

## Promoting Student Success in Historically Black Colleges & Universities

StacyAnn Baker, MA, MPA  
Tennessee State University

*Previous studies have indicated that by offering academic support programs and services, such as tutoring, higher education institutions can have positive effects on students' learning and retention. This research sought to illustrate the quality of higher learning offered at Historically Black Colleges and Universities (HBCUs) and contribute to the larger literature on student success. It employed a quantitative case study design and collected data from a large public HBCU in the state of Tennessee for Fall 2016. The case study examined whether students' participation in tutoring programs was related to improved course GPA. Overall, tutoring was found to be significantly and positively related to improved student performance.*

**Keywords:** Historically Black Colleges and Universities, academic support, tutoring, student success

Historically Black Colleges and Universities (HBCUs) have provided access to quality higher education since the late 19th century (Allen & Jewell, 2002; Gasman, 2013; Hill, 1985; Mayfield, 2001). Since their establishment, these institutions have had a majority Black student composition (Allen & Jewell, 2002; Gasman, 2013; Hill, 1985; Mayfield, 2001). However, being dynamic entities, HBCUs have diversified to include higher populations of non-Black students, and a large-yet decreasing population of Black students (Allen & Jewell, 2002; Gasman, 2013; Hill, 1985; Mayfield, 2001). Additionally, there is also a growing population of students who are considered nontraditional, as well as “at-risk” (Adams & Corbett, 2010; Choy, 2002; Luedke, 2018; Luedke et al., 2019; NCES, 2019b). Thus, students’ needs, motivations, goals, expectations, and barriers for learning have changed and resulted in several demands for student success (Adams & Corbet, 2010; Allen & Jewell, 2002; Balsiger et al., 2017; Choy, 2002; Gasman, 2013; National Center for Educational Statistics [NCES], 2019a).

In the state of Tennessee, HBCUs, and other institutions of higher education, are challenged with increasing retention and graduation rates (Hearn, 2006; Mayfeild, 2001). They are also faced with the needs of a growing knowledge industry, and the demands of economic development initiatives (Brint & Clotfelter, 2016; Hearn, 2006; Ritt, 2008; Southern Association of Colleges and Schools. Commission on Colleges [SACSCOC], 2018; Thomas, 2014). These include producing knowledge-based professionals that have expert, accredited, and abstract knowledge, as well as higher earning potential. Additionally, higher learning is expected to allow for identity and moral development, helping to increase leadership, and community involvement (Kuh et al., 2006; Luedke, 2018; Luedke et al., 2019; Ritt, 2008). Therefore, to demonstrate their commitment to student excellence, HBCU’s can provide evidence-based academic support programs and services, such as tutoring (Coladarci et al., 2013, ; Kim, 2015). These programs and services can be utilized to ensure and enhance student preparedness and student success (Adams & Corbet, 2010; Choy, 2002; Gassman, 2013; Hussar & Bailey, 2009; Luedke et al., 2019; Ritt, 2008).

### Literature Review

#### Academic and Social-Cultural Demands Faced by HBCUs

The history of HBCUs can be traced to the late 19<sup>th</sup> century when they were first established to educate Black Americans (Allen & Jewel, 2019; Gasman, 2013; Hill, 1985; NCES, 2019a). Currently, there are over a hundred HBCUs in the US, and they are both public

and private. Traditionally while both types offer quality higher learning, public HBCUs tend to have larger enrollments from Non- Black groups who lack access and finances to participate in higher education (Allen & Jewell, 2002; Gasman, 2013; Hill, 1985; Mayfield, 2001; NCES, 2019a, 2019b). As such, over the decades, the student composition of HBCUs has changed and expanded to include international and other Non-Black students (Gasman, 2013; Hill, 1985; NCES, 2019a). This has resulted in more diversity and demands, especially for public HBCUs, as the student population comprises of a variety of different countries, races, ethnic backgrounds, and social classes.

### **Student Success at HBCUs**

There are several demands for student success at HBCUs that include traditional, as well as new and evolving requirements. Kuh et al. (2006), indicated that student success involves academic achievement, student satisfaction, and completing educational outcomes. It also includes post-college performance, as well as moral and identity development (Kuh et al., 2006; Luedke, 2018; Luedke et al., 2019; Ritt, 2008). In addition, state initiatives, such as Tennessee's "Drive to 55", seek to increase the volume of higher education degrees or certificates (Brint & Clotfelter, 2016; Hearn, 2006; Thomas, 2014; TnAchieves, 2019). This adds further diversity to the student composition at HBCUs. Consequently, new social realities dictate that the focus of students' success extends beyond academic performance, to include personal and professional growth and development (Brint & Clotfelter, 2016; Hearn, 2006; SACSCOC, 2018; Thomas, 2014).

