participation in the bridge program. Therefore, in order to meet minimum requirements for analysis, several groups were eliminated. The racial categories of American Indian, Asian, Hispanic, Native Hawaiian/Pacific Islander and Multi-Racial were eliminated due to low numbers within each

group. The categories of African American and White remained. Race was found to be independent of bridge program participation (See Table 4.10).

Table 4.10. Comparison of Music Bridge Program Participants to Non-Participants on Selected Demographic Characteristics at a Large Research University in the South

Demographic Variable	$\chi^2$	df	p
Residency	5.785	1	.016
Gender	5.083	1	.024
Race	1.786	6	.938

Results of the Chi-square test of independence for residency and bridge program participation indicated that the variables were not independent ( $\chi_1^2 = 5.785, p = 0.016$ ). The nature of the relationship between these variables was such that less than one third of the non-participants were out of state residents while almost half of the participants were out of state residents (See Table 4.11).

Table 4.11. Residency of Participants and Non-Participants in the Music Bridge Program at a Large Research University in the South

Residency		Bridge Program		
		Non-Participant	Participant	Total
Out-of-State	Frequency	60	38	98
	Percent	31.6%	46.9%	36.2%
Louisiana	Frequency	130	43	173
	Percent	68.4%	53.1%	63.8%
Total	Frequency	190	81	271
	Percent	100.0%	100.0%	100.0%

Note.  $|\chi_1^2 = 5.785, p = 0.016|$

Results of the Chi-square test of independence for gender and bridge program showed that the variables were not independent ( $\chi_1^2 = 5.083, p = 0.024$ ). This non-independence indicated that there was a relationship between gender and participation in the bridge program. The nature of this relationship was such that the majority of the non-participants were male while the majority of participants were female (See Table 4.12).

Table 4.12. Gender of Participants and Non-Participants in Music Bridge Program at a Large Research University in the South

Gender		Bridge Program		
		Non-Participant	Participant	Total
Female	Frequency	75	44	119
	Percent	39.5%	54.3%	43.9%
Male	Frequency	115	37	152
	Percent	60.5%	45.7%	56.1%
Total	Frequency	190	81	271
	Percent	100.0%	100.0%	100.0%

Note.  $\chi^2_1 = 5.083, p = 0.024$

### Objective Four Results

The fourth objective of the study was to determine if relationships existed between first year GPA and the following academic and demographic characteristics of bridge program participants:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency.

Pearson's product moment correlation coefficients were computed to test for relationships between each continuous variable and first year GPA. These variables included age, high school GPA, and ACT score. The statistical procedure that was used to measure the relationship between each of the demographic variables that were measured on a categorical scale of measurement and the first year GPA among students who participated in the bridge

program was the independent t-test. These variables were race, gender and residency. These procedures were chosen for the ease of interpretation of the results.

After consideration of the descriptive statistics produced in initial study objectives, it was determined that due to sample size and constitution, all racial groups with fewer than ten data points would be removed from correlational testing to enhance the accuracy of results.

It should be noted that the statistical significance level of the t-tests presented are exactly the same as the statistical significance level of the correlation coefficients for the analysis had correlation coefficients been used. For example, the alpha level for the t-test comparing bridge program participants' ACT composite scores by whether or not the students were in-state residents is  $p = .858$ . If this analysis had been conducted using a correlation between their ACT score and whether or not the students were in-state residents, the correlation is  $r = -.020$ , and the significance level is  $p = .858$ . The advantage of the comparative analysis is that the researcher does not have to present the coding for the levels of whether or not the students were in-state residents to make the results interpretable. On the other hand, with the Point Biserial correlation coefficient, without knowing the coding for the levels of the residency variable (e.g. 1 for Louisiana resident and 2 for out of state resident), the correlation coefficient is not interpretable.

There were 81 cases (bridge program participants) considered in this objective. Age, gender, race, and residency did not have significant results. High School GPA and ACT score were the only two variables with statistically significant results (See Table 4.13).

#### High School GPA

The high school GPA correlation with first year GPA was statistically significant ( $r = .630$ ,  $n = 81$ ,  $p < .001$ ) (See Table 4.13). The positive nature of this relationship indicates that a higher high school GPA tended to be associated with a higher first year GPA. When interpreting

the strength of the relationship, Davis' (1971) scale of association was used. (Appendix F). The correlation coefficient of .630 was determined to be indicative of a substantial relationship between the two variables.

Table 4.13. Relationship Between First Year GPA and Selected Demographic and Academic Characteristics of Music Bridge Program Participants at a Large Research University in the South

Demographic/ Academic Variable	r/t	df	p
High School GPA	.630	81	<.001
ACT Score	.327	81	.003
Gender	1.943	79	.056
Race	1.677	68	.098
Residency	.180	79	.858
Age	.000	81	.999

#### ACT Score

The correlation of the ACT scores of bridge program participants with their first year GPA showed statistically significant results ( $r = .327, n = 81, p = .003$ ) (See Table 13). The positive nature of this relationship indicates that a higher ACT score tended to be associated with a higher first year GPA. When interpreting the strength of the relationship, Davis' (1971) scale of association was used (Appendix D). A .327 correlation coefficient was determined to indicate a moderate relationship between the two variables.

### Objective Five Results

The fifth objective of the study was to determine if relationships existed between first year GPA and the following academic and demographic characteristics of non-participants in the bridge program:

- a. Age;
- b. Race;
- c. Gender;

- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency.

Pearson's product moment correlation coefficients were computed to test for relationships between each continuous variable and first year GPA. These variables included age, high school GPA, and ACT score. The statistical procedure that was used to measure the relationship between each of the demographic variables that were measured on a categorical scale of measurement and the first year GPA among students who did not participate in the bridge program was the independent t-test. These variables were race, gender and residency. These procedures were chosen for the ease of interpretation of the results.

After consideration of the descriptive statistics produced in initial study objectives, it was determined that due to sample size and constitution, all racial groups with fewer than ten data points would be removed from correlational testing to enhance the accuracy of results.

There were 190 cases (program non-participants) considered in this objective. Age, gender and residency were not found to be significantly associated with first year GPA. High School GPA, ACT score and race were found to have statistical significance in this objective (See Table 4.14).

#### High School GPA

The high school GPA correlation with first year GPA was statistically significant ( $r = .557, n = 190, p < .001$ ) (See Table 4.14). This relationship is such that the correlation of high school GPA of non-participants to their first year GPA was positive and substantial, according to Davis' (1971) descriptors. A higher high school GPA tended to indicate a higher first year GPA.

Table 4.14. Relationship Between First Year GPA and Selected Demographic and Academic Characteristics of Non-Participants in the Music Bridge Program at a Large Research University in the South

Demographic/ Academic Variable	r/t	df	p
High School GPA	.557	190	<.001
ACT Score	.296	190	<.001
Race	2.404	158	.017
Gender	1.285	188	.200
Age	.064	190	.382
Residency	.036	188	.971

#### ACT Score

The ACT score correlation of non-participants with their first year GPA showed statistically significant results ( $r = .296, n = 190, p < .001$ ) (See Table 4.14). For non-participants of the bridge program, ACT score was positively correlated with first year GPA at a moderate level. A higher ACT score tended to indicate a higher first year GPA.

