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Experiences of African American Women in Washington State's Applied Baccalaureate Programs: A Mixed Methods Study

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Experiences of African American Women in Washington State's Applied Baccalaureate

Programs: A Mixed Methods Study

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Abstract

As the nation continues to strive for excellence in higher education at home and abroad, baccalaureate degree attainment remains a steady and consistent goal. Public community and technical colleges play a vital role in achieving this goal by offering applied baccalaureate programs at two-year institutions. These programs build upon applied associate degree programs allowing place-bound, low-income working adults with an opportunity to obtain a bachelor's degree near home. Despite Washington State being a national leader in applied baccalaureate programs, disparities in enrollment and completion for minoritized women exist. These disparities are particularly prominent for African American women.

The purpose of this mixed methods study was to explore the enrollment considerations, challenges faced, and student support services utilized by African American women in applied baccalaureate programs in Washington State. Data were evaluated with a Critical Race Theory lens to identify systemic barriers and potential solutions.

Findings indicate that African American women in applied baccalaureate programs choose such programs because of their link to industry and future career opportunities. Financial concerns, limited access to student support services and programs, and faculty's limited knowledge of instructional design and cultural responsiveness challenged participants after initial enrollment. Recommendations for the role that community and technical colleges could play in supporting future African American women in applied baccalaureate programs include 1) providing instructional design and cultural responsiveness training for faculty, 2) aligning student support services and programs with applied baccalaureate program schedules, 3) creating new services and programs that are specific to applied baccalaureate student needs, and 4) assessing institutional capacity on a broad level to identify resource needs and funding gaps.

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Programs: A Mixed Methods Study

Prompted by concerns over the United States' continued scientific and technological advancement, in 2009 President Barack Obama announced his national goal for higher education: by 2020, the U.S. would rank first among developed nations with a majority of its population holding a college degree (Zumeta, Breneman, Callan, & Finney, 2012). Recognizing that the U.S. had lost the most ground among adults aged 25 years and older, the president's broad goal was eventually revised to focus solely on the education attainment of this age group. According to Delaney and Doyle (2007), in order to reach and surpass other leading nations, the U.S. would need to increase the proportion of adults with a baccalaureate degree by approximately 4% every year through 2020. As 2020 quickly approaches, the goal was extended to add another 16.4 million baccalaureate degree holders by 2025 (Lumina Foundation, 2017).

In addition to increasing baccalaureate degrees conferred through four-year public universities, a major initiative to strengthen financial assistance and access to two-year public community and technical colleges (CTC) was launched as well. Compared to public four-year universities, CTCs serve a unique population in which students are more likely to be working adults with families, low-income, students of color, and place-bound to their geographic area (American Association of Community Colleges [AACC], 2019). Because of their interaction with this unique population, CTCs play an increasingly important role in filling the college degree pipeline by producing graduates through what are called *applied baccalaureate* (AB) degrees (Bragg & Ruud, 2011). The popularity of these professional-technical degree programs has grown substantially nationwide, with 130 community and technical colleges offering AB programs (AACC, 2019).

As an early adopter, Washington State became a national leader in the development and implementation of AB programs. After the successful pilot of several programs in 2005, the State Board for Community and Technical Colleges (SBCTC) was granted full legislative authority in 2010 to approve such degrees as needed (Ames, 2015). During the present study, the SBCTC had approved 102 AB degree programs at 29 colleges (SBCTC, 2019). Also during this study, 13 proposals were engaged in the approval process, and 13 colleges had expressed interest in 18 additional programs (SBCTC, 2019). In 2017-2018, there were 3,142 full time equivalent students (FTEs) enrolled in AB programs, representing approximately 1.8% of all FTEs in the CTC system (SBCTC, 2019).

The popularity of AB programs has been partially driven by the State's determination to "serve the needs of local and state employers to fill regional skills gaps" (Kaikkonen, 2015, p. 1). Prior to the implementation of AB degrees, most CTCs in Washington had relied upon terminal applied associate degrees, referred to Associate of Applied Science (AAS) degrees, to meet the professional needs of regional employers. While these terminal degrees were designed to directly help students get jobs, they were not designed to transfer to a public four-year university baccalaureate program. The AB degree addresses this gap by providing the equivalent of two years of upper-level division college coursework at the CTC, equal to a student's junior and senior years at a four-year public university. As part of this coursework, students also take additional general education classes beyond what they may have taken in their AAS program. Overall, AB programs are built upon an inverted structure, where higher-order thinking skills are taught in the last two years of a program as opposed to the first two years as typically taught in public four-year university baccalaureate programs (Bragg & Ruud, 2011). The impact of this inverted structure means that students immediately build upon the technical skills learned at the

associate level, transforming those technical skills into management skills and filling leadership roles in highly technical professions.

In addition to meeting employer and industry demand for highly skilled workers, AB degrees provide an important pathway to baccalaureate degree attainment for historically underrepresented students. For many of these students pursing a baccalaureate program without a public four-year university near home is challenging due to conflicting priorities of work and family (Kaikkonen, 2015). Moreover, because of their inverted structure, AB degrees cost less than baccalaureate programs at public four-year universities (Kaikkonen & Quarles, 2017). AB programs therefore provide a cost-effective avenue to degree attainment for students who may not be able to obtain one otherwise, particularly for low-income students (Walker, 2001).

Despite Washington's student-focused approach to AB program development and implementation, a recent SBCTC report indicated a 12% decline in the enrollment of women in such programs over the last five years (Kaikkonen, 2017). More troubling, the report also indicated a 3% decrease in the enrollment of African American students over that same time period (Kaikkonen, 2017). While this decrease may seem inconsequential, the total number of African American students enrolled in AB programs was never historically substantial, making the steady decrease much more troubling when compared to peer enrollments.

To further explore the implications of these demographic shifts, a cross comparison of enrollment and completion rates by gender and race revealed a significant disparity for African American women. Compared to their women peers, African American women comprised 8% of all AB enrollments in Washington, but only 5% of all completions (Kaikkonen, 2017). By comparison, Asian women represented 12% of all enrollments and completions, Native American women represented 3%, Pacific Islander women represented 1%, and

Other/Multiracial women represented 2%, respectively (Kaikkonen, 2017). Hispanic women

represented 12% of all enrollments and 13% of all completions (Kaikkonen, 2017). Similarly,

White women represented 61% of all enrollments and 65% of all completions (Kaikkonen,

2017). While the total numbers of women in certain demographic groups were low overall,

according to Kaikkonen's (2017) report, "colleges should pay careful attention in particular to

African American student's experiences as this group has seen a decline in enrollment over the

past several years… This in combination with fewer completions suggests an opportunity for

improvement with respect to the [AB] degree program adequately meeting the needs of those

students" (p. 7).

Operational Definitions

The impacts of gender and race/ethnicity on student sense of belonging is a recurring

theme of discussion throughout this study. Scholars such as Gloria Ladson-Billings (1998),

Kimberle Crenshaw (1989) and others assert that biological differences between people from

differing races is a social construction (Delgado & Stefancic, 2012). With this in mind, the term

African American women is used throughout this study to refer to AB students in Washington

State who self-identified as women and as African American or another Black population such as

African, Afro-American, and/or Multiracial Black. The term *minoritized* is also used throughout

this study to support contemporary, anti-deficit language that calls attention to the "structural and

institutional actions that have over time limited access to, and led to a lack of presence among"

certain populations of students (Benitez, 2010, p. 131). It is also used to reflect an understanding

of *minority* as a status which is socially constructed in specific contexts, such as in the broader

systems of higher education, and supports the development of a common language to promote an

access-for-all approach to higher education research (McGee & Bentley, 2017).

Additionally, throughout this study, the following definitions are provided for the understanding of key terms:

- Applied Baccalaureate – A two-year, minimum 90 quarter credit, program consisting of 300 and 400-level upper division college coursework conferred by a community or technical college. In Washington AB degrees are referred to as Bachelor of Applied Science (BAS) degrees and umbrella Bachelor of Science in Nursing (BSN) degrees as well. All AB programs build upon a technical Associate of Applied Science degree.

- Associate of Applied Science – A two-year, minimum 90 quarter credit, program consisting of 100 and 200-level lower division college coursework conferred by a community or technical college. In Washington the technical AAS is used as the foundation for the AB program.

- Public four-year university – Institutions where baccalaureate degrees represent at least 50 percent of all degrees. May also confer master's and doctoral degrees.

- Public two-year community and/or technical college – Institutions where associate degrees represent more than 50 percent of all degrees. May also confer AB degrees.

Interest in Study

The research presented in this study was of particular importance to me because of my professional involvement with AB programs. Over the last five years I have personally developed and implemented two AB programs at a local technical college in Washington. This experience allowed me to see first-hand the positive impact that such programs have on the lives of CTC students. I was also involved in the organization and development of the Baccalaureate Leadership Council (BLC), comprised of AB program staff and faculty from all 34 colleges in the SBCTC system. While I feel a strong connection to the BLC and AB programs in general, it

must be noted that my involvement in both places me in a position of power. Moreover, I am a White woman who comes from an upper-middle class socioeconomic background. My academic and personal life experiences are different from those of the study population. My influence and position of power must be noted as it the lens with which I operate.

As an educational leader, I also have a deep sense of social justice. While all students deserve to have a quality educational experience, I am particularly interested in supporting women in community and technical college programs. Over the last five years, women comprised a 55% majority of all enrollments in the CTC system (SBCTC, 2018). Similarly, the percent of minoritized students continues to increase, from 41% of all students in 2013-14 to 46% in 2017-18 (SBCTC, 2018). While both demographic groups participate in AB programs at an equivalent or higher rate than in CTC programs in general, not all colleges show women and minoritized students as earning degrees at a rate equivalent to their participation rate (Kaikkonen, 2015). Moreover, African American women in particular are increasingly characterized as lacking the skills and abilities necessary to succeed in such programs (Green, 2007). This deficit model likens the problem of underrepresentation of African American women in AB programs to student-level characteristics, such as ability and motivation; however, the varying degrees of success that African American women realize in AB programs highlights the importance of institution-specific factors that may constrain and inhibit their success (Malcom & Malcom, 2011). The research questions for this study were therefore developed with this unique population in mind. Moreover, the questions likely would have differed had the study focused on a different population. The intention behind the research questions was to 1) document the experiences of African American women in Washington's AB programs, 2) share aggregate

findings with BLC membership, and 3) support development of equitable and inclusive best

practices for AB programs across the CTC system.