Students who are successful tend to have acquired their desired knowledge, skills, and competencies (Kuh et al., 2006; Mayfeild, 2001; Millea et al., 2018). As such, HBCUs have to understand and embrace there are different demographics, dynamics, culture, and subcultures at their institutions (Gasman, 2013; Morgan, 1998). This will enable them to have a better perspective of their student population. It will also enhance appropriate and effective modes of academic support and student engagement, such as tutoring, to better address students' needs, engagement, interests, and concerns.

### ***Traditional and Nontraditional Students***

Traditional students are characterized as leaving high school and entering higher education at the age of 18, and study full-time (Adams & Corbett, 2010; Choy, 2002; NCES, 2019b). They also tend to come from families with higher education experience, as such, tend to be better prepared to handle the demands of higher education. Nontraditional students, on the other hand, tend to have delayed enrollment, may not have received a traditional high school diploma, as well as have poor or rusty study skills (Choy, 2002; Hussar & Bailey, 2009; Layton, 2015; Mayfeild, 2001; NCES, 2019b).

Nontraditional students also face additional challenges as they are over the age of 24, may be employed full time, attend school part-time, be single parents, or have other dependents (Choy, 2002; Hussar & Bailey, 2009; Layton, 2015; Mayfeild, 2001; NCES, 2019b). Consequently, the nontraditional population has novel and unique psychological, academic, and financial challenges, not considered under traditional models of higher education. Therefore, these students tend to be considered more at-risk for not completing college.

**“At-Risk” Students.** It is important to note that despite differences between the traditional and nontraditional paradigms, students do have similarities amongst them, such as culture (Luedke, 2018; Luedke et al., 2019; Ritt, 2008). In addition, notwithstanding their distinctions, millions of students begin their post-secondary education lacking the necessary

academic skills to perform at the college level (Chen, 2016). As such, traditional and Nontraditional students can both be considered "at-risk" in relation to college completion.

Factors such as problems adjusting, external obligations, and monetary concerns are stated to play a role in student performance, retention, and graduation (Tinto, 1996). However, social isolation and a lack of congruence between students and institutions also influence student success (Luedke, 2018; Luedke et al., 2019; Tinto, 1996). Thus, "at-risk" students also pose novel demands as they have different motivations, abilities, goals, expectations, and barriers, from those who are traditional and nontraditional (Adams & Corbett, 2010; Choy, 2002; Luedke, 2018; Luedke et al., 2019; Mayfield, 2001).

Culture is "contextually driven" and is comprised of many intangible things such as values, beliefs, assumptions, perceptions, artifacts, and patterns of behavior (Morgan, 1998). Hence, evidence-based strategies, such as academic support programs and services, can be utilized. Specifically, academic support in the form of tutoring, as they can provide the perspective, tools, techniques, and resources (academic and sociocultural) to help address these demands (Ciscell et al., 2016; Coladarci et al., 2013; Kim, 2015; Luedke, 2019; Thomas, 2014).

### **Academic Support Programs and Services**

Academic support programs and services, such as tutoring, are stated to be important for student success as they allow for student engagement, integration, and performance (Amora et al., 2016; Balsiger et al., 2017; Chen, 2016; Hu & John, 2001). They also empower institutions of higher learning with the ability and capacity to embrace change and appropriately address its challenges (Balsiger et al., 2017; Hu & John, 2001). By providing tutoring, HBCUs can address student deficiencies with increased social and perceived institutional support, helping to improve their student retention and graduation rates (Kenner & Weinerman, 2011; Thomas, 2014). Furthermore, by increasing access to resources students need to transition successfully, they can also address issues of equity in academic, professional, and personal development when implementing scholarly-socialization initiatives (Luedke, 2018; Luedke et al., 2019; Ritt, 2008; Thomas, 2014). Therefore, through utilizing tutoring programs and services, HBCUs have the opportunity to address students' needs proactively and have improved student success (Millea et al., 2018; Thomas, 2014).

### ***Myths Regarding Tutoring Programs and Services***

There are several myths held by students and professors regarding the process and outcomes of tutoring programs and services (Marx et al., 2016). Professors believe that tutoring will work to "undermine traditional classroom dynamics" and preclude them from handling the course material (Marx et al., 2016, p.86). As such, tutoring is perceived as a service that is misused by students and hinders students' ability to study independently. It also is considered to reduce the role of the professor (Marx et al., 2016). However, tutoring does support traditional pro-school norms and behaviors as it allows for active and collaborative peer- learning and peer-tutoring strategies (Arco-Tirado et al., 2011; Chen, 2016; Cohen et al., 1982; DeAngelo, 2014; Marx et al., 2016; Wiggins, 2011). It also helps students to study more independently and have better course outcomes (Coladarci et al., 2013). According to Kim (2015), the role of a tutor is to provide supplementary information, progress communication, and writing skills. They also help to advance literacy, expand interpersonal skills, increase leadership ability, and develop presentation skills (Kim, 2015).