#### Race

After consideration of the descriptive statistics produced in initial study objectives, it was determined that due to sample size and constitution, all racial groups with fewer than ten data points would be removed from correlational testing to enhance the accuracy of results. Additionally, to provide consistency in study results, the researcher decided to remove the Hispanic category from this analysis, even though there were 16 students in the Hispanic category in this variable. Removing the Hispanic group from this analysis allows for greater consistency in generalizing results since the previous objective also had the Hispanic category removed due to the low number of students. Therefore, American Indian ( $n = 1$ ), Asian ( $n = 5$ ), Hispanic ( $n = 16$ ), Native Hawaiian-Pacific Islander ( $n = 3$ ), and Multi-Racial ( $n = 7$ ) were eliminated from the t-test procedure. This resulted in a race variable with two categories, White ( $n = 141$ ) and African American ( $n = 19$ ). White non-participants in the bridge program had a mean first year GPA of 3.23 ( $SD = .804$ ) and African American bridge program non-participants

had a mean first year GPA of 2.74 ( $SD = 1.086$ ) (See Table 4.15). The first year GPA of White students was significantly higher than the first year GPA of African American students ( $t_{158} = 2.404, p = .017$ ) (See Table 4.14).

Table 4.15. First Year GPA of Non-Participants in the Music Bridge Program by Race at a Large Research University in the South

Race	N	M	SD
White	141	3.23	.804
African American	19	2.74	1.086

Note.  $|t_{158} = 2.404, p = .017|$

### Objective Six Results

The sixth objective of the study was to determine if relationships existed between first year retention and the following academic and demographic characteristics of bridge program participants:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);
- b. Louisiana Residency/Non-residency.

Independent t-tests were utilized to test for relationships between each continuous variable and the dichotomous (yes/no) variable of retention. Chi-square tests of independence were used to test for the independence of categorical variables from first year retention. Each of these measures were chosen on the basis of providing the most easily interpreted results. There were 81 cases (program participants) considered in this objective. Age, ACT score, gender, race and residency were not found to be significant. High School GPA was the only variable found to have a significant result (See Table 4.16).



Table 4.16. Relationship Between First Year Retention and Selected Demographic and Academic Characteristics of Music Bridge Program Participants at a Large Research University in the South

Demographic/ Academic Variable	$\chi^2/t$	df	p
High School GPA	2.232	79	.028
ACT Score	1.048	79	.298
Race	.971	1	.324
Residency	.316	1	.574
Age	.556	79	.580
Gender	.067	1	.796

### High School GPA

High School GPA had a statistically significant relationship with first year retention for bridge program participants. ( $t_{79} = 2.232, p = .028$ ) (See Table 4.16). This variable is the only variable that proved to have a significant difference by first year retention status for bridge program participants. The nature of the relationship is such that the high school GPA's of participants who were retained were significantly higher than the high school GPA's of those who were not retained (See Table 4.17).

Table 4.17. Comparison of High School GPA by First Year Retention Status for Music Bridge Program Participants at a Large Research University in the South

Variable	Retention Status	n	Mean	SD
HS GPA	Yes	73	3.575	.395
	No	8	3.240	.479

Note.  $|t_{79} = 2.232, p = .028|$

### Objective Seven Results

The seventh objective of the study was to determine if relationships existed between first year retention and the following academic and demographic characteristics of students who did not participate in the bridge program:

- a. Age;
- b. Race;
- c. Gender;

- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency.

Independent t-tests were utilized to test for relationships between each continuous variable and the dichotomous (yes/no) variable of retention. Chi-square tests of independence were used to test for independence of categorical variables from first year retention. Each of these measures were chosen on the basis of providing the most easily interpreted results. There were 190 cases (non-participants) considered in this objective. Age, gender and residency were not found to be significant. High School GPA, ACT score and race were found to be statistically significant (See Table 4.18).

Table 4.18. Relationship Between First Year Retention and Selected Demographic and Academic Characteristics of Non-Participants of the Music Bridge Program at a Large Research University in the South

Demographic/ Academic Variable	$x^2/t$	$df$	$p$
High School GPA	2.861	188	.005
ACT Score	2.335	188	.021
Race	4.296	1	.038
Age	1.202	188	.231
Residency	.365	1	.546
Gender	.241	1	.623

#### High School GPA

High School GPA had a statistically significant relationship with first year retention for non-participants of the bridge program. ( $t_{188} = 2.861, p = .005$ ) (See Table 4.18). The nature of the relationship is such that the high school GPA's of non-participants who were retained were significantly higher than the high school GPA's of those who were not retained (See Table 4.19).

Table 4.19. Comparison of High School GPA by First Year Retention Status for Non-Participants in the Music Bridge Program at a Large Research University in the South

Variable	Retention Status	n	Mean	SD
HS GPA	Yes	167	3.483	.395
	No	23	3.232	.382

Note.  $|t_{188} = 2.861, p = .005|$

#### ACT Score

The ACT score comparison of non-participants by their first year retention showed statistically significant results ( $t_{188} = 2.335, p = .021$ ) (See Table 4.18). These results indicate that the ACT scores of non-participants who were retained were significantly higher than the ACT scores of those who were not retained (See Table 4.20).

Table 4.20. Comparison of ACT Score by First Year Retention Status for Non-Participants in the Music Bridge Program at a Large Research University in the South

Variable	Retention Status	n	Mean	SD
ACT Score	Yes	167	26.46	3.832
	No	23	24.48	3.604

Note.  $|t_{188} = 2.335, p = .021|$

#### Race

After consideration of the descriptive statistics produced in initial study objectives, it was determined that due to sample size and constitution, all racial groups with fewer than ten data points would be removed from correlation testing to enhance the accuracy of results.

Additionally, to provide consistency in study results, the researcher decided to remove the Hispanic category from this analysis, even though there were 16 students in the Hispanic category in this variable. Removing the Hispanic group from this analysis allows for greater consistency in generalizing results since the previous objective also had the Hispanic category removed due to the low number of students. Therefore, American Indian ( $n = 1$ ), Asian ( $n = 5$ ), Hispanic ( $n = 16$ ), Native Hawaiian-Pacific Islander ( $n = 3$ ), and Multi-Racial ( $n = 7$ ) were eliminated from the t-test procedure. This resulted in a race variable with two categories, White

( $n = 141$ ) and African American ( $n = 19$ ) and allowed for the Chi-square test of independence to be utilized. The variable of race was statistically significant in this analysis ( $\chi^2_1 = 4.296, p = .038$ ) indicating that the variables race and retention were not independent of each other (See Table 4.17). Cross-Classification analysis provided a more detailed result. The percentage of African American students retained (73.7%, 14 of 19) after the first year was lower than the percentage of White students retained (90.1%, 127 of 141) after the first year (See Table 4.21).

Table 4.21. Music Bridge Program Non-Participants' Race and First Year Retention Status at a Large Research University in the South

		Race			
			African American	White	Total
LSU Retention	No	Frequency	5	14	19
		Percent	26.3%	9.9%	11.9%
	Yes	Frequency	14	127	141
		Percent	73.7%	90.1%	88.1%
Total		Frequency	19	141	160
		Percent	100.0%	100.0%	100.0%

Note.  $\chi^2_1 = 4.296, p = .038$

### Objective Eight Results

The eighth objective of this study was to determine if a model existed that explained a significant portion of the variance in the first year GPA of incoming freshman music majors from the following demographic and academic characteristics:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT),
- f. Louisiana Residency/Non-residency;

g. Bridge Program Participation.

A multiple regression analysis was used to examine the variance in first year GPA. The categorical independent variables of gender, residency and bridge program participation were all dichotomous. The researcher decided to examine the three largest racial categories in this analysis. Racial categories of African American, Hispanic and White were each established as separate variables such that all study subjects were classified as either possessing that trait or not possessing that trait. For example, all study subjects were classified as either African American, or not African American, creating a series of additional dichotomous variables for entry into the regression analysis.