Problem Statement

African American women in Washington's AB programs are disproportionally

underrepresented in enrollment and completion rates when compared to their peers (Kaikkonen,

2017). Yet enrollment and completion data do not tell the full story of why such disparity exists

and why it has increased over the last five years. The purpose of this study was to understand

why African American women choose to enroll in AB programs and what challenges they face

after they enroll that may impact their ability to complete their program. A secondary purpose of

this study was to explore which institutional supports African American women currently utilize

as well as elicit feedback on additional supports they may use if offered. This study employed an

online survey as well as one-on-one interviews to allow as many African American women as

possible to participate in the study as well as tell their stories in their own words and from their

own perspectives. Themes developed through student voice and storytelling were evaluated

through a Critical Race Theory (CRT) lens to develop potential solutions to challenges and build

recommendations for AB program improvement.

Justification of Research

Although AB programs are not new to the research landscape, research on the experience

of women in AB programs is nonexistent. Moreover, research on the experience of minoritized

groups such as African American women in AB programs is equally nonexistent (Bragg & Soler,

2016). A search of the Community College Baccalaureate Association (CCBA) website resulted

in nearly 429 articles associated with varying topics about AB programs, yet none focused on

women or African American women and their experiences in such programs. Another search of

ProQuest Dissertations and Theses Global (PQTD Global) and Education Information Resource

Center (ERIC) turned up little information on the topic. Of the articles and research reports

found, most primarily focused on the cost effectiveness of AB degrees (Bemmel, 2008), whether

such degrees met employer and industry demand (Shah, 2010), the impact or effect of AB

degrees on wage and postsecondary earnings (Cominole, 2017; Kaikkonen & Quarles, 2017),

administrative personnel and faculty perspectives (Ames, 2015; Geisinger, 2017; Petrosian,

2010; Petry, 2003), employer perspectives (Grothe, 2009; McKee, 2001), the value-added by

different types of vocational training (Dadgar & Trimble, 2014; Jepsen, Troske, & Coomes,

2014; Xu & Trimble, 2016), and institutional supports related to the library (Coslor, 2015). Of

the limited number of dissertations and articles found that were related to AB student and

graduate perspectives (Donohue, 2010; Grothe, 2009; Kujawa, 2012; Shah, 2010), none

exclusively addressed the experiences of just women or just minoritized women.

　　　Recognizing the need to support minoritized students in AB programs, Washington's

BLC approved the development of an equity subcommittee in early 2017 (SBCTC, 2017). Prior

to its formation in 2016, the BLC had met informally to support CTCs in the development of AB

program best practices. Today, the BLC continues to set policy and procedure for AB programs

and through its official work plan develops and enforces those best practices. The initial purpose

of the equity subcommittee was to "gather data and provide recommendations for promoting

equity in applied baccalaureate programs" (SBCTC, 2017, para. 24). Since then, the

subcommittee's mission has expanded to include the use of research and data to further identify,

develop, and share best practices specifically related to the promotion of diversity, equity, and

inclusion within AB programs and the support of baccalaureate attainment for students from

diverse backgrounds (J. Cooley, personal communication, January 29, 2018).

Although addressing equity gaps is not specifically called out in the BLC work plan, the SBCTC Instruction Commission (IC), which oversees the BLC as well as several other instruction-related Councils, updated its work plan in 2017 to include language regarding diversity, equity, and inclusion. Under the objective of ensuring equitable access and outcomes for students in AB programs, one strategy listed is to "[e]amine the participation and success rates of [AB] degrees for historically underserved populations" (SBCTC, 2018, p. 7). The work plan also states that IC will "[d]evelop and promote [AB] pathways with embedded supports targeted to ensure equitable outcomes for historically underserved populations" (SBCTC, 2018, p. 7). To do this, IC will "[c]onsider qualitative and other kinds of data to identify context behind equity gaps" (SBCTC, 2017, p. 7). This study therefore aimed to assist CTC system leadership in understanding why disparities exist, particularly among African American women, and how institutions can address barriers through current and potential institutional supports. Indeed, CTC leaders are called upon by the SBCTC (2019) to "offer an open door to every citizen, regardless of his or her academic background or experiences" ("Increasing Educational Pathways," para. 3).

Theoretical Framework

This study used a CRT lens to understand the context in which African American women in AB programs operate. CRT was useful for this purpose because at its core CRT examines issues of racism and educational inequality. The CRT framework is comprised of many tenants, including storytelling, the permanence of racism, Whiteness as property, interest convergence, intersectionality, and the critique of liberalism (DeCuir & Dixson, 2004; Hiraldo, 2010; Ladson-Billings, 1998). CRT also assumes no universal experience, making it a leading framework for similar research regarding African American women in undergraduate baccalaureate programs

(Espinosa, 2011; Johnson, 2011; Ong, Wright, Espinosa, & Orfield, 2011). Using a CRT lens, this study focused on the tenants of intersectionality and storytelling.

Intersectionality is the analysis of racism and its intersection with other forms of oppressions such as sexism, classism, and homophobia (Delgado & Stefancic, 2012). It is "the predicament of women of color and others who sit at the intersection of two or more categories" (Delgado & Stefancic, 2012, p. 7). Intersectionality also examines how class, race, gender, and sexuality operate as an interacting system of oppression. Crenshaw (1989) describes it as "double-discrimination – the combined effect of practices that discriminate on the basis of race, and on the basis of sex" (p. 44). Along these same lines, Malone and Barabino (2009) coined the term "integration of identities" to describe how undergraduate programs are constructed for White students, leaving African American women to bear the brunt of countering the oppressive situations they face. Because of this, African American women are often stuck between their identities as women and students of color (Malone & Barabino, 2009).

Ro and Loya (2015) used similar language in their investigation of the differences in undergraduate learning outcomes for African American women compared to those of White women. They coined the term "double effect" to explain the crossroads of how gender and race impacts learning outcomes. The double effect places African American women at twice the disadvantage as their White women counterparts, because African American women "assess their abilities in certain skills lower than the majority group. This is important in White male dominated fields, where the systems in place might be perpetuating privilege and advantages to the majority group" (Ro & Loya, 2015, p. 367).

Similarly, Ong et al. (2011) and Johnson (2011) used the term "double bind" to develop the concept that unlike White women, African American women in undergraduate programs are

met with both racism and sexism. As Johnson (2011) eloquently explains, "[college] culture is identified with notions of Whiteness and masculinity, even though it' is portrayed as being objective and neutral regarding issues of racial, ethnic, cultural, and gender differences" (p. 81). The double bind also includes isolation and lack of faculty support, especially when it comes to the dissemination of knowledge. Johnson (2011) found that "faculty often actively discouraged discussion of diversity issues in class, which left women of color feeling silenced and ignored" (p. 81).

CRT purposefully and intentionally calls upon researchers not to treat women as one homogenous group, contending that to do so "obscures important dimensions of women's experiences and fosters the notion of a universal gender experience among women" (Johnson, 2011, p. 75). CRT instead urges researchers to create a space within which minoritized students can talk about their experiences first hand through *storytelling* (Delgado & Stefancic, 2012). Storytelling recognizes and celebrates women's diversity and acknowledges the challenges it presents (Tong, 2014). Moreover, it explicitly supports the notion that categorizing all women's experiences as the same is "neither natural, nor essential, but socially constructed" (Sinnes & Loken, 2014, pp. 353-354). In this way, CRT frames gender and sex differently, with gender being socially constructed within and across national and social movements. For example, Collin and Bilge (2016) detail how African American women in the United States have had to incorporate discussions about gender into already prevailing race and class arguments of the Black nationalist movement, as well as incorporate race and class into the feminist movement. They explain that minoritized women have distinct histories from one another, "yet their activities and intellectual work have been shaped by collaboration" (Collin & Bilge, 2016, p. 93). Storytelling thus allows for the analysis of the interconnectedness of race, class, gender, and

sexuality as systems of power within and across individual and social contexts.

For these reasons, CRT provided a solid theoretical foundation for this study. Indeed, as Martella, Nelson, Morgan, and Marchand-Martella (2013) note, "[i]f we want to know what occurs in a participant's life…low-constraint research can tell us what will happen in an applied context, such as in a classroom" (p. 34). By providing African American women with the opportunity for storytelling, this study developed a holistic understanding beyond disparities in data to add context to the problem that would not otherwise be gained.

Literature Review

Although research on the experiences of minoritized women in AB programs is nonexistent, a plethora of literature exists pertaining to the experiences of minoritized women in undergraduate programs in general (e.g., Cech, Rubineau, Silbey, & Seron, 2011; Hanson, 2007; Huang, Taddese, Walter, & Peng, 2000; Kolo, 2016; Tate & Linn, 2005). Reviewing this greater collection of research provides context for understanding the challenges and systemic barriers that minoritized women face within the larger educational system. Moreover, by their very design, AB programs are situated within this larger educational system and possess many of the same systemic barriers for minoritized women as public four-year universities (Chao, DeRocco, & Flynn, 2007). Understanding the larger framework of research therefore assists in the understanding of similar challenges and barriers faced by African American women in AB programs.

A meta-analysis by Ong et al. (2011) revealed that from 1970 to 2009 there were 116 published empirical papers related to factors that influence the enrollment, retention, and achievement of minoritized women in undergraduate programs. Of the 116 studies, 33% utilized qualitative methods (ethnographies, case studies, interviews, and phenomenological studies),

57% employed quantitative methods (descriptive, experimental, and quasi-experimental studies),

and 8% used mixed method research designs (Ong et al., 2011). The authors noted that early

research focused primarily on biological explanations for the underrepresentation of minoritized

women in undergraduate programs, claiming that they are biologically less inclined towards

certain types of baccalaureate programs (e.g., science, technology, mathematics, etc.). Beginning

in the late 1970's, research shifted away from the biological argument to one that focused on the

undergraduate environment as "hostile to women given its historical jurisdiction by White men

and documented androcentric, ethnocentric, and absolutist culture," (Espinosa, 2011, p. 210).