Beyer (1995) and Halpern (1998) suggest that tutoring helps to develop students' critical thinking skills, to purposefully discipline, monitor, and correct themselves. These intellectual qualities help to empower and enable students to skillfully analyze, assess, and reconstruct their

thoughts, thereby improving the quality of decisions (Paul, 1992; Paul & Elder, 2007). This is also supported by Coladarci et al. (2013), whose study found that participation in tutoring had a small but positive and significant effect on grades. It has also been recommended that students who are “at-risk”, be identified early and encouraged to take tutoring services to improve their grades (Coladarci et al., 2013; Luedke, 2018; Luedke et al., 2019). Furthermore, benefits extend towards peer-tutors, as not only do tutees outperform their peers, but tutors also receive positive effects as they also had an increased understanding of the study material (Coladarci et al., 2013). In addition, these skills gained extend beyond academic growth to also include personal and professional development (Beyer, 1995; Halpern, 1998; Ritt, 2008).

Student perception also plays a role in student performance as students also have their own beliefs, based on stereotypes or myths about tutoring. For example, a study by Ciscell et al. (2016), indicated that students might not utilize tutoring as they assumed tutoring is stigmatized. They also questioned whether tutoring was socially acceptable and were fearful that their tutors would find them inferior (Ciscell et al., 2016). Students were also either un-aware tutoring services were being provided or were un-sure whether their subject-matter was offered or if a tutor was available (Ciscell et al., 2016). However, despite student apprehensions, participation in tutoring has been found to have a significant effect on retention in comparison to those who did not participate (Coladarci et al., 2013). In order to improve and enrich their programs, universities need to engage students through purposeful student-faculty contact, as well as university-wide promotion. By providing students with positive experiences, as well as addressing student deficiencies with increased social and perceived institutional support, universities will be able to contribute to student success and improve student retention and graduation rates (Kenner & Weinerman, 2011; Thomas, 2014).

### ***The Value of Tutoring for Student Preparedness and Student Success***

Wiggins (2011) argues that it is important universities invest in programs that promote retention and provide resources such as tutoring. In demonstrating their commitment to excellence, HBCUs can provide needed assistance and improve the educational experience of the student population (Wiggins, 2011). Being, transformative in nature, tutoring encourages critical thinking, self-reflection, self-knowledge, and learning, thereby supporting student success in the classroom and society (Candy, 1991; Hearn, 2006; Layton, 2015). It also allows for identity and moral development, which is stated to help increase leadership and community involvement (Luedke, 2018; Luedke et al., 2019; Ritt, 2008). Thus, tutoring helps to provide students with academic, social, and cultural capital to efficiently, economically, and equitably improve their performance (Chen, 2016; Luedke, 2018; Luedke et al., 2019). Additionally, tutoring has proven to be a way to engage, motivate, and instruct individuals. It enables students to access the epistemologies of their discipline, provides the opportunity for participation in small group discussions, as well as enhances the academic services provided by helping to extend learning to include knowledge and competence (Balsiger et al., 2017; Barr & Tagg, 1995; Chen, 2016; Kim, 2015; Layton, 2015). It can also help those who do not have the finances to get additional assistance with their studies. Ergo, it can be used as a strategy by HBCUs to improve and enrich academic programs (Brint & Clotfelter, 2016; Thomas, 2014).

Tutoring not only improves literacy but also helps with developing presentation skills, as well as writing abilities (Kim, 2015). As such, it is valuable for advancing communication, writing, and interpersonal skills, which expands students' ability to think, perform, and lead, critically (Beyer, 1995; Halpern, 1998; Kim, 2015; Ritt, 2008). Tutoring also provide students with the resources needed for performance, persistence, and achievement, by indirectly improving their confidence and competence (DeAngelo, 2014; Hu & John, 2001). Additionally,

it can be utilized to help bridge the culture of their homes with that of the campus (Luedke, 2018; Luedke et al. 2019). This will allow for a deliberate bi-directional socialization process to foster scholarly socialization. It will also help to improve quality, as well as equity in coursework completion and competition, and other aspects of student success for traditional, nontraditional, and "at-risk" groups (Brint & Clotfelter, 2016; Thomas, 2014).

### **Assessing Tutoring and Student Success at HBCUs**

Despite myths regarding tutoring, it has proven to be beneficial for improving academic performance, as well as personal and professional development (Arco-Tirado et al., 2011; Cohen et al., 1982; Ritt, 2008). To allow for quality control, HBCUs can monitor and evaluate, as well as reform and revitalize offered services, by assessing tutees' course performance. According to Rhee and Rha, (2009), process-quality and outcome-quality are important service aspects to consider when measuring a client's perceptions or experiences (Rhee & Rha, 2009). Process-quality regards client perception of the value of the service provided. Outcome quality regards the end product after the completion of a service (e.g., grade or improved understanding of course material) (Hearn, 2006; Rhee & Rha, 2009). Course grade point average (GPA) is noted to be a good proxy measurement of student performance (Coladarci et al., 2013; York, Gibson, & Rankin, 2015). By assessing student course GPAs, the quality of tutoring programs can be evaluated to allow for improvements that appropriately and adequately meet the needs and interests of all students.