The first step in conducting the regression analysis was to examine the bivariate correlations. Two-way correlations between independent variables and first year GPA are presented in Table 4.22. Six of the correlations were found to be statistically significant. High School GPA was positively correlated at a substantial level using Davis' (1971) descriptors, such that a higher high school GPA tended to be associated with a higher first year GPA ( $r = .578, p < .001$ ). ACT score was positively correlated with first year GPA at a moderate level such that a higher ACT score tended to be associated with a higher first year GPA ( $r = .324, p < .001$ ). Bridge program participation had a positive, but low, correlation with first year GPA such that participating in the bridge program was correlated with a higher first year GPA ( $r = .187, p = .001$ ). The variable Race-African American was negatively correlated at a low level with first year GPA such that African American students' first year GPA tended to be lower than the other racial groups ( $r = -.164, p = .003$ ). Gender was negatively correlated with first year GPA at a low level such that males tended to have a lower first year GPA than females ( $r = -.146, p = .008$ ).

The variable Race-White was positively correlated with first year GPA at a low level ( $r = .109$ ,  $p = .036$ ) (See Table 4.22).

Table 4.22. Relationship between Select Demographic and Academic Characteristics and First Year GPA of Music Majors at a Large Research University in the South

Variable	<i>r</i>	<i>df</i>	<i>p</i>	Interpretation <sup>a</sup>
High School GPA	.578	271	<.001	Substantial
ACT Score	.324	271	<.001	Moderate
Bridge Program	.187	271	.001	Low
Race African Am	-.164	271	.003	Low
Gender	-.146	271	.008	Low
Race White	.109	271	.036	Low
Race Hispanic	-.097	271	.056	Negligible
Age	-.048	271	.213	Negligible
Residency	-.031	271	.307	Negligible

<sup>a</sup> Davis (1971)

To ensure that variables entered into the regression analysis did not have excessive collinearity or that any combination of the independent variables formed a singularity, the variance inflation factor (VIF) was examined. The researcher used Hair et al.'s (2006) guidelines for a tolerance value cutoff threshold of .10, which corresponds to a VIF value of 10. The tolerance values for this analysis ranged from .778 to .998. Therefore, no excess multicollinearity was present in the data.

Since the bridge program was the primary variable of investigation in this study, the researcher entered this variable into the regression analysis first. Following this, the other variables were entered into the analysis on a stepwise basis to determine if any of these measures added to the percent of explained variance over that explained by bridge program participation.

The first step in the regression analysis yielded a significant model after the entry of the bridge program variable, with an R of .187 ( $R^2 = .035$ ). A significant regression model was found ( $F_{(1, 269)} = 9.786$ ,  $p = .002$ ) (See Table 4.23). Considered alone, bridge program participation

explained 3.5% of the variance in first year GPA. The influence of this variable is such that participation in the bridge program was associated with a higher first year GPA.

Table 4.23. Regression of First Year GPA on Music Bridge Program Participation among Music Majors at a Large Research University in the South

Source of Variation	<i>df</i>	MS	F	<i>p</i>
Regression	1	6.506	9.786	.002
Residual	269	.665		
Total	270			

Variable	R	R <sup>2</sup>	R <sup>2</sup> Change	F Change	Sig F Change	Std Coefficients Beta
Bridge	.187	.035	.035	9.786	.002	.187

At the second step of the regression analysis, the remaining independent variables were entered in a stepwise fashion. One additional variable entered into this significant model ( $F_{(2, 268)} = 130.697, p < .001$ ) (See Table 4.24). This variable was high school GPA, which explained an additional 35% of the variance in first year GPA ( $R = .593, R^2 = .351$ ). The nature of the influence of the variables in this significant two-factor model is such that students who participated in the bridge program tended to have higher first year GPA's than those who did not and students with higher high school GPA's tended to have higher first year GPA's in college.

Table 4.24. Regression of First Year GPA on Music Bridge Program Participation and Select Demographic and Academic Characteristics among Music Majors at a Large Research University in the South

Source of Variation	<i>df</i>	MS	F	<i>p</i>
Regression	2	32.565	72.601	<.001
Residual	268	.449		
Total	270			

Variable	R	R <sup>2</sup>	R <sup>2</sup> Change	F Change	Sig F Change	Std Coefficients Beta
Bridge	.187	.035	.035	9.786	.002	.131
HS GPA	.593	.351	.316	130.697	<.001	.565

## Objective Nine Results

The ninth objective of this study was to determine if a model existed that significantly increased the researcher's ability to correctly classify music majors on retention from the first to second year of study from the following demographic and academic characteristics:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency;
- g. Participation in music bridge program;
- h. First year GPA.

The statistical technique used by the researcher to accomplish this objective was discriminant analysis. To ensure compatibility with the discriminant analysis, all variables had to be measured on a continuous scale of measurement or be coded as dichotomous variables. All independent variables in this objective met the criteria above, with the exception of the race variable. To create dichotomous race variables, the categories of African American, Hispanic and White were each established as separate variables. All study subjects were then classified as either possessing that trait or not possessing that trait. For example, all study subjects were classified as either African American, or not African American, creating a dichotomous variable. Retention status (yes/no) was the dependent variable in the analysis and the independent variables were each entered into the analysis in a stepwise fashion.



The first step in the discriminant analysis was to examine the independent variables for the presence of multicollinearity. The researcher used Hairet al.'s (2006) guidelines for a tolerance value cutoff threshold of .10, which corresponds to a VIF value of 10. The tolerance values for the independent variables in this analysis ranged from .805 to .999. Using Hair et al.'s (2006) specifications, no excess multicollinearity was present in the variables, indicating none of the variables were excessively related such that it would interfere with the accuracy of the analysis.

The second step of the discriminant analysis was to compare the groups (retained versus not retained) on each independent variable. To accomplish this, the researcher compared the means of each independent variable for the students who were retained to the students who were not retained. Four of the independent variables were found to have a significant difference between the retained and not retained groups. First year GPA was significantly different for the students, such that the mean first year GPA of the retained students was higher ( $M = 3.421$ ,  $SD = .611$ ) than the mean first year GPA of the non-retained students ( $M = 2.070$ ,  $SD = 1.239$ ) ( $F_{(1, 269)} = 99.527$ ,  $p < .001$ ) (See Table 4.25). High School GPA was significantly different for the groups ( $F_{(1, 269)} = 13.317$ ,  $p < .001$ ). The students who were retained had a higher high school GPA ( $M = 3.511$ ,  $SD = .397$ ) than those not retained ( $M = 3.235$ ,  $SD = .401$ ). ACT score was also significantly different for the groups, with the students who were retained having a higher ACT score ( $M = 26.850$ ,  $SD = 3.880$ ) than those not retained ( $M = 24.935$ ,  $SD = 3.660$ ) ( $F_{(1, 269)} = 6.766$ ,  $p = .010$ ). Finally, African American students were less likely to be retained than the other racial groups examined in this analysis ( $F_{(1, 269)} = 4.759$ ,  $p = .030$ ) (See Table 4.25). The means of the other five variables were not significantly different for the retained versus not retained groups.