With this broader understanding of how the undergraduate environment perpetuates

negative stereotypes within the larger educational context, more recent research has focused on

institutional deficiencies that contribute to the challenges minoritized women face. A broad

review of the literature reveals three core themes that directly impact the enrollment and

completion of minoritized women: Faculty-student relationships (e.g., Shapiro & Sax, 2011),

institution type (e.g., Espinosa, 2011; Griffith, 2010), and a sense of belonging (e.g., Carlone &

Johnson, 2007; Johnson, 2011).

Faculty-Student Relationship

A large collection of quantitative and qualitative research concentrated on the importance

of the faculty-student relationship and the quality of instructional pedagogy, with specific

attention paid to the way in which faculty contribute to stereotype threat (Ong et al., 2011).

Stereotype threat is the "idea of a situational predicament as a contingency of group identity, a

real threat of judgment or treatment in the person's environment" (Steele, 2010, pp. 59-60). In

their quantitative study examining stereotype threat in undergraduate programs, Schmader,

Johns, and Forbes (2008) found that the psychological threats that prevent recruitment of

minoritized women were different from those that prevent retention. They concluded that

negative stereotypes about minoritized women's abilities were less of a concern for women who

had yet to identify with a major than they were for women who were already in a program.

Despite being in the same classroom with other intelligent, highly skilled students, minoritized

women have different experiences because of their unique group identity. For example, Thomas,

Wilson, and Watkins (2014) documented an experience of one minoritized woman who shared

that a mentor once rewrote an entire article that she had written, keeping the high-level ideas

intact but rewording almost every sentence. The woman recounted:

> If I had not had several other positive and glowing affirmations of my writing ability, this
>
> experience could have seriously undercut my confidence... This instance wasn't novel or
>
> unique to me. I have heard many stories of women of color who have been told verbally,
>
> nonverbally, overtly, covertly and subliminally that they aren't good enough. This blatant
>
> untruth is what undermines the progress of women of color (Thomas et al., 2014, para. 8).

Shapiro and Sax (2011) noted that because undergraduate courses are often taught in a large,

lecture format, fierce competition leads to the exclusion of minoritized women. This system of

exclusion discouraged collaborative work, negatively affecting minoritized women who tended

to gravitate towards and thrive in collaborative work spaces (Diekman, Brown, Johnston, &

Clark, 2010; Diekman, Clark, Johnston, Brown, & Steinberg, 2011; Morgan, Isaac, & Sansone,

2001). Indeed, Besterfield-Sacre, Moreno, Shuman, and Atman (2001) found that women placed

a higher value than men on oral communication skills, and that women more often relied on

interpersonal sources for information gathering. Charleston, George, Jackson, Berhanu, and

Amechi (2014) confirmed that such unsupportive climates led to further social stratification and

low expectations of African American women.

Understanding that faculty perspectives have long-lasting effects on the learning experiences of students, positive faculty-student interactions were found to support a welcoming environment that encouraged minoritized women towards degree completion (Gayles & Ampaw, 2011; Johnson, 2011; Malone & Barabino, 2009; Ro & Loya, 2015; Sax, Kanny, Riggers-Piehl, Whang, & Paulson, 2015). Similarly, Espinosa (2011) called on faculty to encourage students to question the role of power, align theoretical concepts with real-world scientific problems, and increase interpersonal collaboration among students inside and outside the classroom. Professional development authors Jackson, Hillard, and Schneider (2014) likewise concluded that "men and women in academia may have egalitarian beliefs, but if they fail to recognize that they possess discrepant implicit associations or if they do not understand the effect these implicit associations can have, they can inadvertently engage in discriminatory behaviors" (p. 421). Finally, Charleston et al. (2014) emphasized that "in order to create more inclusive learning spaces for Black women, faculty…should more critically examine their own prejudices and biases" (p. 173).

Institution Type

Much like faculty-student relationships, college choice and institution type was found to impact the experiences of African American women in undergraduate programs. As Campbell (1996) states, "failure to solve the attrition problem stems, in part, from an overemphasis on the student deficit model and under-emphasis on institutional deficiencies" (p. 10). Factors found to impact enrollment and completion of minoritized women include whether they attended a public versus private institution, the level of selectivity in the admissions process, the ratio of undergraduate to graduate students, the emphasis or non-emphasis on research, and whether the

institution was predominately White or historically black (Espinosa, 2011; Gayles & Ampaw,

2011; Gayles & Ampaw, 2014; Griffith, 2010; Ong et al., 2011).

Espinosa (2011) found that attending a private institution was a positive predictor of

persistence, indicating that minoritized women who attended a private college were nearly 10%

more likely to complete their degree than those who attended a public institution. Minoritized

women at institutions with more undergraduate students relative to the number of graduate

students were also more likely to complete, suggesting that "institutions with a focus on

undergraduate education are more successful in retaining their undergraduate majors" (Griffith,

2010, p. 3). Along these same lines, Griffith (2010) found that minoritized women at colleges

with large research expenditures relative to total educational expenditures had lower completion

rates. However, other research suggested that the opportunity to conduct undergraduate research

was positively related to degree completion for minoritized women (Carpi, Ronan, Falconer, &

Lents, 2016; Doerschuk, et al., 2016; Espinosa, 2011; Ong et al., 2011; Toven-Lindsey, Levis-

Fitzgerald, Barber, & Hasson, 2015). Commitment to the institution as a whole and attending

college full time were also found to be a positive indicator of completion (Gayles & Ampaw,

2014; Toven-Lindsey et al., 2015).

Compared to public four-year universities, small liberal arts colleges, CTCs, and

historically black colleges and universities (HBCUs) were found to provide a supportive climate

for minoritized women, particularly because of their "openness toward alternative routes into the

major, a lack of stigma for remedial course work, high expectations for student success, and a

supportive and healthy relationship between students and faculty" (Ong et al., 2011, pp. 182-

183). By facilitating close interaction between faculty and students through applied programs,

CTCs in particular have been found to have "contributed strongly to… expanding minorities'

postsecondary education opportunities" (Huang et al., 2000, p. 15).

Sense of Belonging

Development of a sense of belonging in college is in part based on understanding "social

and familial contexts and how those shape and interact with [student's] educational experiences"

(Knaus, 2005, p. 2). Indeed, parental involvement in college choice, expectations of completing

college, and assistance with funding have all been found to impact the enrollment and

completion of minoritized women in undergraduate programs (Buschor, Berweger, Frei &

Kappler, 2014; Gayles & Ampaw, 2011; Kolo, 2016). Similarly, dependent status, household

structure (e.g., single or two parent home), socioeconomic status, and residency status have been

found to impact African American women in particular (e.g., Espinosa, 2011; Gayles & Ampaw,

2011; Perna, et al., 2009).

Sense of belonging also refers to "students' perceived social support on campus, a feeling

or sensation of connectedness, [and] the experience of mattering or feeling cared about"

(Strayhorn, 2012, p. 3). This cognitive evaluation of how a student feels about how they 'fit'

within the larger campus community and/or is viewed by others on campus is what leads to a

particular response or behavior, such as deciding to stay or leave an undergraduate program.

Indeed, sense of belonging is "a critical aspect in retaining all students and particularly students

of color" (Maestas, Vaquera, & Zehr, 2007, p. 238). Anderman and Freeman (2004) also noted

that sense of belonging takes on a heightened significance for minoritized students, who are

already in an environment where they may feel marginalized, unsupported, or unwelcome. This

was found to be particularly true for minoritized women, who, because of their intersectionality

and unique social and familial contexts, are often considered to be competent and able to perform

but receive the least amount of recognition for their efforts (Carlone & Johnson, 2007; Espinosa, 2011; Strayhorn, 2012). *Competence* refers to a student's perceived grasp of concepts and material; *performance* pertains to experiences that can be measured, such as a grade on an exam; whereas recognition refers to a student being recognized for their contributions in the classroom and to the institution overall (Carlone & Johnson, 2007; Espinosa, 2011).

Further research linked the importance of recognition with self-perception and self-efficacy (Hazari, Sadler, & Sonnert, 2013; Johnson, 2011). Johnson (2011) contended that "less-than-positive perceptions of the broader racial climate on campus negatively contributed to overall sense of belonging… This sense of belonging affected how women of color developed and maintained their identity" (p. 80). Other research focused not just on a sense of belonging, but also on what contributed to or hindered that sense of belonging. Examples of hindrances included being excluded from classroom discussions, being left out of campus clubs and organizations, going unrecognized for one's work, and being omitted from hands-on classroom activities (Aschbacher, Li, & Roth, 2010; Carpi et al., 2016; Eddy & Brownell, 2016). Malone and Barabino (2009) also called attention to discrimination in the form of racialization, such as when a minoritized woman's idea is passed over for one expressed by a White student. They explained that "the prospect of being valued (for one's talent, for bringing diversity, for skills) may be promissory during recruitment, but it may or may not be sustained at later stages in one's education" (Malone & Barabino, 2009, pp. 496-497).

Research suggested that one way minoritized women combated negative sense of belonging was to vigorously seek out academic and personal support through networking and mentoring opportunities (Ong et al., 2011; Tinto, 2012). These relationships served to bolster their confidence as well as their determination to persist to completion. Mentors often took the

form of parents, faculty and peers, and did not necessarily have to be of the same gender and

racial/ethnic background (Ong et al., 2011). Indeed, Shain (2012) found that while their cultural

identity was important to their educational experience overall, African American women did not

place a high emphasis on the cultural background of their mentor. Finally, Fuller and Meiners

(2005) found that minoritized women valued institutional settings where they could contribute to

the community at large, providing them with support and encouragement to succeed. Networking

opportunities such as tutoring and student groups, as well as the level of ease of adjustment to

college life, have also been found to impact minoritized women's sense of belonging (Strayhorn,

2012).

Applying the Larger Context to AB Programs

As noted earlier, African American women in AB programs face many of the same

challenges as African American women in public four-year universities, especially pertaining to

faculty-student relationships, racialized discrimination, and limited access to student support

services and programs (Chao et al., 2007). Although CTCs were found to be functioning well in

terms of offering programs that meet the needs of minoritized students (Huang et al., 2000),

"history has borne out the reality that programs intended to serve women disproportionately

benefit White women, and programs intended to serve minorities mainly benefit minority males"

(Ong et al., 2011, p. 176).