While there have been studies regarding the positive effects of tutoring, this study seeks to determine the local effects of this type of academic support at a large public HBCU in the state of Tennessee. This HBCU offers several tutoring programs, both on-line and in-classroom. To address demands for alternatives, in Fall 2016, the university implemented a new tutoring program geared towards providing academic support through the use of both faculty and peer tutors over a variety of courses. It also aimed at accommodating students who could not attend regular sessions and was provided free of cost. As such, for the purpose of this paper, this novel tutoring program was assessed to provide a cross-sectional analysis. The goal was to provide empirical evidence regarding the value of this tutoring service, as well as demonstrate its utility for enhanced student success.

### **Methodology**

This research examined the utility of academic support programs and services through the use of tutoring, at a large public HBCU located in Tennessee. It assessed whether students' academic performance improved after they received tutoring from a new tutoring program and service implemented in Fall 2016. The goal of the new tutoring program used in this study was to provide free access to academic support in a variety of courses on-campus. It also offered a wider option of times to attend or request tutoring services, which included weekends, to increase student access. It involved the use of peer-tutoring, as well as tutoring from professors to allow for active and collaborative learning and tutoring. This research sought to answer the following question: *Does participation in a tutoring program have a significant effect on collegiate GPA?* To test the above research question are the following hypotheses:

*Hypothesis 1:* Does participation (yes, no) in tutoring result in significant differences in student GPA?

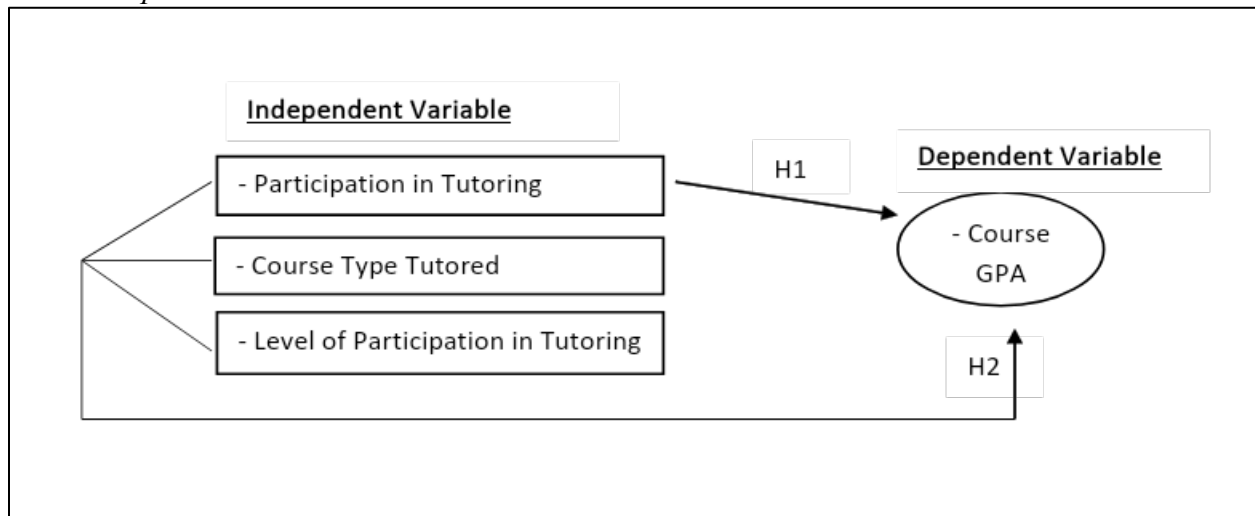
*Hypothesis 2:* To what extent does course type tutored, level of participation, and participation in tutoring, increase the odds of improvement in course GPA?

### **Measures**

To assess the effects of academic support programs and services, the tutoring program offered at a large public HBCU in the state of Tennessee was used to determine whether tutoring services provided had positive effects on student success. Student success was measured by GPA to indicate the achievement of learning objectives, as well as the acquisition of required skills and competencies. Secondary data from the tutoring were used to examine the relationship between participation in tutoring and improvement in student GPA. The independent variables used in this study were student participation in tutoring (yes and no), level of participation (number of hours and number of visits), and course type tutored. The dependent variable was the course GPA. See Figure 1, for the conceptual framework.