Table 4.25. Comparison of Selected Demographic and Academic Characteristics by Retention Status for Music Majors at a Large Research University in the South

Discriminating Variable	Group		F	p
	<u>Retained</u> (N = 240)	<u>Not Retained</u> (N = 31)		
	<u>M</u>	<u>M</u>		
	<u>SD</u>	<u>SD</u>		
First Year GPA	3.420 .611	2.070 1.239	99.527	<.001
High School GPA	3.511 .397	3.235 .401	13.317	<.001
ACT Score	26.850 3.880	24.935 3.660	6.766	.010
Race - African American	.095 .295	.226 .425	4.759	.030
Race - White	.754 .431	.612 .495	2.842	.093
Race - Hispanic	.075 .161	.263 .374	2.638	.105
Age	18.428 .420	18.532 .333	1.752	.187
Residency	.629 .161	.710 .374	.767	.382
Bridge Program	.304 .461	.258 .445	.277	.599

The third step of the discriminant analysis was to examine the computed standardized canonical discriminant function coefficients. The centroid for the retained student group was .224 and the centroid for the not retained student group was -1.731. The large difference between these two centroids indicates a more reliable model of prediction than had the difference been smaller. Ten independent variables were entered into the model. Two variables, first year GPA and high school GPA, entered into a significant discriminant model, producing an overall canonical correlation of .530. The square of a canonical correlation coefficient is the percentage of variance in the dependent variable explained by the significant model. Therefore, 28.1% ( $r_c^2 =$

.281) of the variance in retention status is attributed to students' first year GPA and high school GPA.

The variable that entered the discriminant model first and had the greatest influence on retention, as evidenced by the highest standardized discriminant function coefficient was first year GPA ( $\beta = 1.126$ ). The nature of the influence of first year GPA on retention status was such that a higher first year GPA increased the likelihood that a student would be retained.

The variable that entered the discriminant model second was high school GPA. The standardized discriminant function coefficient of high school GPA in this analysis was  $\beta = -.272$ . The nature of the influence of high school GPA on retention status, with the effects of first year GPA removed, was such that students with a higher high school GPA were less likely to be retained. No additional variables entered into the model at a significant level.

Within-group structure coefficients were also examined by the researcher. A discriminant score for each student was computed for each variable that entered into the significant model. These discriminant scores were compared for each independent variable to measure the relationship between the two (See Table 4.26). A significant structure correlation is any coefficient that is half or greater than the magnitude of the highest structure coefficient. In this study, the highest structure coefficient was .974 (first year GPA) therefore, any coefficient over .487 would be substantively significant. The structure coefficient of the other independent variable in the significant model, high school GPA, did not meet the criteria stated above.

Table 4.26. Summary Data for Stepwise Multiple Discriminant Analysis for Retention Status of Music Majors at a Research University in the South

Independent Variable	$\beta$	s	Discriminant Functions	
			Group	Centroids
First Year GPA	1.126	.974	Retained	.224
High School GPA	-.272	.356	Not Retained	-1.731
ACT Score	a	.205		
Bridge Program	a	.199		
Race- White	a	.023		
Age	a	-.002		
Residency	a	-.009		
Race- Hispanic	a	-.033		
Race- African American	a	-.063		
Gender	a	-.121		
<u>Eigenvalue</u>	<u>Rc</u>		<u>Wilk's Lambda</u>	<u>p</u>
.390	.530		.719	< .001

$\beta$  = standardized discriminant function coefficient

s = within group structure correlation

Rc = canonical correlation coefficient

Note. N = 271

<sup>a</sup> Did not enter the discriminant model as a significant predictor

The final step of the analysis was to examine the correctly classified cases. As shown in Table 4.27, the model correctly classified 84.9% of the cases. The researcher used the Tau statistic as presented by Barrick and Warmbrod (1988) to measure the substantive significance of the correctly classified cases in this study. According to Barrick and Warmbrod, to be substantively significant, the model needs to increase the percentage of correctly classified cases with a 25% improvement over chance. "Chance" represents a 50% likelihood of correct classification into one of the two groups; a 25% increase would add another 12.5%, for a total of 62.5% cutoff for a significant model. With this guideline for substantive significance, the discriminant model produced in this study is substantively significant because it correctly classified 84.9% of the cases. This represents an increase of 41% over chance by using this model to classify cases.

Table 4.27. Retention Status Classification of Music Majors at a Research University in the South

Actual Group	Number of Cases	Predicted Group	
		<u>Retained</u>	<u>Not Retained</u>
		n	n
		%	%
Retained	240	210 87.5%	30 12.5%
Not Retained	31	11 35.5%	20 64.5%

*Note.* 84.9% of cases correctly classified, N = 271.

## CHAPTER 5. SUMMARY, CONCLUSIONS, IMPLICATIONS & RECOMMENDATIONS

### **Purpose of the Study**

The primary purpose of this study was to determine the influence of participation in the music bridge program and select demographic and academic characteristics on the academic success and retention of freshmen music majors at a large research university in the southern portion of the United States.

### **Objectives**

This study attempted to determine if a bridge program focused on fostering peer relationships, academic preparation and support strategies affected the academic success (first year GPA) and first to second year retention of freshman music majors.

To answer the above, the study had the following objectives:

1. Describe the incoming music freshmen who participated in the bridge program in the LSU School of Music for the selected five years based on the following demographic and academic characteristics:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (HS GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency.

2. Describe the incoming music freshmen who did not participate in the bridge program in the LSU School of Music for the selected five years based on the following demographic and academic characteristics:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency.

3. Compare the incoming music students who participated in the School of Music bridge program to those who did not on the following demographic and academic characteristics:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency.

4. Determine if a relationship exists between first year GPA and the following demographic and academic characteristics for students who participated in the School of Music bridge program:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);

f. Louisiana Residency/Non-residency.

5. Determine if a relationship exists between first year GPA and the following demographic and academic characteristics for students who did not participate in the School of Music bridge program:

a. Age;

b. Race;

c. Gender;

d. High School Grade Point Average (GPA);

e. Standardized test scores (ACT/SAT);

f. Louisiana Residency/Non-residency.

6. Determine if a relationship exists between first to second year retention and the following demographic and academic characteristics for students who participated in the School of Music bridge program:

a. Age;

b. Race;

c. Gender;

d. High School Grade Point Average (GPA);

e. Standardized test scores (ACT/SAT);

f. Louisiana Residency/Non-residency.

7. Determine if a relationship exists between first to second year retention and the following demographic and academic characteristics for students who did not participate in the School of Music bridge program:

a. Age;



- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency.

8. Determine if a model exists explaining a significant portion of the variance in first year GPA among music majors from the following demographic and academic characteristics:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency;
- g. Participation in music bridge program.

9. Determine if a model exists that significantly increases the researcher's ability to correctly classify music majors on retention from the first to second year of study from the following demographic and academic characteristics:

- a. Age;
- b. Race;
- c. Gender;
- d. High School Grade Point Average (GPA);
- e. Standardized test scores (ACT/SAT);
- f. Louisiana Residency/Non-residency;

- g. Participation in music bridge program;
- h. First year GPA.

### **Summary of Methodology**

#### Population and Sample

The target population for this study is all incoming freshman music majors at large universities. The accessible population was incoming freshmen at a research extensive university in the fall semesters of 2014-2018 who were admitted to the School of Music and declared their intended major in music. For this accessible population, the focus was on the students' participation (or non-participation) in the bridge program offered by the School of Music for incoming freshmen music majors.

#### Data Collection

Students self-selected into bridge program participation. The instrument used to collect data on the participants and non-participants was a researcher-generated form. Data was sourced from both university demographic records and School of Music student records. All personal identifiers were removed from the data prior to analysis. All data were complete for the 279 students included in the study. Two international students who entered as freshmen during 2014-2018 were removed from the study due to their ineligibility to participate in the bridge program and lack of equivalent high school and demographic data.