In their meta-analysis of research on AB programs, Bragg and Soler (2016) note the need

for more research at the community college level about AB programs. They concede that some

missing or ambiguous information about AB degrees is understandable due to their relatively

new emergence, but that it is "time for these degrees to come out of the shadows" in a more

thorough and meaningful way and that it is "imperative that institutions participate in this

research" (Bragg & Soler, 2016, p. 65). Moreover, the authors specifically call for more research on "diverse students who enroll in AB programs, on their experiences as learners and graduates of these programs, and on the various outcomes that they achieve" (Bragg & Soler, 2016, p. 65).

Methodology

This study employed a mixed methods design using an online survey and one-on-one interviews to examine the educational experiences of African American women in Washington's AB programs. The purpose was to better understand what attracts African American women to enroll in AB programs and what challenges they face after initial enrollment. The secondary purpose was to explore what types of institutional supports African American women in AB programs currently utilize, and what types of institutional supports they might utilize if not currently provided. Implications of this study are to highlight participant-identified barriers to AB program completion and to highlight ways in which institutions may contribute to and overcome such barriers. Voices of current African American women in AB programs were analyzed to form recommendations for increasing institutional roles in educating future African American women in AB programs.

Research Questions

1. What attracts African American women to enroll in Washington's AB programs?

2. What challenges do African American women face after enrolling in an AB program?

3. What types of institutional supports do African American women currently utilize to overcome those challenges?

4. What additional supports could institutions provide to help African American women overcome those challenges?

Research Purpose

The primary purpose of this study was to explicitly identify the systemic barriers African American women face in AB programs and the roles that CTCs played in creating and overcoming those barriers. This purpose was met by creating an avenue for African American women to share their experiences and perspectives as AB students. Data methods included a participant survey and structured participant interviews.

The research met its aims by 1) detailing the most common enrollment considerations for African American women in AB programs, 2) detailing the most common challenges and systemic barriers African American women face after enrolling in an AB program, 3) detailing the institutional student support services and programs most frequently utilized by African American women in AB programs, 4) describing new services and programs African American women in AB programs might use if offered, and 5) recommending potential changes that CTCs could make to assist future African American women in AB programs. The goal of the research was to document and describe structures and practices which support and challenge African American women seeking to enter and complete an AB program in Washington State.

Research Design

This study employed an explanatory sequential design which began with quantitative methods followed by qualitative methods to explain the quantitative results in more depth (Creswell, 2015). Mixed methods are particularly popular in the areas of applied social research and program evaluation because they allow the researcher to obtain two different perspectives of the same problem (Cameron, 2009). Although any study may suffer potential errors in conclusions due to poor design or approach to one or both methods, "the ultimate goal of developing a better understanding and explanation of the social world comes from an appreciation of what each has to offer" (Neuman, 2006). Explanatory sequential design was

therefore useful for this study because it allowed for distinct and easily recognizable stages of

conducting the study within a short timeframe. More importantly, the design was chosen based

on the intent to produce some level of generalization while also allowing for in-depth insight into

the study population. As Martella et al. (2013) note, "if researchers can come to the same

conclusion using different methods, the conclusions are more likely to be accurate" (p. 317).

Quantitative. The first phase of the design consisted of an online survey (see Appendix

A). Survey research was appropriate for this study because the nature of the research questions

sought to explore and investigate phenomena not previously studied (Fowler, 2009). An online

survey was also appropriate for this study because of the unique population under consideration,

which was small enough to include the entire population but dispersed across a large geographic

area (i.e., Washington State) (Martella et al., 2013). After responses were captured from the

survey, descriptive statistics (e.g., frequencies, mean, median, mode) and multiple response

analysis were used to describe trends and develop a summary of results.

Qualitative. Using survey results as a basis for further exploration, the second phase of

the study consisted of structured interviews, also called standardized open-ended interviews,

with a smaller sample of the population. Interviewing allows direct interaction between the

researcher and participant and captures the complexities of individual perceptions and

experiences (Patton, 1990). Structured interviews were used to ensure that each interview

participant was asked the same set of pre-developed, open-ended questions (see Appendix B).

The purpose of using this method over another was to ensure efficiency in obtaining information

given the short timeframe for data collection. In addition, interviews were focused and

simplified, minimizing the timeline for coding and theme generation. This method also allowed

for questions on the interview instrument to be updated as needed based on the results from the

first phase of the design. The interview instrument was available to participants prior to the

interviews, building trust between the researcher and participant (Martella et al., 2013).

Interviews embraced the theme of capturing African American women experiences as explored

through participant voice and exploration of the CRT tenants of intersectionality and storytelling

(Delgado & Stefancic, 2012).

Participants

Participants for this study included CTC students enrolled in the Fall 2018 quarter who

were at least 18 years of age, and who self-identified as women and as African American. Of the

166 African American women enrolled in AB programs in Fall 2018 (Kaikkonen, 2018), 123

completed the online survey. Seven participants took part in follow up interviews. Institutional-

level enrollment data was collected from the SBCTC to identify institutions and specific AB

programs where participants were enrolled. Colleague connections through the BLC were used

to share the survey link with participants via email. Survey participants were asked for their

institutionally-provided email address which served as the primary modality for interview

participant recruitment. Each participant that provided an institutional email address was given a

$5.00 Amazon gift card via that email address for participating in the survey.

Recruitment. Participants were recruited for the online survey via email through BLC

colleague connections which included AB program faculty, staff, and administrators. At the

conclusion of the online survey, participants that had provided an institutional email address

were invited to participate in a follow up, one-on-one interview. From the limited number of

responses, seven were willing to participate in an interview. Each identified participant was

provided an informed consent form (see Appendix C) and a copy of the interview questions prior

to meeting in person. Interviews took place off campus from the participant's identified CTC.

Data Collection

Data collection was conducted in two stages: an online survey and structured participant interviews. Potential research participants were identified through SBCTC enrollment data and BLC colleague connections. Survey responses provided high-level information regarding considerations for AB program enrollment, types of challenges faced after initial enrollment, types of institutional supports utilized, classroom experiences, and issues with racialized discrimination. Follow up interviews explored each participant's journey through her AB program. The interviews also delved into participants' specific CTC experiences and recommendations for improving the AB pathway. Through this two-phase data collection process, diverse and parallel perspectives were explored and revealed.

Survey. The Diverse Learning Environments Survey (DLES), developed by the Cooperative Institutional Research Program (CIRP) and housed within the Higher Education Research Institute (HERI) at the University of California Los Angeles (UCLA), was used as the survey instrument for this study (HERI, 2018). The DLES is an online survey that is used by two- and four-year higher education institutions to evaluate campus climate; collect information about institutional practices; assess institutional strengths and identify areas for improvement; track progress related to diversity efforts; and disaggregate student perceptions and experiences by different social identities, including race, gender, sexual orientation, religion, ability/disability status, socioeconomic status, and military/veteran status (HERI, 2018). The instrument includes core questions as well as optional modules and is designed to be administered to students in their sophomore, junior, and senior years. For the purposes of this study, core questions as well as questions from the Classroom Climate optional module were used and found to be highly reliable (18 items; $\alpha = .88$).

The survey was provided to potential participants via their CTC email address. A link to the survey was included in the recruitment email, which included an explanation of the purpose and use of the survey, researcher contact information, confidentiality statement, and a statement of how important participant response was to the success of the survey. The initial timeframe for participant response collection was three weeks. This timeframe was extended by two weeks due to additional Institutional Review Board (IRB) requirements at several colleges. Survey information was captured through the use of Google Forms provided through the University of Washington's (UW) password-protected Google Drive.

The purpose of the survey was to determine considerations for AB program enrollment, educational experiences with specific questions focused on experiences with AB program faculty and staff, and the types of institutional supports utilized by the population. The survey took approximately 15 minutes to complete and included three sections with dichotomous as well as Likert scale questions. Section one included demographic questions, such as college email address and name of the participant's CTC and AB program. Section two involved institutional support services information, such as the types of academic programs participants utilized and how often. The third section included questions related to campus climate/campus experience information, including questions regarding direct experiences with discrimination on campus and in the classroom. Email addresses collected from survey participants were used to identify potential interview participants.

Interview. Interview protocol developed by Soler and Bragg (2016) in support of the Office of Community College Research and Leadership (OCCRL) was used as the basis for the structured interviews. The OCCRL is a national leader in AB research and is located at the University of Illinois at Urbana-Champaign. The protocol was developed by the research team

"to measure AB degree program outcomes at various levels that may be useful for future

evaluations of AB degrees" (Soler & Bragg, 2016, p. 18). Permission to use and update the

protocol was granted by Dr. Bragg and Dr. Soler through personal electronic communication (D.

Bragg, personal communication, February 23, 2018).

Berg & Lune (2011) states that interviews are an effective instrument when the

researcher is interested in "understanding the perceptions of participants or learning how

participants come to attach certain meanings to phenomena or events" (pg. 115). The purpose of

the structured interviews was to not only triangulate data collected from the survey, but to also

provide an opportunity for participant storytelling. My goal was to understand the underlying

factors and causes of each participant's unique AB experience and the role that her CTC played

in that experience. Specifically, I was interested in the motivation for choosing an AB program,

the reasons for perceived challenges and how those challenges had or had not been overcome,

the types of support services utilized as well as those not utilized and why, and the types of

institutional and programmatic improvements needed to support future African American women

in AB programs.

Pre-Interview. Prior to each meeting with identified interview participants, I emailed

individual participants to thank them for participating in the online survey and informed them of

the opportunity to provide additional feedback through an interview. This recruitment email also

included a reminder of the purpose of the survey, confidentiality statement, researcher contact

information, and a statement of how important each participant's voice was to the research.

Seven participants responded to the recruitment email. Each of the seven respondents was

provided with the interview questions and informed consent form prior to our meeting. The

purpose of each pre-interview email was to prepare the participant for the face-to-face, structured interview as well as provide time for review and questions.

Structured interview. One structured interview was conducted for each participant. Interviews were conducted at a mutually-agreed upon location offsite from the participant's college campus. Interviews were recorded using a digital recorder. Interviews explored the participant's pathway to her AB program, including her social and familial contexts, as well as preparation received from her associate degree program. Also explored were perceptions of AB program faculty and staff, as well as challenges faced and how each participant had or had not overcome those challenges at the time of the interview. Finally, interviews clarified first phase data analysis and explored recommendations for additional college and program supports.