**Figure 1**

*The Conceptual Framework*



*Note.* Conceptual framework indicating variables and relationships

### Sample

Secondary data for this study were collected from students at a large public HBCU, located in the state of Tennessee. Participants in this study were students (tutees and non-tutees) in active attendance for the Fall semester of the year 2016. Students are racially and educationally diverse, as such consist of both traditional, nontraditional, and “at-risk” learners. To examine whether tutoring improved course performance, a sample consisting of 852 students was collected. A total of 123 of the students indicated they participated in tutoring for the fall semester of 2016. Non-random sampling was also implemented as students self-selected or were referred to tutoring services.

### Procedure

The secondary data collected from the sample above was used to create the dataset for this study. The data utilized included student midterm GPA and student final GPA for the Fall semester of 2016. It analyzed if there was a difference in student GPA between students who participated in tutoring and students who did not participate in tutoring in fall 2016. Initially, before screening the collected data, coding issues were addressed, to prevent misinterpretation. The data set included course type tutored (natural sciences, social sciences, humanities, professional studies and unknown), midterm GPA, final GPA, number of visits to tutoring, number of hours spent in tutoring, gender, ethnicity, student classification and student

participation (yes, no) in tutoring. Variables were then transformed and recoded into different variables and descriptive statistics were generated.

### Analysis

An independent samples t-test was conducted to test *Hypothesis 1*: Does participation (yes, no) in tutoring result in significant differences in student GPA? This was done to evaluate the effectiveness of the tutoring program by determining the mean difference between students who participated in tutoring and those who did not participate in tutoring. To test the assumption of normality, descriptive statistics were generated, and a histogram was utilized to identify whether the data was normal. Outliers were also identified using a boxplot to reduce bias and confound results.

A Factorial Analysis of Variance was conducted to test *Hypothesis 2*: To what extent does course type tutored, level of participation, and participation in tutoring, increase the odds of an improvement in course GPA? This was conducted to test for group differences by comparing the main effects of participation in tutoring and course type and the interaction effect between participation in tutoring and course type, on the difference in course GPA. Histograms, Q-Q plots were used to test for normality. The Levene's Test addressed homoscedasticity of error variances. Logistic regression was used to identify which independent variable (participation, course type, level of participation) best predicted GPA. A two-way analysis of variance was also conducted on the influence of course type and participation on the differences in course GPA. Course type included five (5) levels (natural sciences, social sciences, humanities, professional studies, and unknown), and participation in tutoring consisted of two levels (participate, did not participate). Logistic regression was the most appropriate test to predict the odds of the differences in course GPA (improved, did not improve). Logistic regression has procedures for creating necessary dummy variables automatically; it requires fewer assumptions and is statistically robust.

### Results

The results of the study indicated that students received tutoring for a total of thirty-six (36) subjects, with some students receiving tutoring for multiple courses. The majority of the student received tutoring in Biology (35), Pre-Calculus (31), and Physics (29). Other subjects with ten tutees or more included: Sociology (21), College Algebra (16), Anatomy & Physiology I (14), Chemistry (13), Calculus I (10), and Calculus II (13).

Students who attended tutoring were primarily sophomores (37.5%) and seniors (37.5%) who were female (52%) and black (84.4%). Participating students in tutoring attended an average of about 5 visits (SD = 5.87) and spent about 3 hours (SD=7.04). The independent samples t-test indicated that midterm grades were significantly lower for those who participated (M = 2.2, SD= 0.86), than those who did not participate in tutoring (M = 2.45, SD= 0.81),  $t(827) = -3.319, p = .001$ .

A two-way analysis of variance was conducted on the influence of course type and participation on the differences in course GPA. All effects were statistically significant at the .05 significance level except for the interaction between course and tutoring. The main effect for participation in tutoring yielded an F ratio of,  $F(1, 850) = 18.049, p < .05$  indicating a significant difference in course GPA between those students who participated in tutoring (M=0.54, SD=0.60) and those who did not participate in tutoring (M=0.29, SD=0.59). The main effect for type of course yielded an F ratio of,  $F(4, 850) = 2.11, p < .05$  indicating a significant difference in course GPA between students who were tutored in Social Science courses (M= 0.44, SD= 0.94), Professional Studies courses (M= 0.47, SD= 1.13), Natural Science courses (M= 0.41, SD= 1.11)

and the Humanities ( $M= 0.17$   $SD= 1.05$ ). The interaction effect was not significant  $F(4, 850) = 0.47, p > .05$ .

A logistic regression analysis was conducted to ascertain the effects of tutoring and level of participation on the likelihood that students who participate in tutoring will improve their course GPA. A test of the full model against a constant only model was statistically significant. This indicated that the predictors as a set reliably distinguished between improvement and no improvement in course GPA ( $chi-square = 13.768, p < .05$  with  $df=3$ ).