### **Summary of Findings**

#### Objective One

More White students ( $n = 59, 72.8\%$ ) participated in the bridge program than other races ( $n = 22, 27.2\%$ ). More female students ( $n = 44$ ) participated in the bridge program than males ( $n = 37$ ). The mean high school GPA for bridge participants was a 3.54 ( $SD = .412$ ), the mean ACT

score was 27.60 ( $SD = 3.856$ ), with 21 students scoring 31 or higher. Slightly more bridge program participants were from Louisiana ( $n = 43$ ) than from out of state ( $n = 38$ ).

#### Objective Two

Of the non-participants in the bridge program, 25 were less than 18.01 years of age at the start of their first semester in college. The racial breakdown among non-participants was 74.2% White students ( $n = 141$ ) and 25.8% other races ( $n = 130$ ). More male students ( $n = 115$ ) were non-participants than females ( $n = 75$ ). Non-participants' mean HS GPA was 3.45 ( $SD = .401$ ), and ACT mean was 26.22 ( $SD = 3.850$ ), with 29 students scoring 31 or higher. Less than one-third of non-participants were out of state students ( $n = 62$ ).

#### Objective Three

The participant and non-participant groups were very similar in racial makeup, age, and high school GPA, with significant differences in ACT score ( $t_{269} = 2.718, p = .007$ ), gender ( $\chi^2_1 = 5.083, p = .024$ ) and residency ( $\chi^2_1 = 5.785, p = .016$ ). The mean ACT score was higher for the participant group than the non-participant group. Gender was different such that the majority of participants were female and the majority of non-participants were male. Residency was different such that less than one-third of the non-participants were out of state students, while almost half of the participants were out-of-state students.

#### Objective Four

Of the independent variables tested in objective four, age, gender, race and residency did not have a statistically significant relationship with first year GPA for program participants. High School GPA ( $r = .630, n = 81, p < .001$ ) and ACT score ( $r = .327, n = 81, p = .003$ ) had significant relationships with first year GPA such that a higher high school GPA was associated

with a higher first year GPA and a higher ACT score was associated with a higher first year GPA.

#### Objective Five

Of the independent variables tested in objective five, age, gender and residency did not have a significant relationship with first year GPA for non-participants. High School GPA ( $r = .557, n = 190, p < .001$ ), ACT score ( $r = .296, n = 190, p < .001$ ) and race (African American) ( $t_{158} = 2.404, p = .017$ ) had statistically significant relationships with first year GPA for non-participants. Higher high school GPA's and ACT scores was predictors of higher first year GPA's. Race was statistically significant for non-participants, with results showing that African American students had lower first year GPA's than White students.

#### Objective Six

High School GPA had the only statistically significant correlation to retention for bridge program participants ( $t_{79} = 2.232, p = .028$ ). Higher high school GPA's indicated a greater likelihood of being retained after the first year of college. Seventy-three of 81 (90%) bridge program participants were retained, with the high school GPA's of those retained averaging .335 points higher than those not retained (Retained HS GPA  $M = 3.575, SD = .395$ ; Not Retained HS GPA  $M = 3.240, SD = .479$ ).

#### Objective Seven

The independent variables, high school GPA ( $t_{188} = 2.861, p = .005$ ), ACT ( $t_{188} = 2.335, p = .021$ ) and race ( $\chi^2_1 = 4.296, p = .038$ ) each had a statistically significant relationship to retention for non-participants. One hundred sixty-seven of 190 (88.8%) non-participants were retained. Non-participants who were retained had a mean high school of .251 points higher and mean ACT 1.98 points higher than those not retained (Retained HS GPA  $M = 3.483, SD = .395$ ; Not

Retained HS GPA  $M = 3.232$ ,  $SD = .482$ ; Retained ACT  $M = 26.46$ ,  $SD = 3.832$ ; Not Retained ACT  $M = 24.48$ ,  $SD = 3.604$ ).

#### Objective Eight

High School GPA ( $r = .578$ ,  $p < .001$ ), ACT ( $r = .324$ ,  $p < .001$ ), bridge program participation ( $r = .187$ ,  $p = .001$ ), race-African American ( $r = -.164$ ,  $p = .003$ ), race-White ( $r = .109$ ,  $p = .036$ ), and gender ( $r = -.146$ ,  $p = .008$ ) were each significantly related to first year GPA, with the classifications African American and male being indicators of a lower first year GPA. A significant regression model was found with the entry of the bridge program participation variable ( $F_{(1, 269)} = 9.786$ ,  $p = .002$ ). High School GPA also entered into the significant model ( $F_{(2, 268)} = 130.697$ ,  $p < .001$ ). No other variables entered into the significant model.

Bridge program participation explained 3.5% of the variance in first year GPA ( $R = .187$ ,  $R^2 = .035$ ), with high school GPA explaining an additional 35% of the variance in first year GPA ( $R = .593$ ,  $R^2 = .351$ ).

#### Objective Nine

Four of the independent variables were found to have a significant difference between the retained and not retained groups: First year GPA ( $F_{(1, 269)} = 99.527$ ,  $p < .001$ ), such that the mean first year GPA of the retained students was higher ( $M = 3.421$ ,  $SD = .611$ ) than the mean first year GPA of the non-retained students ( $M = 2.070$ ,  $SD = 1.239$ ), high school GPA ( $F_{(1, 269)} = 13.317$ ,  $p < .001$ ) such that the students who were retained had a higher high school GPA ( $M = 3.511$ ,  $SD = .397$ ) than those not retained ( $M = 3.235$ ,  $SD = .401$ ), ACT score ( $F_{(1, 269)} = 6.766$ ,  $p = .010$ ) such that the students who were retained had a higher ACT score ( $M = 26.850$ ,  $SD = 3.880$ ) than those not retained ( $M = 24.935$ ,  $SD = 3.660$ ), and finally, African American students

( $F_{(1, 269)} = 4.759, p = .030$ ) were less likely to be retained than the other racial groups examined in this analysis.

Two variables, first year GPA and high school GPA, entered into a significant discriminant model, producing an overall canonical correlation of .530, indicating that 75% of the variance in retention status was attributed to these variables. First year GPA ( $\beta = 1.126$ ) entered the discriminant model first and high school GPA ( $\beta = -.272$ ) entered second. First year GPA had the highest structure coefficient (substantive significance) at .974. The discriminant model produced in this study is substantively significant because it correctly classified 84.9% of the cases.

### **Conclusions, Implications and Recommendations**

Based on the findings of this study, the researcher derived the following conclusions:

1. The bridge program participant and non-participant groups were very similar. This conclusion is based on the finding that both groups had similar makeup with regard to race, gender, residency and high school academics. Both groups had strong academic preparation as evidence by similar average high school GPA's (Participants  $M = 3.54$ , non-participants  $M = 3.45$ ) and average ACT scores, which were significantly different, but only separated by 1.38 points (Participants  $M = 27.60$ , non-participants  $M = 26.22$ ). Both groups had similar demographic characteristics, with regard to average age, gender makeup and in-state versus out-of-state classification.

The implication of this conclusion is that as a result of the groups being similar, the researcher was able to attribute outcomes of the study to what occurred upon arrival at college (bridge program and first year GPA) rather than to differences in the students upon entry.

2. Males were less likely to participate in the bridge program than females. This conclusion is based on the findings that of the 81 bridge program participants, only 37 (45.6%) were male and of the 190 non-participants, 112 (58.9%) were male. The implications of this conclusion are that male students are less likely to participate in the bridge program and male students may be more at risk than female students for not being retained as a result of not establishing a sense of fit with the university. Studies have shown that females are more likely to seek help when needed and are willing to participate in social organizations of the university (Milem and Berger, 1997). The lack of participation of male students in the bridge program may indicate that males perceive the program as an indication of their needing help, or as too social in nature, and as such it does not appeal to them as much as the female students. The bridge program aims to help students establish a better sense of fit and community and improve their engagement with both peers and faculty, each of which can positively impact retention. Males, who may be even less likely to seek out a social community in which to participate, may be the ones who need it the most.