Each interview began with my appreciation for participation and an explanation of the study's purpose. Each participant was provided with a printed copy of the informed consent form and interview questions, and was given time to ask questions as needed. I attempted to develop and build trust with each participant by acknowledging that my race and ethnicity provided me with different experiences than the participants. I also acknowledged my professional association with AB programs. I believe I built trust through the genuine acknowledgement of this context.

Data Analysis

Quantitative. Survey response data was analyzed using descriptive statistics. Package for the Social Sciences (SPSS) was used to conduct frequency scores of means (*M*), medians (*Mdn*), modes (*Mode*), standard deviations (*SD*), and percentages (*%*). Mean substitution, in which missing values on a variable are replaced by the average of the observed values for that item, was used to account for missing responses. When used with 5% or less missing data, mean substitution has been found to be as efficient as other missing data techniques, especially when

used with dichotomous and Likert-type data (Dodeen, 2003; Rubin, Witkiewitz, Andre, & Reilly,

2007). Multiple response analysis was also used as a frequency analysis for several dichotomous

survey questions (i.e., yes/no responses). Multiple response occurs when there can be more than

one response to a survey question per participant (e.g., check all answers that apply). Rather than

treat each dichotomous response as a separate variable, multiple response analysis "allows the set

of responses to be combined and collectively analyzed" (Zhang, Zhang, Wang, Yang, & Zhao,

2017, p. 3).

      Qualitative. Analysis of interview transcript data followed a modified grounded theory

process (e.g., Glaser, 1992; Strauss & Corbin, 1998). Grounded theory was appropriate for this

study because it is both a method for identifying concepts and categories within qualitative data

(e.g., interview transcripts) as well as a method for linking and establishing relationships

between categories. Traditional grounded theory employs "a systematic set of procedures to

develop an inductively derived theory about a phenomenon" (Strauss & Corbin, 1990, pg. 24).

The end-product of the categorizing process is thus the development of a theory that is

"grounded" or rooted within the original data (Saldana, 2016). Moreover, because traditional

canon requires that analysis be directed towards theory development, grounded theory also

requires a meticulous analytic process of coding data (Holloway & Todres, 2003). Coding refers

to the process of analyzing data for the purposes of "breaking down, examining, comparing,

conceptualizing, and categorizing data" (Strauss & Corbin, 1990, pg. 61). While there have been

numerous versions of grounded theory since its inception (e.g., Charmaz, 2002; Glaser, 1978;

Glaser & Strauss, 1967; Strauss, 1987; Strauss & Corbin, 1998), each employs a systematic

approach to coding and category identification while attempting to generate a plausible and

useful theory of the phenomena (McLeod, 2011).

For the present study, two cycles of systematic coding procedures were used to identify patterns within the data towards the development of themes. A theme is defined as "an extended phrase or sentence that identifies what a unit of data is about and/or what it means" (Saldana, 2016, pg. 199). Themes capture the recurrent patterns within the data which then provide the basis for experiences to be described as a meaningful whole (DeSantis & Ugarriza, 2000). While assertions and recommendations were made based on the themes identified, theory development was not a focus of this study due to its complex and time-consuming nature. Quirkos, a Computer Assisted Qualitative Analysis (CAQDAS) software package, was used to store and code interview transcript data. Each transcript discussion was considered separately. Analytic memo writing was also employed to document and reflect upon the analysis process. Finally, a codebook was developed to maintain a list of all codes created for the project (see Appendix D).

First cycle coding involved the well-established methodology of *initial coding* (Charmaz, 2014), also called *open coding* (Saldana, 2016; Strauss & Corbin, 1990). Initial coding is an open-ended approach to coding data into discrete parts, allowing the researcher to closely examine and compare them for similarities and differences (Saldana, 2016). For this study, detailed, line-by-line coding was used as outlined by Charmaz (2014) and Salanda (2016). Initial codes were tentative and reworded as needed as analysis progressed. Analyses were focused upon the four research questions. Alignment of the research questions with analysis resulted in the development of ten initial codes: Enrollment Considerations, Goals, Challenges, Challenges Addressed, Institutional Supports Used, Institutional Supports Desired, Resources Used, Perceptions of Faculty, Perceptions of Staff, and Recommendations. These initial codes were the foundation for the various codes described in Appendix D.

After an additional cycle of *subcoding*, which is employed "after an initial yet general coding scheme has been applied… and the researcher realizes that the classification scheme may have been too broad" (Saldana, 2016, pg. 92), a second round of *focused coding* was used to further develop major categories, subcategories, and themes (Charmaz, 2014). As a second cycle coding process, focused coding is a streamlined method for developing categories without distracted attention to their properties (Saldana, 2016). This was important because many of the initial codes from the first cycle of coding had varying degrees of belonging. Focused coding therefore allowed me to remove and merge codes as needed to better define subcategories and categories towards theme development (see Appendix E for coding manual and Appendix F for category descriptions). This process was conducted for each interview transcript, with newly revealed codes added to the codebook as needed. Results were exported from Quirkos into an Excel spreadsheet, which allowed for the codes to be sorted from largest to smallest within each subcategory (see Appendix G).

Themes were constructed using basic thematic categorization analysis as outlined by Saldana (2016). In this approach, the researcher reviews the categories identified through the systematic coding process and looks for patterns of similarity and difference (Saldana, 2016; Gibson & Brown, 2009). Patterns can be repeating ideas, participant-specific terms, metaphors and analogies, transitions or shifts in a topic, linguistic connectors, theoretical issues suggested by participants, and even what is missing from the data (Ryan & Bernard, 2003). Patterns are then categorized into themes according to commonality and ordered to reflect on their possible groupings and relationships (Saldana, 2016). For the purposes of this study, identified themes were also aligned with quantitative findings to reveal potential overlapping results. Themes were

also aligned with the study's research questions to ensure connection to theory and the CRT framework.

Confidentiality and Data Access

UW's secure, password-protected Google Drive was used to ensure confidentiality of all survey and interview data. Google Drive was appropriate because it provides both the ability to store various types of data (e.g., spreadsheets, numerical and audio data, graphical representations of data, etc.), as well as the ability to encrypt data and limit access with user-specific passwords. For the purposes of this study, access to the data and files stored on the UW Google Drive were only accessible by the researcher.

Google Forms was used as the survey instrument and response data were stored separately from the instrument. Interview transcripts were also stored on the Google Drive. Transcripts were stored separately from the survey instrument and response data. Storing interview transcripts on a separate, password-protected Google site ensured that any identifying information from the survey (e.g., college email address, name of AB program) would not be accessible or traceable to the data collected from the interviews. Interview participant names were given a pseudonym and all transcribed data used these pseudonyms for data analysis purposes (see Appendix H).

Ethical Considerations

The American Educational Research Association (AERA) states that "it is of paramount importance that educational researchers respect the rights, privacy, dignity, and sensitivities of their research populations and also the integrity of the institutions within which the research occurs" (as cited in Martella et al., 2013, p. 588). Although the risk was minimal, a potential area where harm could have occurred in this study involved invasion of privacy. Both the survey and

interview instruments included questions that some participants may have found sensitive in nature, such as questions about participants' experiences with harassment and discrimination at their institution. Because of the nature of this information, a data breach could have caused short-term embarrassment or psychological discomfort for participants. My purpose in including such questions was to explore, not judge, during each phase of the research.

As an AB program professional and former community college instructor, I have worked with and seen many diverse students complete their programs because of their strong potential and desire to succeed. Unfortunately, I have also seen these same students struggle because of limited access to student support services and programs as well as limited faculty knowledge of inclusive classroom pedagogy. I have managed several AB programs that were advertised as being fully supported by the institution and community, but in reality lacked the necessary resources to fully support students and faculty. Because of this background, I have a sense of the pathways that students take to come into such programs. In addition, I am a White woman who earned undergraduate and graduate degrees through the same higher education systems as the AB students with whom I work, but received significantly more support because of my racial privilege. Recognizing this, throughout this study I tried to be open to all participant experiences and not pre-judge based upon my own experiences and knowledge of the system.

Quantitative Results

The purpose of this study was to identify enrollment considerations and challenges of African American women in AB programs. Additionally, the intent was to explore the types of institutional supports and programs currently utilized by African American women in AB programs. The following section includes findings from the first phase of the study.

Demographic Information

Limited demographic data were collected to understand participants and their college and AB programs. Demographic items included age, CTC email address (optional), name of CTC, and name of AB program. The age ranges of the participants were as follows: 9 (7%) were between 18 and 20 years of age, 16 (13%) were between 21 and 24 years old, 30 (24%) were between 25 and 29 years old, 32 (26%) were between 30 and 39 years old, 30 (24%) were between 40 and 54 years old, and 6 (5%) were 55 years or older.

Participants were enrolled in 20 AB programs at 10 different institutions across Washington State, with the majority (71%) of participants enrolled at institutions within King County. AB program emphasis varied from applied and organizational management (4%); health care and allied health (15%); marketing, business, and trade logistics (8%); teaching, early learning, and teacher preparation (30%); youth development (12%); behavioral science (9%); and science and information technology (22%).

Considerations for Initial Enrollment

The first section of the survey asked participants about the various factors they considered prior to enrolling in their AB program. Dichotomous ratings for individual items are presented in rank order in Table 1. As can be seen, participants identified "Future career opportunities" ($M = .98$) as the most important consideration for enrollment. Crosstab analysis (see Appendix I) confirmed that 97.6% of participants responded *yes* to this item. Other items that received high rankings were "Availability of financial assistance" ($M = .96$), "Requirement for current or future job" ($M = .93$), "Convenient time and place for classes" ($M = .93$), "Availability of program I wanted" ($M = .92$), and "Time required to complete program" ($M = .92$). These items received 100 or more responses each, with the total percent of *yes* responses for each item at 92% or higher. For the remainder of the items, mean scores dropped while

standard deviations increased, indicating that those items were considered for enrollment but not

at the same rate as the others.