Nagelkerke's  $R^2$  of 0.036 indicated a weak relationship between prediction and grouping. Prediction success overall was 67.1%, (4% for not improved, and 100% for improved). The Wald criterion demonstrated that tutoring made a significant contribution to prediction ( $p = .001$ ). The number of hours and number of visits, however, were not significant predictors. Exp (B) value indicates that when a student participates in tutoring, the odds ratio is 0.553 times, indicating that they are more likely to improve their course GPA. See Table 1, for a summary of logistic regression analysis.

**Table 1**

*Summary of Logistic Regression Analysis for Variables Predicting Improvements in Student GPA.*

Predictor	B	<i>S.E. B</i>	$e^B$
Tutoring	-.592*	.311	.553
Number of Visits	-.074	.063	.929
Number of Hours	.106	.074	1.112
Constant	1.206	.302	3.339
$\chi^2$	13.78		
<i>df</i>	3		

\* $p < .05$ .

### Discussion

This study focused on improvements in student GPA from midterm to finals for the Fall semester of 2016. It analyzed if there was a significant difference in student GPA between students who participated in tutoring and for students who did not participate in tutoring in fall 2016. This study indicated that those who participated in tutoring on average were more likely to have a lower GPA at their midterms than students who did not participate in tutoring. This may have been the reason why they were referred or elected to attend tutoring services. The results also indicated that tutoring had a small, but significant and positive association with student GPA. These findings support previous research such as Coladarci et al. (2013) that the participation of at-risk students in tutoring services will result in a small, positive, and significant effect on their grades.

The results of this study also indicated that participation in tutoring services offered at increased the odds that a student had significant improvement in their academic performance (GPA). Students who did participate in tutoring were more likely to improve their GPA from their midterms to their finals. The odds were that they were 0.553 times more likely to increase their course GPA. These results support previous studies by Wiggins (2011) that purports grades play a role in the need and positive effects of tutoring. Students with lower midterm grades were more likely to require, as well as utilize tutoring services, and those who utilized these services had increased academic success. The results of this study also provide further support for research by Kim (2015), Thomas (2014), and Cohen et al., (1982) that participation in the tutoring programs is related positively to student success. In addition, the results also implied is offering quality, results-driven intervention services to assist students equitably. Therefore, the



evidence suggests that the HBCU is offering a valuable public service. The outcome quality of tutoring services indicates it functions as a powerful influence on student success, as student GPAs were improved for those who participated in tutoring.

### **Limitations**

For this study, non-random sampling was utilized as such the results may not be representative, and there may be sampling bias, which may have caused the predictive power in the logistics regression analysis results. In addition, the study utilized cross-sectional data (Fall 2016) and was not replicated for any other semester. As such, it is difficult to determine the temporal relationship between tutoring participation and improvement in course GPA. Therefore, only an association and not causation can be inferred. It is recommended that this study be repeated for other semesters to provide additional insight and demonstrate HBCUs' commitment to student success. It is also recommended that qualitative analysis methods also be employed to assess process quality. Lastly, to allow for improved analysis, it is recommended that future studies be conducted on a wider population of students from several HBCUs in Tennessee. This will allow for further validation of quality measures, as well as provide further insight, as well as increased accuracy in, and generalizability of conclusions drawn.

### **Conclusion**

This research sought to evaluate a novel tutoring program at a large public HBCU in Tennessee to determine if tutoring would have a positive effect on student success. The results of this study were significant and supported previous research regarding the utility of tutoring. Students who participated in tutoring tended to have lower midterm grades than those who did not participate. This also suggested that students need these services, as most tutees were referred or self-selected into this program. It also implied the HBCU is proactively addressing the demands it is faced with and is committed to students' success. Overall, tutoring was found to be positively related to student performance as students who participated in tutoring had higher odds of their course GPA improving than those who did not participate. Despite the limitations of this study, the results provide necessary and relevant empirical evidence. This can be utilized to improve the quality of academic support programs and services, thereby helping to ensure equitable student success.