A recommendation for practice is that the bridge program needs to be marketed more carefully so as not to dissuade females from participating, but to create a more enticing program advertisement for males. One way this could be done would be to create short advertisement videos that feature former bridge program participants who are male, speaking about why they enjoyed the camp and why they felt it was useful for them. The print and website publications should include better visuals that feature male students. Another possibility is to create sessions during the bridge program that separate males and females into gender specific peer groups and allow the groups to meet with several older students to ask questions and engage socially. It may be the case that just seeing the gender specific sessions in the program's agenda may help male

students feel like the program is appropriate and tailored to their needs. A recommendation for future research is to conduct a follow-up study of male music majors (both participants and non-participants) to determine their perception of the bridge program and why they chose to attend or not attend to better address any misconceptions male students may have and market the program more effectively.

3. Academic preparedness before college begets academic success in college. This conclusion is based on the findings that for both the participant and non-participant groups, high school GPA and ACT scores had significant relationships with first year GPA (Participants: HS GPA:  $r = .630, p < .001$ , ACT:  $r = .327, p = .003$ ; Non-participants: HS GPA:  $r = .557, p < .001$ , ACT:  $r = .296, p < .001$ ). The implication of these findings is that one cannot deny the impact of academic preparation in high school. This is supported by the literature that consistently shows high school grade point average as a significant predictor of college academic achievement (Bean, 1986; Clark & Cundiff, 2011, Milem & Berger, 1997). However, as national demographics shift and more of the college-going population will be made up of students without the same level of traditional academic preparation, universities must be prepared to support students with lower high school academic measures. The populations that will be entering college in 2025 and beyond are predicted to be underserved in the K-12 system and are less likely to have a parent who attended college and attained a degree (Grawe, 2018). If university practitioners accept that high school GPA and ACT scores are most likely to predict first year GPA, there must be a call to action to identify those students whose high school academics indicate they may need additional support or resources. Based on the results in this study, participation in a bridge program, even for students with relatively strong high school academics, can positively impact first year GPA and ultimately, perhaps retention. Identifying



students who come into the university with lower academic measures and not only encouraging them to participate in a bridge program but also maintaining the sense of community the program establishes, through consistent meetups or workshops throughout the semester may also assist more at-risk students.

One suggestion for further research in this area would be to replicate this study with a sample of lower achieving students, based on their high school records to determine if the impact of pre-college academic measures was affected by bridge program participation among that group.

4. African American students who did not participate in the bridge program had a lower first year GPA than their White peers, while African American students who participated in the bridge program did not. This conclusion is based on the findings that race (African American) had a negative relationship with first year GPA for non-participants, with a t-test value of  $t_{158} = 2.404$ ,  $p = .017$ . However, no relationship with first year GPA was found for participants ( $t_{68} = 1.677$ ,  $p = .098$ ). The implication of this conclusion is that it is even more important for African American students to participate in bridge programming to establish a sense of community during their transition to college and set themselves up for success through early exposure to the academic environment of college. The researcher feels strongly that bridge program participation was able to negate the negative relationship of race and first year GPA for incoming music majors. African American students, as a collective, still fall behind their White peers in academic achievement in college. Studies have shown when pre-college academic measures are controlled that African American students do just as well as their peers (Murtaugh, et al., 1999). The researcher cannot control for high school preparedness in the real world, so the next best thing is to implement programming to support students and help each student find a

way to be successful. The bridge program showed promise in supporting the African American students in this way, potentially because it is able to provide a sense of fit or belonging, combatting a known stressor for minority students at predominantly White institutions (Galicki & McEwen, 1989; Guloyan, 1986).

One recommendation for practitioners is to stress the importance of bridge program participation to minority students during the recruitment and orientation phases to increase participation of these groups. As previously discussed, the advertisements for the bridge program need to be created thoughtfully. In this case, the advertisements need to include visuals and/or video footage that includes minority students, both participants and current students in the School of Music. The researcher would like to see a video of a minority male student speaking about the program and, if possible, a student who did not participate in the program, but who wishes he had, to extoll the virtues of the program and what he feels he missed out on by not attending.

Administrators also need to ensure minority peer leaders and faculty are involved in the program to better represent inclusivity of the program and school. The researcher recommends further research to follow up with minority students who participated in the bridge program to assess what they feel to be the most valuable parts and areas for improvement that would allow the program to be modified to be more inclusive for all racial groups.

5. African American students who participated in the bridge program were more likely to be retained than those who did not participate. This conclusion is based on the findings that race was not a significant factor in retention for bridge program participants ( $\chi^2 = .971, p = .324$ ). Research on student persistence shows that the transition to college may be more difficult for minority students (Allen, 1999). It is the hope of the researcher that the bridge program

serves to assist all students, but especially the potentially at-risk minority students in successfully transitioning to college. In this study, participation in the music bridge program negated the potential negative impact of race on retention.

Based on this conclusion and findings, the researcher recommends that administrators continue to assess programming to combat issues minority students may face in predominately White institutions. Further, the School of Music at LSU should consider the addition of minority student focused interventions or support systems beyond just the bridge program to ensure all incoming music majors have a community and sense of belonging at LSU. It is of concern to the researcher that these findings clearly highlight an issue with retention of minority students who were not involved in the bridge program. As the university continues to increase the number of minority students enrolled, it must also develop programming to support these students. At this time, there are only a handful of major-specific bridge programs at LSU and the researcher feels strongly that programs of this type, as opposed to non-targeted optional programs, offer better integration for minority students into their peer group and with their major-specific faculty with whom they will work through their first year in college. Exposure to faculty is a known factor for student retention. As supported in a study by Astin (1993), positive interactions with faculty lead to higher student satisfaction.

The researcher further recommends a follow-up study of the minority students in the School of Music at LSU to evaluate their perceptions of preparedness, fit with the university and satisfaction with their experience. Feedback from that research can inform administrators of pain points for minority students so the school can adjust its policies and practices to create an equitable experience for all students. The researcher would hope that a study of this nature would canvass all minority students in the School of Music, not just freshmen or bridge program

participants, in order to create programming that can build upon the groundwork of the bridge program and continue to support minority students through graduation. This could involve creating an underrepresented populations student group, or first-generation peer and faculty mentoring programs to offer students a community within their college community in which to engage socially.

6. The bridge program in the School of Music is making an impact. Bridge program participation had a positive impact on first year GPA. This conclusion is based on the significant and positive relationship between program participation and first year GPA ( $r = .187, p = .001$ ) as well as the positive contribution of program participation in the regression model ( $F_{(1, 269)} = 9.786, p = .002$ ). Certainly, the researcher would have hoped for a higher percent of the variance explained than 3.5%, however, there must be acknowledgement of the impact 3.5% can have. If the vast majority of first year GPA is determined by high school academic measures (high school GPA and ACT score) then the reality is that university practitioners can actually do very little to affect first year GPA for incoming students. Therefore, any significant impact is important. If the bridge program is able to affect first year GPA by up to 3.5%, that has the potential to be extremely impactful for a student, when considering that a 3.5% difference in GPA could be the difference of up to .14 in a student's GPA. Further, first year GPA is a factor in a student's likelihood to be retained, so every positive increase in first year GPA is important not only as a measure of success but also as an indicator of retention. This is also supported by Attewell, Heil, & Reisel's 2012 study which found that academic momentum, including a higher first year GPA, positively impacted retention.