Table 1
Factors of Consideration for AB Program Enrollment

Item	M	Mdn	Mode	SD
Future career opportunities	.98	1.00	1	.155
Availability of financial assistance	.96	1.00	1	.198
Requirement for job	.93	1.00	1	.261
Time and place of classes	.93	1.00	1	.261
Availability of program	.92	1.00	1	.274
Time to complete program	.92	1.00	1	.274
Info on college/program website	.81	1.00	1	.391
Ability to transfer credits	.80	1.00	1	.398
Distance from campus	.80	1.00	1	.398
Reputation of institution	.76	1.00	1	.431
Availability of online courses	.73	1.00	1	.445
High rate of job placement	.72	1.00	1	.449
Personal recommendation	.58	1.00	1	.496
Tuition reimbursement	.54	1.00	1	.500
Campus visits	.50	1.00	1	.502
Employer support/endorsement	.41	.00	0	.495
Courses held at employment site	.17	.00	0	.378
Availability of child care	.10	.00	0	.298

Note. Dichotomous scale with Yes (1) and No (0) response options.

Challenges After Initial Enrollment

The second section of the survey included 3-point, 4-point, and 5-point Likert scales

which asked participants about the types of challenges they experienced after enrolling in their

AB program. Questions in this section were related to participants' concerns about their ability to

finance their education; issues related to college climate, discrimination, and sexual harassment;

adjustment from associate program to AB program; perceptions of AB program faculty; and

personal and family responsibilities.

Ability to finance education. As seen from Table 2, 52.8% of participants cited "Some"

concern about their ability to finance their college education. Alternatively, 23.6% of participants

reported that they had no such concern ("I am confident that I will have sufficient funds").

Interestingly, another 23.6% of participants indicated that they had "Major" concerns about their

ability to finance their education ("Not sure I will have enough funds to complete college").

These findings indicate that although almost a quarter of participants reported no concern in this

area, a majority of participants (76.4%) did experience at least some level of concern about their

ability to finance their education.

Table 2
Level of Concern About Ability to Finance Education

	Response	
Concern	No.	%
None	29	23.6
Some	65	52.8
Major	29	23.6
Total	123	100

Note. Three-point Likert scale ranging from None (1), Some (2), Major (3).

College climate, discrimination, and sexual harassment. Overall, participants

indicated a positive college climate and limited experiences of discrimination and sexual

harassment. The data presented in Table 3 show a high level of agreement with "This college

promotes cultural differences" ($M = 3.98$). Indeed, an analysis of crosstab data revealed that 77%

of participants indicated that they *agree* (39.8%) or *strongly agree* (37.4%) with this statement.

Other items related to college climate that received high rankings were "This college reflects the

diversity of its students (i.e. brochures, online, etc.)" ($M = 3.94$), "This college promotes a sense

of community on campus" ($M = 3.92$) and "This college encourages public voice and the sharing

of ideas" ($M = 3.90$). Crosstab analysis (see Appendix J) showed that a majority of participants

also indicated that they *agree* (31.7%) or *strongly agree* (35%) with "I feel a sense of belonging

at this college" ($M = 3.89$).

Table 3
Perceptions of College Climate

Item	*M*	*Mdn*	*Mode*	*SD*
College promotes cultural differences	3.98	4	4	1.109
College reflects diversity of students	3.94	4	5	1.140
College promotes sense of community	3.92	4	4	1.076
College encourages public voice/sharing ideas	3.90	4	5	1.051
Sense of belonging on campus	3.89	4	5	1.131
Staff are racially diverse	3.54	4	4	1.073
Faculty are gender diverse	3.53	4	3	1.019
Faculty are racially diverse	3.33	3	3	1.178
College has racial tension	2.09	2	1	1.008
College feels unsafe	1.67	1	1	.922

Note. 5-point Likert scale ranging from Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), Strongly Disagree (1).

When asked about how often they had been discriminated against or excluded from campus activities based upon various demographic items, only a small percentage (7%) of participants indicated having experienced such discrimination. Indeed, as can be seen in Table 4, there was not a large variety in the range of mean scores across items (1.03 to 1.31). However, further crosstab analysis (see Appendix K) revealed that some participants did report discrimination or exclusion based on "Age" (15.4%), "Race/ethnicity" (12.2%), "Religious/spiritual beliefs" (12.2%), "Gender" (10.5%), "Political beliefs" (10.5%), "Socioeconomic status" (8.1%), "Ability/disability status" (7.3%), and "Sexual orientation" (4.8%).

Table 4
Discrimination and Exclusion from Activities Based on Demographics

Item	*M*	*Mdn*	*Mode*	*SD*
Age	1.31	1	1	.821
Race/ethnicity	1.23	1	1	.702
Gender	1.20	1	1	.677
Political beliefs	1.19	1	1	.664
Religious/spiritual beliefs	1.18	1	1	.553
Socioeconomic status	1.18	1	1	.685

Ability/disability status	1.15	1	1	.623
Sexual orientation	1.14	1	1	.689
Parent/guardian	1.05	1	1	.381
Citizenship	1.03	1	1	.361
Military/Veteran	1.03	1	1	.361

Note. 5-point Likert scale ranging from Very Often (5), Often (4), Sometimes (3), Seldom (2), Never (1).

In addition to discrimination and exclusion based on demographic items, participants were also asked about the forms in which they had personally experienced discrimination. As seen in Table 5, where mean rankings ranged from 1.05 to 1.40, "Verbal" ($M = 1.40$) was the most highly ranked form of discrimination experienced by participants. While none of the items received particularly high mean scores, further frequency analysis (see Appendix L) confirmed that 21.9% of participants indicated some level of "Verbal" discrimination. The other items on the subscale received 9% or less response indication by comparison.

Table 5
Forms of Discrimination Experienced at Institution

Item	*M*	*Mdn*	*Mode*	*SD*
Verbal	1.40	1	1	.881
Written	1.22	1	1	.782
Exclusion	1.22	1	1	.663
Offensive visuals	1.16	1	1	.727
Physical assault	1.14	1	1	.613
Phone calls	1.10	1	1	.559
Property damage	1.07	1	1	.400
Threat of physical assault	1.05	1	1	.381

Note. 5-point Likert scale ranging from Very Often (5), Often (4), Sometimes (3), Seldom (2), Never (1).

Additional questions asked participants about how often they had witnessed and personally reported discrimination and sexual harassment. As seen in Table 6, "Witnessed discrimination" ($M = 1.39$) was the highest ranked item, followed by "Reported an incident of discrimination to a campus authority" ($M = 1.16$). Similarly, "Been sexually harassed" ($M = 1.12$) was followed by "Reported an incident of sexual harassment to a campus authority" ($M =$

1.09). Crosstab analysis (see Appendix M) revealed that 74% of participants indicated *never* to

witnessing discrimination, while 26% reported witnessing discrimination *seldom* (17.1%),

sometimes (6.5%%), *often* (.8%), and *very often* (1.6%).

Table 6
Witnessing and Reporting of Discrimination and Sexual Harassment

Item	M	Mdn	Mode	SD
Witnessed discrimination	1.39	1	1	.771
Reported discrimination	1.16	1	1	.653
Been sexually harassed	1.12	1	1	.575
Reported sexual harassment	1.09	1	1	.522

Note. 5-point Likert scale ranging from Very Often (5), Often (4), Sometimes (3), Seldom (2), Never (1).

Overall, these findings indicate that a majority of participants had a positive perception of

their college climate and experienced little discrimination and sexual harassment. However,

although limited, the experiences of discrimination and sexual harassment that were found

through the additional crosstab analysis cannot be discounted.

Perceptions of faculty and classroom experiences. In general, participants reported

positive experiences with their program faculty and in the classroom. As seen in Table 7, a

majority (75%) of participants reported that faculty "Share their own experiences and

background in class" ($M = 1.31$). Additional items on the table also received a mean score of 1 or

higher, indicating that a majority of participants reported general agreement with each item (see

Appendix N for response frequencies per item). Similarly, in Table 8, "I feel comfortable sharing

my own perspectives and experiences in class" ($M = 4.06$) ranked highly with strong overall

agreement (78%) (see Appendix O for response frequencies per item). At the same time, 82% of

participants responded *disagree* (18.7%) or *strongly disagree* (63.4%) to "I have been singled

out in class because of my identity (such as race/ethnicity, gender, sexual orientation, disability

status, religious affiliation, etc.)" ($M = 1.69$).

While the majority of participants indicated positive perceptions of faculty and classroom experiences, further examination of crosstab data (see Appendix N) revealed challenges in both areas. For example, participants reported that *most but not all* (15.4%), *less than half* (13.8%), and *very few* (15.4%) of their faculty had open discussions about privilege, power, and oppression. Similarly, participants indicated that *most but not all* (26.8%), *less than half* (11.4%), and *very few* (10.6%) faculty provided opportunities to study and serve communities in need. Additionally, while 73% of participants indicated *all* to "Encourage students to contribute different perspectives in class" ($M = 1.36$), 21% of participants also reported *most but not all* to this same item. These findings indicate that perceptions of faculty vary significantly between participants and across AB programs.

Table 7
Perceptions of AB Program Faculty

Item	M	Mdn	Mode	SD
Faculty provide discussions about oppression	1.90	1	1	1.146
Faculty provide opportunities to serve community	1.82	1	1	1.015
Faculty teach tolerance	1.58	1	1	.902
Faculty provide opportunities for dialogue	1.58	1	1	.911
Faculty provide feedback	1.56	1	1	.879
Faculty sensitive ability levels	1.54	1	1	.770
Faculty motivate students	1.53	1	1	.870
Faculty made me feel valued	1.49	1	1	.793
Faculty value individual differences	1.38	1	1	.660
Faculty encourage different perspectives	1.36	1	1	.682
Faculty share own experiences	1.31	1	1	.606

Note. 4-point Likert scale ranging from Very Few (4), Less than Half (3), Most but not All (2), All (1).

In terms of how participants felt they were perceived in the classroom (see Table 8), a majority of participants (65%) responded *disagree* (22.8%) or *strongly disagree* (42.3%) to "I feel I have to work harder than other students to be perceived as a good student" ($M = 2.19$). However, additional crosstab analysis (see Appendix O) revealed that 23.5% of participants indicated *agree* (21.1%) and *strongly agree* (2.4%) to this item. These findings also indicate that

participants perceived that they had to work harder than other students despite a general feeling

of comfort within the classroom.

Table 8

Experiences in the Classroom

Item	M	Mdn	Mode	SD
Comfort sharing perspectives in class	4.06	4	4	.979
Work harder than others	2.19	2	1	1.255
Singled out in class	1.69	1	1	1.115

Note. 5-point Likert scale ranging from Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), Strongly Disagree (1).