## References

- Adams, J., & Corbett, A. (2010). Experiences of traditional and non-traditional college students. *Perspectives*, 2(1), 2-28. <https://scholars.unh.edu/perspectives/vol2/iss1/2/>
- Allen, W. R., & Jewell, J. O. (2002). A backward glance forward: Past, present, and future perspectives on historically Black colleges and universities. *The Review of Higher Education*, 25(3), 241-261. <https://doi.org/10.1353/rhe.2002.0007>
- Amora, J., Ochoco, M., & Anicete, R. (2016). Student engagement and college experience as the mediators of the relationship between institutional support and academic performance. *Digital Journal of Lasallian research* (12), 15-30. [http://revista\\_roma.delasalle.edu.mx/numero\\_12/johnny\\_amora\\_12.pdf](http://revista_roma.delasalle.edu.mx/numero_12/johnny_amora_12.pdf)
- Arco-Tirado, J. L., Fernández-Martín, F. D., & Fernández-Balboa, J. M. (2011). The impact of a peer-tutoring program on quality standards in higher education. *Higher Education*, 62(6), 773-788. <https://doi.org/10.1007/s10734-011-9419-x>
- Balsiger, J., Förster, R., Mader, C., Nagel, U., Sironi, H., Wilhelm, S., & Zimmermann, A. B. (2017). Transformative Learning and Education for Sustainable Development. *GAIA: Ecological Perspectives for Science & Society*, 26(4), 357-359. <https://doi.org/10.14512/gaia.26.4.15>
- Barr, R. B., & Tagg, J. (1995). From teaching to learning—A new paradigm for undergraduate education. *Change: The Magazine of Higher Learning*, 27(6), 12-26. <https://doi.org/10.1080/00091383.1995.10544672>
- Beyer, B. K. (1995). *Critical thinking*. Phi Delta Kappa Educational Foundation.
- Brint, S. & Clotfelter, C. T. (2016). U.S. higher education effectiveness. *R.S.F.: The Russell Sage Foundation Journal of the Social Sciences* 2(1), 2-37. <https://doi.org/10.1353/rus.2016.0008>
- Candy, P., & Brookfield, S. (1991). *Self-direction for lifelong learning*. Jossey-Bass.
- Chen, X. (2016). *Remedial coursetaking at U.S. public 2-and 4-Year institutions: Scope, experiences, and outcomes*. National Center for Education Statistics. Retrieved March 28, 2018, from <https://files.eric.ed.gov/fulltext/ED568682.pdf>
- Choy, S. (2002). *Nontraditional undergraduates*. National Center for Education Statistics. Retrieved March 28, 2018, from <https://files.eric.ed.gov/fulltext/ED546117.pdf>
- Ciscell, G., Foley, L., Luther, K., Howe, R., & Gjsedal, T. (2016). Barriers to accessing tutoring services among students who received a mid-semester warning. *Learning Assistance Review (TLAR)*, 21(1). [https://nclca.wildapricot.org/resources/Documents/Publications/TLAR/Issues/21\\_1.pdf](https://nclca.wildapricot.org/resources/Documents/Publications/TLAR/Issues/21_1.pdf)
- Cohen, P. A., Kulik, J. A., & Kulik, C. L. C. (1982). Educational outcomes of tutoring: A meta-analysis of findings. *American Educational Research Journal*, 19(2), 237-248. <https://doi.org/10.3102/00028312019002237>
- Coladarci, T., Willett, M. B., & Allen, D. (2013). Tutor program participation: Effects on GPA and retention to the second year. *Learning Assistance Review*, 18(2), 79-96. [https://nclca.wildapricot.org/resources/Documents/Publications/TLAR/Issues/18\\_2.pdf](https://nclca.wildapricot.org/resources/Documents/Publications/TLAR/Issues/18_2.pdf)
- DeAngelo, L. (2014). Programs and practices that retain students from the first to second year: Results from a national study. *New Directions for Institutional Research*, (160), 53-75. <https://doi.org/10.1002/ir.20061>
- Gasman, M. (2013). The changing face of historically black colleges and universities. *Penn Center for Minority Serving Institutions*. [https://repository.upenn.edu/gse\\_pubs/335](https://repository.upenn.edu/gse_pubs/335)