The researcher recommends a continual evolution of the bridge program. Some indication of success is welcome, but not justification for complacency. School of Music administrators

should follow up with program participants to determine which parts of the program made a difference for them and what they feel was missing from the program that would have been beneficial. The bridge program should be adjusted as much as necessary each year as student needs and school goals shift. This study should be replicated in 2-3 years after the program has undergone adjustments to see if the impact the bridge program has on first year GPA is increased.

7. Bridge program participation does impact student retention. This conclusion is based on the findings that the most significant predictor of retention in this study was first year GPA ( $\beta = 1.126$ ,  $r_s = .974$ ), and that bridge program participation positively impacted first year GPA ( $F_{(1, 269)} = 9.786$ ,  $p = .002$ ). Therefore, students who participated in the bridge program were more likely to have a higher first year GPA and students with a higher first year GPA were more likely to be retained. Programming that improves students' perception of fit and desire to persist should positively impact retention. This is supported by Astin (1999), who found that experiencing early academic success in college may affect a student's satisfaction and desire to persist at the university. The bridge program is built upon Tinto's (1993) principles of effective retention in that it is "committed to the development of supportive social and educational communities in which all students are integrated as competent members" (p. 146-147). A program like this, which was shown to positively impact first year GPA, should not be ignored when discussing its ability to also positively affect retention.

For practitioners, making the association for incoming students and their families that participating in the bridge program helps students to establish a sense of community and comfort with the school is of utmost importance. It is obviously important to also cite the program's success in affecting first year GPA's for students, but it may be even more important for

prospective students and families to understand the challenges students face in making the transition to college and how programs like this are able to help combat those challenges. The impacts on GPA and retention are simply the evidence that the bridge program is working.

The researcher recommends that the administration set goals of greater participation in the bridge program for incoming students. Future marketing of the bridge program should include evidence of the impact of participation on first year GPA and be centered around social integration and opportunities to interact with faculty. The researcher recommends this study be replicated in 3-5 years, preferably with a larger and more diverse sample, and after on-going programming adjustments have occurred to see if there are increased positive results attributed to the bridge program.

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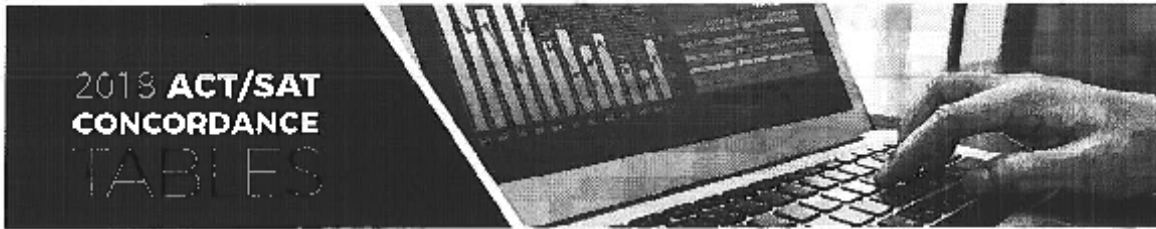
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# APPENDIX A. ACT/SAT CONVERSION CHART



**Table A1: SAT Total to ACT Composite.**

SAT	ACT	SAT	ACT	SAT	ACT
1600	36	1250	26	910	16
*1580	36	*1240	26	900	16
1580	36	1240	26	*890	16
1570	36	1220	25	880	16
1560	35	*1210	25	870	15
1550	35	1200	25	860	15
*1540	35	*1190	24	*850	15
1530	35	*1180	24	840	15
1520	34	1170	24	830	15
1510	34	1160	24	820	14
*1500	34	1150	23	810	14
1490	34	*1140	23	*800	14
1480	33	1130	23	790	14
1470	33	1120	22	780	14
*1460	33	*1110	22	770	13
1450	33	1100	22	*760	13
1440	32	1090	21	750	13
*1430	32	*1080	21	740	13
1420	32	1070	21	730	13
1410	31	1060	21	720	12
*1400	31	1050	20	*710	12
1390	31	*1040	20	700	12
1380	30	1030	20	690	12
*1370	30	*1020	19	680	11
1360	30	*1010	19	*670	11
1350	29	1000	19	660	11
*1340	29	990	19	650	11
1330	29	980	18	640	10
1320	28	*970	18	*630	10
*1310	28	960	18	620	10
1300	28	950	17	610	9
1290	27	940	17	600	9
*1280	27	*930	17	*590	9
1270	27	920	17		
1260	27				

\*Use the SAT score when a single score point comparison is needed.  
 Note: Concordance tables for the ACT Composite were derived from scores and totals of the ACT SAT scores.

**Table A2: ACT Composite to SAT Total.**

ACT	SAT	SAT Range
36	590	1570-1600
35	540	1530-1560
34	500	1490-1520
33	460	1450-1480
32	430	1420-1440
31	400	1390-1410
30	370	1360-1380
29	340	1330-1350
28	310	1300-1320
27	280	1260-1290
26	240	1230-1250
25	210	1200-1220
24	180	1160-1190
23	140	1130-1150
22	110	1100-1120
21	100	1060-1090
20	100	1030-1060
19	100	990-1020
18	90	960-990
17	90	930-960
16	80	890-920
15	80	860-890
14	80	830-860
13	70	790-820
12	70	760-790
11	60	730-760
10	60	700-730
9	50	670-700



APPENDIX B. WELCOME EMAIL ATTACHMENT

A vertical poster for the LSU School of Music Boot Camp. The background is dark blue with a subtle pattern. At the top, 'FALL 2016' is written in white, underlined. Below that is the LSU logo in white, followed by 'College of Music & Dramatic Arts' and 'School of Music' in a smaller white font. The words 'BOOT CAMP' are written in large, bold, yellow letters, underlined. Below that, 'FOR ENTERING MUSIC STUDENTS' is written in yellow. Another underline is followed by 'A FIVE-DAY PROGRAM' in yellow. A paragraph of white text describes the program. Below that is a bulleted list of activities. At the bottom, a yellow horizontal band contains the text 'INFORMATION AND REGISTRATION' and 'MUSIC.LSU.EDU/BOOTCAMP' in dark blue. Below the yellow band, the phone number '225-578-3261' and the website 'music.lsu.edu' are written in yellow.

**FALL 2016**

**LSU** | College of Music & Dramatic Arts  
School of Music

**BOOT CAMP**

FOR ENTERING MUSIC STUDENTS

**A FIVE-DAY PROGRAM**

The LSU School of Music Boot Camp is an intensive five-day program designed for incoming music students. The program is designed to ease the transition for incoming music students to college life.

- Engage with School of Music faculty and staff
- Take practice classes and exams
- Collaborate in the creation of an original music production
- Participate in study and life skills workshops

**INFORMATION AND REGISTRATION**  
**MUSIC.LSU.EDU/BOOTCAMP**

**225-578-3261 • music.lsu.edu**

## APPENDIX C. BOOT CAMP EMAIL

Dear Students,

Nice meeting you at Orientation!

As most of you know by now, I will be helping you with any questions about your fall schedules, if you need to make changes after the semester begins or any other questions you may have.

I am at the Music & Dramatics Arts building, on the west side of the building room 109.  
My email address is -

Please note that we have move some of you to a different section for the GROUP PIANO class. So please check your schedules for any possible changes that will affect your daily schedule on the fall.

I know there were many questions unanswered at Orientation and some Issues that I am following up on. Please If I have not answer any of your question or you have something pending and haven't hear from me yet send me a reminder and I will answer or take care of it as soon as possible.

I am attaching information for the Music ensembles and Boot Camp. IF there is any information missing please contact me or the Faculty involve to find out.