Program adjustment. The last part of section two of the survey asked participants about

their level of difficulty with adjustment to their AB program. As can see seen in Table 9,

participants identified "Find time for schoolwork" ($M = 2.79$) as the most difficult challenge in

terms of their adjustment to their AB program. "Adjust to the academic demands of AB classes"

($M = 2.28$), "Improve English skills" ($M = 2.26$), and "Find student services when you need

them" ($M = 2.21$) were also ranked with a mean of 2.00 or higher. Crosstab analysis (see

Appendix P) further revealed that 41.5% of participants found it *difficult* (36.6%) or *very difficult*

(4.9%) to find time to do their schoolwork. Crosstab data also showed that "Adjust to the

academic demands of AB classes" received the second highest percentage of *difficult* (22.8%)

and *very difficult* (2.4%) responses. Following this, 13.8% found it *difficult* or *very difficult* to

"Find help and information when you need it", 13% found it *difficult* or *very difficult* to "Find

student services when you need them", and 11.4% found it *difficult* or *very difficult* to "Complete

program requirements". At the same time, "Improve English skills" had the highest percentage

(46%) of *not applicable* responses, followed by "Find student services when you need them"

(26%). The remainder of the items on the subscale received mean ratings below 1 but above

1.50, indicating a response of *somewhat easy* or *very easy* to those items.

Table 9

Challenges Related to Program Adjustment

	M	Mdn	Mode	SD
Find time for schoolwork	2.79	2	2	1.223
Adjust to academic demands	2.28	2	2	1.191
Improve English skills	2.26	3	3	0.999
Find student services when needed	2.21	2	1	1.05
Find help and info when needed	1.94	2	2	1.019
Complete program requirements	1.87	2	1	1.04
Find which courses count to degree	1.69	1	1	1.017
Schedule classes for next quarter	1.59	1	1	0.948
Find classes when needed	1.55	1	1	0.842

Note. Five-point Likert scale ranging from Very Difficult (5), Difficult (4), Not Applicable (3), Somewhat Easy (2), Very Easy (1).

Similar findings were found in Table 10, where 26% of participants reported that they had *frequently* taken classes when most campus services were closed. As seen in Appendix Q, "Contributed money to help support your family" (M = 2.22) was the highest ranked item, indicating that participants *occasionally* (24.4%) or *frequently* (48.8%) contributed money to support their families while in college. "Participated in study groups" (*M* = 2.00) was the second highest ranked item, with the majority of responses falling within *occasionally* (49.6%). Similarly, crosstab analysis found that the majority of participants (46.3%) responded that they *occasionally* attended faculty office hours.

Table 10

Challenges Related to Personal and Family Responsibilities

Item	M	Mdn	Mode	SD
Contributed money to support family	2.22	2	3	.845
Participated in study groups	2.00	2	2	.713
Attended office hours	1.71	2	2	.674
Most campus services were closed	1.70	1	1	.863
Missed class for personal/family reasons	1.52	1	1	.569
Had trouble commuting	1.34	1	1	.564
Not able to get into classes	1.27	1	1	.507
Missed class due to employment	1.17	1	1	.378

Note. Three-point Likert scale ranging from Frequently (3), Occasionally (2), Not at All (1).

Utilization of Institutional Support Services and Programs

The third section of the survey included dichotomous scales which asked participants about their utilization of student support services and programs. As seen in Table 11, participants identified "Financial aid advising" ($M = .76$) as the most utilized student support service. Additional crosstab exploration (see Appendix R) confirmed that 76% of all participants responded *yes* to this item. Similarly, 71% of participants responded *yes* to "Academic advising" (M = .71). The next two items on the subscale, "Tutoring" ($M = .43$) and "Writing center" ($M = .32$), showed noticeably lower mean scores. This indicates that financial aid and academic advising were the primary student support services used by participants, with utilization of additional services dropping in frequency thereafter.

Table 11
Utilization of Student Support Services

Item	M	Mdn	Mode	SD
Financial aid advising	.76	1	1	.431
Academic advising	.71	1	1	.457
Tutoring	.43	0	0	.497
Writing center	.32	0	0	.467
Campus safety services	.23	0	0	.421
Career counseling	.20	0	0	.398
Student health services	.14	0	0	.346
Disability resource center	.10	0	0	.298
Veterans services	.05	0	0	.216
Student psychological services	.03	0	0	.178
Childcare services on campus	.02	0	0	.155

Note. Dichotomous scale with Yes (1) and No (0) response options.

Additional multiple responses analysis indicated a higher overall *no* response rate, with 986 total *no* responses compared to a total of 366 *yes* responses. Coupled with consistently low mean scores, these findings indicate low participant utilization of student support services overall.

Similar findings were revealed in Table 12, where the highest ranked item was "Orientation" ($M = .52$), followed by "Student clubs" ($M = .28$) and "Honors program" ($M =$

.22). Of note was the noticeable drop in mean scores between the first and second items,

indicating a drop in frequency of participant utilization of programs after "Orientation".

Additional analysis (see Appendix S) confirmed that 52% of participants responded *yes* to

"Orientation" while 28% responded yes to "Student clubs". Similarly, 22% of participants

indicated *yes* to "Honors program". Another noticeable drop in mean scores occurred seen

between "Academic support services for low-income/first-generation students" (M = .14) and

"Mentoring program" (M = .04). While a small number of participants (N = 17) indicated the use

of mentoring programs, many more (N = 104) indicated no use of such programs.

Table 12
Utilization of Student Programs

Item	M	Mdn	Mode	SD
Orientation	.52	1	1	.502
Student club	.28	0	0	.449
Honors program	.22	0	0	.416
Low-income/first-gen support	.14	0	0	.346
Mentoring program	.04	0	0	.198
ESL instruction	.03	0	0	.178
Study abroad program	.02	0	0	.127

Note. Dichotomous scale with Yes (1) and No (0) response options.

Much like the utilization of student support services, multiple response analysis revealed

a high overall *no* response rate (i.e., 153 *yes* responses compared with 707 *no* responses) on the

subscale. These findings indicate low overall utilization of student programs as well.

Qualitative Results

In addition to building upon the findings of the quantitative phase of the study, the

purpose of the second phase of the study was to explore the experiences of African American

women in AB programs as told in their own words. The intent was to also identify additional

institutional student support services and programs that participants would use if they were

offered, as well as capture recommendations for future African American women in AB

programs. The following section includes the findings from the second phase of the study.

Participant Backgrounds

Interview participant data are presented in Table 13 (see [Appendix H](#)) and summarized

using puedonyms as identifiers below. Participants were enrolled at four different CTCs

throughout the Puget Sound region. Chanita, Jasmine, Ericka, and Aisha identified as African

American. DeJaunte and Keeshana identified as African American/African. Simone identified as

Multiracial Black. Ages of participants ranged from 21 to 54 years old.

Chanita and Jasmine were enrolled at College 1, a community college with three different

locations throughout the lower Puget Sound. Chanita was enrolled at the main campus in a

management-related program. Jasmine was enrolled in a healthcare-related program at one of the

branch campus locations.

Ericka, DeJaunte, and Aisha were all enrolled at College 2, a community college within a

larger college district. Ericka and Aisha were enrolled in the same education-related program,

while DeJanute was enrolled in a business-related program.

Finally, Simone was enrolled at a small community College (College 3) in a science-

related program. Keeshana was enrolled at College 4, a small technical college, in an information

technology-related program.

Community college education backgrounds ranged from Running Start (i.e., high school

student who took CTC courses to earn a high school diploma and college credits) to adult

learners who had earned an associate degree after working for many years. Keeshana, the

Running Start student, had received her high school diploma and earned her AAS degree, which

she then used towards her AB degree at the same institution. All participants had earned an AAS

degree prior to enrolling in her AB program. Three of the seven had completed an AAS degree at a different CTC than where they were currently enrolled (i.e., completed the AAS at one CTC and transferred to another CTC for the AB degree).

Considerations for Initial Enrollment

Participants overwhelmingly reported that the choice to enroll in an AB program was due to a drive or desire to improve their life circumstances (e.g., learn a new skill, find a better job, improve current knowledge of a subject). Indeed, participants felt personally prepared and assisted by their AB program in the areas of skills and knowledge development. As Simone stated, her AB program had given her "a broad range of knowledge" so that she could "fit a wide range of roles when on the job hunt". Though some participants noted that they had considered personal recommendations from family, friends, and even former faculty about their AB program prior to enrollment, the desire for a better life heavily outweighed such recommendations. For example, Chanita explained:

> I was introduced to the program from a close family friend who worked for [College 1]. But the real primary factors for deciding to enroll were simple. I was just trying to find something I was good at. I had no educational aspirations because I didn't even believe in myself at that point. Eventually when I started the program I quickly fell in love, and I began pursuing a bachelor's degree because I wanted a different life. I wanted to be successful and for my husband and I to have the life he and I never had growing up.

Skills and knowledge development were also tied to attending an AB program over a public four-year university baccalaureate program. Jasmine noted that she specifically sought out her AB program "because of the degree I would end up with". DeJaunte said that her goal for enrollment was to "obtain an applied bachelor's degree in my field" so that she could continue to

climb the ladder at her current place of employment. Others also noted that they appreciated continuing to build upon the foundational, hands-on knowledge they had gained from their associate degree program. Keeshana explained:

> I did the associates program first and the bachelor's program seemed like the next logical step. It seemed like a great opportunity to get my bachelor's all at one school without having to worry about transferring to another school. Now that I'm in my bachelor's program I'm always seeking out opportunities to learn new technologies or use or develop a skill set. My next goal is to use the base knowledge that I learned from the associate program in order to grow my knowledge of SQL and other database concepts in the bachelor's program.

Overall, participants sought out AB programs specifically for the inverted degree structure. Participants also held a strong belief that enrolling in an AB program would improve their life circumstances.

Challenges After Initial Enrollment

Participants identified a variety of challenges experienced while they were in their AB program. At a high level, challenges were related to finances, program management, faculty and staff, and discrimination.

Finances. Participants felt a deep concern about their ability to pay for their college education. Concern was linked with struggles to pay bills, financial support of their family while in school, and time management related to balancing the demands of work and school. For example, Chanita said:

> The biggest challenge was seeing my husband work and carry the weight of our bills while I went back to school. He was so wonderful and told me not to even think about

working but to pursue my education from completing my high school diploma to the

completion of my bachelor's degree in June. However, there were so many times that I

thought about quitting because we had some struggles and he was carrying our family

through tough financial times.