- Halpern, D. F. (1998). Teaching critical thinking for transfer across domains: Disposition, skills, structure training, and metacognitive monitoring. *American Psychologist*, 53(4), 449-455. <https://doi.org/10.1037/0003-066X.53.4.449>
- Hearn, J. C. (2006). Student success: What research suggests for policy and practice. In *Executive summary. National Symposium on Postsecondary Student Success. National Postsecondary Education Cooperative*, 15. [https://nces.ed.gov/npec/pdf/synth\\_Hearn.pdf](https://nces.ed.gov/npec/pdf/synth_Hearn.pdf)
- Hill, S. (1985). *The traditionally Black institutions of higher education, 1860 to 1982*. National Center for Education Statistics.
- Hu, S., & John, E. P. S. (2001). Student persistence in a public higher education system: Understanding racial and ethnic differences. *The Journal of Higher Education*, 72(3), 265-286. <https://doi.org/10.2307/2649332>
- Hussar, W.J., and Bailey, T.M. (2009). Projections of Education Statistics to 2018 (NCES 2009-062). *National Center for Education Statistics*. <https://nces.ed.gov/pubs2009/2009062.pdf>
- Jackson, D., & Bridgstock, R. (2018). Evidencing student success in the contemporary world-of-work: renewing our thinking. *Higher Education Research & Development*, 37(5), 984–998. <https://doi.org/10.1080/07294360.2018.1469603>
- Kenner, C., & Weinerman, J. (2011). Adult learning theory: Applications to non-traditional college students. *Journal of College Reading and Learning*, 41(2), 87-96. <https://doi.org/10.1080/10790195.2011.10850344>
- Kim, M. M. (2015). Peer tutoring at colleges and universities. *College and University*, 90(4), 2-7. [https://www.aacrao.org/docs/default-source/c-u-.pdfs/j4hvjluurjcth310ykiw\\_cuj9004-web.pdf?sfvrsn=cb14dd94\\_0](https://www.aacrao.org/docs/default-source/c-u-.pdfs/j4hvjluurjcth310ykiw_cuj9004-web.pdf?sfvrsn=cb14dd94_0)
- Kuh, G. D., Kinzie, J. L., Buckley, J. A., Bridges, B. K., & Hayek, J. C. (2006). *What matters to student success: A review of the literature* (Vol. 8). National Postsecondary Education Cooperative. [https://nces.ed.gov/npec/pdf/Kuh\\_Team\\_Report.pdf](https://nces.ed.gov/npec/pdf/Kuh_Team_Report.pdf)
- Layton, D. M. (2015). The role of the tutorial system in enabling students' academic success. *South African Journal of Higher Education*, 29(4), 198-210. <https://hdl.handle.net/10520/EJC182449>
- Luedke, C. L. (2018). “Es como una familia”: Bridging emotional support with academic and professional development through the acquisition of capital in Latinx student organizations. *Journal of Hispanic Higher Education*, 18(4), 372-388. <https://doi.org/10.1177/1538192717751205>
- Luedke, C. L., Collom, G. D., McCoy, D. L., Lee-Johnson, J., & Winkle-Wagner, R. (2019). Connecting identity with research: Socializing students of color towards seeing themselves as scholars. *The Review of Higher Education*, 42(4), 1527-1547. <https://doi.org/10.1353/rhe.2019.0074>
- Marx, J., Wolf, M. G., & Howard, K. (2016). A spoonful of success: Undergraduate tutor-tutee interactions and performance. *The Learning Assistance Review (TLAR)*, 21(2). Retrieved March 29, 2018 from <https://files.eric.ed.gov/fulltext/EJ1114523.pdf>
- Mayfield, L. (2001). Town and gown in America: Some historical and institutional issues of the engaged university. *Education for Health Change in Learning & Practice*, 14(2), 231-240. <https://doi.org/10.1080/13576280110056609>
- Millea, M., Wills, R., Elder, A., & Molina, D. (2018). What matters in college student success? Determinants of college retention and graduation rates. *Education*, 138(4), 309-322. <https://www.ingentaconnect.com/contentone/prin/ed/2018/00000138/00000004/art00003>
- Morgan, G. (1997). *Images of organization*. Sage Publications.
- National Center for Educational Statistics [NCES] (2019a). *Fast facts; Historically black colleges and universities*. <https://nces.ed.gov/fastfacts/display.asp?id=667>

- National Center for Educational Statistics [NCES] (2019b). *Definitions and data: Who is nontraditional?* <https://nces.ed.gov/pubs/web/97578e.asp>
- Paul, R., & Elder, L. (2007). Critical thinking: The art of Socratic questioning. *Journal of Developmental Education*, 31(1), 36-37. <https://www.jstor.org/stable/25827745>
- Rhee, S. K., & Rha, J. Y. (2009). Public service quality and customer satisfaction: Exploring the attributes of service quality in the public sector. *The Service Industries Journal*, 29(11), 1491-1512. <https://doi.org/10.1080/02642060902793441>
- Ritt, E. (2008). Redefining tradition: Adult learners and higher education. *Adult Learning*, 19(1-2), 12-16. <https://doi.org/10.1177/104515950801900103>
- Southern Association of Colleges and Schools Commission on Colleges [SACSCOC] (2018). *Resource manual for the principles of accreditation: Foundations for quality enhancement*. Commission on Colleges, Southern Association of Colleges and Schools. <http://www.sacscoc.org/pdf/2018%20POA%20Resource%20Manual.pdf>
- Tinto, V. (1996). Reconstructing the First Year of College. *Planning for higher education*, 25(1), 1-6. Retrieved March, 28, 2018 from <https://eric.ed.gov/?id=EJ558395>
- Thomas, D. (2014). Factors that influence college completion intention of undergraduate students. *The Asia-Pacific Education Researcher*, 23(2), 225-235. <https://doi.org/10.1007/s40299-013-0099-4>
- TN Achieves. (2019). Drive to 55: Mission workforce ready. <https://tnachieves.org/about-us/drive-to-55>
- Wiggins, J. (2011). Faculty and first-generation college students: Bridging the classroom gap together. *New Directions for Teaching and Learning*, 127(1-4). <https://doi.org/10.1002/tl.451>
- York, T. T., Gibson, C., & Rankin, S. (2015). Defining and Measuring Academic Success. *Practical Assessment, Research & Evaluation*, 20(5-7), 1-20. <https://doi.org/10.7275/hz5x-tx03>