As you get ready for the fall semester please, contact me with any questions that you may have, I will try to help you as much as I can.

For when you arrive please note these IMPORTANT DATES

Monday August 20th      Classes begin, 7:30 a.m.

Tuesday August 28th    4:30 pm Final date for dropping courses without receiving a grade of "W,"

Wednesday August 29th    4:30 pm Final date for adding courses for credit and making section changes

Any concerns you might have on your first days of classes please come and share them with me or send me an email as soon as possible so we can discuss options. Please note you only have 9-10 days to change your schedule after classes begin and you need to do it with me.

I will recommend you visit the Center for Academic Success website and see what is available to help you do your best of your College time <http://www.lsu.edu/students/cas/>

Here are some links to important information you already discussed on the invitational

Residential College

<http://www.lsu.edu/reslife/housing/traditional/broussard.php>

Recommended Paths for MDA (Navigate through by department and degree)

<http://catalog.lsu.edu/content.php?catoid=17&navoid=1414>

General Education Catalogue (go to the end of the page to see links to see requirements and valid courses to meet them)

<http://catalog.lsu.edu/content.php?catoid=17&navoid=1364>

Careers in the Arts

<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.forbes.com%2Fsites%2Femsi%2F2016%2F10%2F19%2Fwhat-can-you-do-with-that-useless-liberal-arts-degree%2F%2367d4a52841b8&data=02%7C01%7Capest%40lsu.edu%7C2e1c006fae904f258f3a08d6f046bd63%7C2d4dad3f50ae47d983a09ae2b1f466f8%7C0%7C0%7C636960584914877531&sdata=K16SKteYV4sKFHcF5oz66NjgD%2FIL7K%2BGV0L%2BNkQUudE%3D&reserved=0>

<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.forbes.com%2Fsites%2Fkatiasavchuk%2F2015%2F08%2F19%2Fwhy-art-school-can-be-a-smart-career-move%2F&data=02%7C01%7Capest%40lsu.edu%7C2e1c006fae904f258f3a08d6f046bd63%7C2d4dad3f50ae47d983a09ae2b1f466f8%7C0%7C0%7C636960584914877531&sdata=C6O9rgjOuihJegd9t16Le4Ge5jdAvXw%2BS9NPZs4aL74%3D&reserved=0>

<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.huffingtonpost.com%2Fentry%2Fliberal-arts-is-the-foundation-for-professional-success%2Fus%2F5996d9a7e4b03b5e472cee9d&data=02%7C01%7Capest%40lsu.edu%7C2e1c006fae904f258f3a08d6f046bd63%7C2d4dad3f50ae47d983a09ae2b1f466f8%7C0%7C0%7C636960584914887550&sdata=Z9wmdOUqKzhn2Qq6qp3QdpU%2FeXo5lQ4jDMs9Oii2QaU%3D&reserved=0>

## APPENDIX D. BOOT CAMP WEBSITE

← → ↻ 🔒 https://www.lsu.edu/cmda/music/admissions/boot-camp/index.php ☆ 📌 📌 📌 📌 📌

# Music Boot Camp

The LSU Music Boot Camp is an intensive program designed specifically for incoming music majors. The program is focused on helping students make a smooth transition to LSU music and campus life prior to the start of the fall semester.

## Registration

**Dates:** August 16 - 23, 2019

**Cost:** \$50.00 – Early housing available (Only for students living on campus, additional fees apply)

*\*Co-registration of the Music Boot Camp with other activities (offered during the same dates) such as Tiger Band Camp or STRIPES is **prohibited**.*

**Registration Fee Includes:** all activities/materials/Boot Camp T-shirt

**Registration Deadline:** July 22, 2019

Questions can be directed to **Alexia Perez** at [apere43@lsu.edu](mailto:apere43@lsu.edu) or 225-578-6047.

[Click Here To Register](#)

## About

At LSU Music Boot Camp, participants will:

- Learn important study skills
- Participate in Music History and Theory lectures
- Complete practice exams and review with faculty
- Collaborate with faculty and peer mentors in a variety of engaging activities
- Meet faculty, graduate students, and university staff in a relaxed, informal setting

## Schedule

*(Tentative)*

- Saturday
  - Early Res Life check-in available
- Sunday
  - Program check-in
  - Tours of facilities and the LSU campus
  - Meet 'n' Greet Brunch
- Monday Tuesday Wednesday

[Top](#)



APPENDIX E. PREST IRB APPROVAL



ACTION ON EXEMPTION APPROVAL REQUEST

TO: Allie Prest
AEEE
FROM: Dennis Landin
Chair, Institutional Review Board
DATE: May 24, 2019
RE: IRB# E11727
TITLE: Examining the Impact of a Bridge Program on First-Year Music Majors

Institutional Review Board
Dr. Dennis Landin, Chair
130 David Boyd Hall
Baton Rouge, LA 70803
P: 225.578.6602
F: 225.578.5983
irb@lsu.edu
lsu.edu/research

New Protocol/Modification/Continuation: New Protocol

Review Date: 5/24/2019

Approved X Disapproved

Approval Date: 5/24/2019 Approval Expiration Date: 5/23/2022

Exemption Category/Paragraph: 4b

Signed Consent Waived?: N/A

Re-review frequency: (three years unless otherwise stated)

LSU Proposal Number (if applicable):

By: Dennis Landin, Chairman [Signature]

PRINCIPAL INVESTIGATOR: PLEASE READ THE FOLLOWING -
Continuing approval is CONDITIONAL on:

- 1. Adherence to the approved protocol, familiarity with, and adherence to the ethical standards of the Belmont Report, and LSU's Assurance of Compliance with D-HHS regulations for the protection of human subjects\*
2. Prior approval of a change in protocol, including revision of the consent documents or an increase in the number of subjects over that approved.
3. Obtaining renewed approval (or submittal of a termination report), prior to the approval expiration date, upon request by the IRB office (irrespective of when the project actually begins); notification of project termination.
4. Retention of documentation of informed consent and study records for at least 3 years after the study ends.
5. Continuing attention to the physical and psychological well-being and informed consent of the individual participants, including notification of new information that might affect consent.
6. A prompt report to the IRB of any adverse event affecting a participant potentially arising from the study.
7. Notification of the IRB of a serious compliance failure.
8. SPECIAL NOTE: When emailing more than one recipient, make sure you use bcc. Approvals will automatically be closed by the IRB on the expiration date unless the PI requests a continuation.
\* All investigators and support staff have access to copies of the Belmont Report, LSU's Assurance with DHHS, DHHS (45 CFR 46) and FDA regulations governing use of human subjects, and other relevant documents in print in this office or on our World Wide Web site at http://www.lsu.edu/irb

## APPENDIX F. DAVIS' DESCRIPTORS

### Interpretation of Correlation Coefficients using Davis's (1971) Scale

.00 - .09 = negligible

.10 - .29 = low

.30 - .49 = moderate

.50 - .69 = substantial

.70 - .89 = high

>.89 = very high

## VITA

Allie Prest is an Assistant Dean in the College of Music & Dramatic Arts at Louisiana State University in Baton Rouge, Louisiana. Allie has spent the entirety of her professional career in education, beginning as a middle and high school teacher before moving into academic advising, and eventually, administration in higher education. She is a proud LSU Tiger, having earned a Bachelor's degree in Secondary Education in 2002 at LSU before teaching and earning a Master's degree in Special Education, Academically Gifted, from Northwestern State University of Louisiana in 2008. Allie has a keen interest in the college student lifecycle and finding creative ways to meet the needs of today's students. Outside of scholarly pursuits, Allie loves travel, wine and time with family.