DeJaunte noted that she was working three different jobs in order to keep up with supporting her

family and paying for college. In addition to working multiple jobs, she explained that she was

also saving her financial aid overpayments so that "we have money to fall back on". Many

participants mentioned being working adults and the impact of their employment on finances,

schoolwork, and paying for college. For example, Ericka stated that the most challenging aspect

of pursuing her intended degree was time management. She noted that "balancing work and life

while being so exhausted from attending classes is hard".

Program management. Other challenges that participants frequently cited were related

to AB program operations. For example, participants noted that many times their class schedule

was unclear or not communicated with enough notice before the beginning of the quarter. Aisha

explained:

I did not get my assigned teachers for my student teaching until a week prior to classes

beginning. They also never sent out a formal date for when our courses started, so many

of us were shocked to find out the week of.

Participants also felt that their AB program was unstable. Ericka said:

One of the most challenging aspects was how unfinished the entire program is. My

previous experience at [AAS College] was very organized and amazing, so I came to

[College 2] with high expectations that were never met. They sold the program very well

in their informational sessions, but what they never disclosed was how unprepared they

were to support the number of students that were coming in.

Like Ericka, many participants felt that student support services and programs were unavailable

when they needed them. Because many AB programs are taught in a hybrid format, in which the

majority of schoolwork is completed online through a Learning Management System (LMS), on-

campus time is limited. For example, a typical hybrid AB program includes online instruction

and one-to-three sessions of faculty contact per week. In addition, many AB programs are taught

in the evenings to accommodate working students with daytime employment. As Jasmine noted,

"I decided to enroll in this program because of its location and that I am able to work during the

day and take classes at night". While evening class sessions work well for these students, an

unintended consequence is that many student support services and programs are closed in the

evenings. Chanita felt that having more student support services and programs in the evenings

"would have a huge impact on those that do quit because they are missing those supports that

encourage them to keep pushing".

Faculty and staff. A majority of participants expressed appreciation for their AB

program faculty and staff. As Chanita said:

> My professors and program director were the biggest supports. Any time that I seemed to
>
> be struggling, they were right there to pick me back up and remind me that I could do it. I
>
> honestly do not know where I would be without them and their support. They believed in
>
> me to a degree that I was not able to believe in myself yet. Once I finally found my voice
>
> and strength they were right there behind me to make sure I made it to the finish line.

Despite a general appreciation for faculty and staff, participants also felt that faculty were

unprepared as instructors and staff lacked knowledge of AB programs. Several participants noted

that while they were grateful to have subject matter experts from the industry, faculty lacked

formal training in instruction. This, participants felt, impacted the level of rigor in the program

and varied expectations from faculty. Aisha noted that the level of rigor changed from faculty

member to faculty member, making it difficult to gauge her overall progress and level of learning

in the program. Keeshana similarly commented:

> Most of the faculty seem extremely knowledgeable about the topics covered in the
>
> program but are quite inept at teaching it. I've taken quite a few online general education
>
> classes in order to meet my degree requirements and the difference in instruction is like
>
> night and day.

Similarly, Ericka noted a "lack of targeted instruction to reinforce concepts". She stated that

while she appreciated that her faculty were "very knowledgeable about their subjects", most of

them simply assigned reading from the textbook. She said this impacted her retention of concepts

"because I had already forgotten anything I had read the previous weeks". Some participants

acknowledged that the lack of faculty training in quality instruction could have been due to an

overall lack of resources for the program. Aisha said, "They did not have the staff to instruct the

course, so we were left with the same teacher for three out of four classes in one quarter... I spent

more time trying to figure out what the instructor was lecturing about than focusing on my

studies and it became very exhausting to even attend classes". This caused a feeling of unease

from participants and fed into the feeling that the program was unstable. Moreover, participants

noted faculty's lack of understanding of work/life balance. Ericka said that while her faculty

knew that she and many of her classmates work during day they "often keep us to the very end of

class" and "we struggle with keeping up with the hours we attend in class".

For those participants who filed formal complaints about instructional concerns, they felt as though those complaints went unanswered. Ericka said:

I've made numerous complaints about the program since my first quarter and all of them were ignored until I went outside of the program's faculty to complain. It took four months for me to get any resolution from my formal complaints to the administrators, and I never got a direct response from anyone that I originally complained to.

Similarly, Aisha stated:

I brought up my concerns every chance I could and expressed them to the program head on numerous occasions. When I made my formal complaint, I wasn't met with any support and was left on my own to figure out the process.

Like their experiences with faculty, experiences with staff were mixed as well. Participants overwhelmingly reported appreciation for AB program staff, stating that they "were great" and "very understanding". Alternatively, participants felt less positive about their interactions with CTC staff, particularly CTC advisers and counselors. As Keeshana explained, "My counselor wasn't much of a help to me. They didn't know what classes I could take in order to fulfill my credits. This made it difficult to plan for upcoming quarters".

Discrimination. Few participants expressed feeling explicitly discriminated against or excluded from activities. In fact, only two of the seven participants openly stated that they had been discriminated against or ignored because of their gender and race/ethnicity. One such participant was Simone, who felt as though her intersectionality impacted how she was viewed by her faculty and classmates:

The biggest hurdle for me while pursing my intended degree was that I was one of two Black females in my cohort. I think we, I included, underestimate how difficult that can

actually be. It feels like someone implies every day that you can't be what you want to be

solely because you are a Black female.

Similarly, Ericka expressed dismay about the impact that she felt her gender and race/ethnicity

had had on the formal complaint process:

The complaint I made about my professor was handled so horribly and I honestly think it

was because I'm a woman of color. I've never been so let down and I hope that my

complaint at least improved things for students that enroll after me.

Stories of explicit discrimination such as these were limited throughout the interview process.

Thus, a majority of participants expressed a belief that faculty and staff had positively impacted

their AB program experience. However, for those who did experience racialized and gendered

discrimination, faculty who lacked cultural responsiveness made them feel excluded and ignored.

Under the framework of CRT, these findings indicate that although participants' stories of

discrimination were limited overall, the voices of those who did have such experiences were not

to be discounted or overlooked.

Utilization of Student Support Services and Programs

Utilization of student support services and programs was mixed among participants. For

example, Aisha noted that she "did not really use the services offered at the school". Similarly,

when asked which services and programs she had used, Ericka simply responded "none". Lack

of utilization was linked with being a working adult and taking classes in the evenings when

services and programs were not available.

Participants cited tutoring, student leadership and clubs, financial aid, and library

resources as the most often utilized services. Keeshana noted that she had used financial aid to

secure an on-campus work study position to help support herself through her program and gain

real-world experience. This experience eventually ended with an internship at a nearby business. Keeshana also said that she was "heavily involved in student leadership and clubs" and that she "really tried to be of the team". Chanita explained that she had "used the financial aid supports that were offered" and frequently sought assistance from college financial aid staff. Other participants cited regular use of library resources for research and laboratory purposes. Simone noted that she had "frequently visited the library and labs at least six times or more each quarter". Finally, of those participants that cited use of college services, all felt that tutoring was the most meaningful campus service they had used.

Desired Student Support Services and Programs

All participants offered ideas on areas of improvement for AB programs. Overwhelmingly, participants recommended that services and programs be offered at days and times convenient for AB students. Specifically, participants recommended evening and hybrid student supports. For example, Ericka recommended that college's offer "better meal and evening dinner service on campus before class, because there are currently only vending machines open". Other participants noted the need for AB program-specific services, such as targeted tutoring. Chanita explained that having "a tutor just for this program, like we have for other programs at the tutoring center for math or reading, would be really helpful". DeJaunte expanded on this by explaining that the tutors at her college's tutoring center were nice, but that they didn't always understand the content of the higher-level AB courses. She said, "What we really need is tutoring by individuals that are familiar with or in the program that I am in".

The need for AB program mentors was also a consistent theme throughout the interview process. Mentors were seen as support persons who could assist participants in all aspects of academic as well as personal life. Jasmine summarized, "Having a mentor and support unit is a

plus. If we had someone like that it would be helpful in planning out how to adapt to the new

schedule with class and work and life balance". Others similarly commented that a mentoring

program could assist AB students in coping with "stress and other factors caused by working full

time and going to school full time".

The value of having an AB program-specific mentor was also tied to a desire for

assistance with self-care, financial advice and how to pay for college, and advice and assistance

in preparing for and finding employment. Overall, participants felt that having a mentor to help

guide them through their AB program would have reduced these various stressors. Jasmine

explained, "Having a mentor to help juggle the cost of education and life would have helped

make pursing an education less stressful". Keeshana similarly expressed that she would have

utilized a mentor "who could help me plan my schedule and how I am going to pay for it. It

would have been nice to have the support and also be a support to others in the same situation".

In the absence of such a formal mentoring program, Keeshana turned to networking with other

minioritized women outside of her AB program. She explained:

> I didn't just settle for the learning that happened in the classroom. If there was something
>
> that interested me that was not being taught or emphasized in a class, I went out and
>
> learned it. I also networked and asked as many questions as I could to other women of
>
> color who worked in the industry. I gained a lot of invaluable knowledge doing this.

Simone also mentioned networking out of her AB program to understand what skills she should

focus on for finding employment:

> I started to network with a lot of friends to find out what concepts and technologies they
>
> used on a daily basis in their jobs. A friend of mine gave me some guidance and what

was important to know really well and what concepts were out of date or not as useful in

the industry.

She went on to explain that in the absence of a formal mentoring program, she formed her own

networking group to address challenges. She said:

And regarding addressing the challenge of being one of the only Black females in my

cohort… unfortunately the occasional sexist comment and action became the norm.

Seeking out advice and encouragement from other Black women on campus was helpful.

Participants expressed a strong desire for targeted, AB program-specific student support services

and programs. This desire was linked to areas where participants felt the most stress and/or

frustration; particularly in the areas of financial concern, work/life balance, and job preparation

and placement. Tutoring and mentoring programs were highly desired and in some cases

prioritized over others.

In addition to having more accessible services and programs, participants also

recommended additional professional development and training for AB program faculty. Aisha

said, "I would advise that they look deeply into the program faculty" and ensure that program

faculty have instructional training at the upper division level. Similarly, Ericka recommended

"cross training for all instructors and someone overseeing content". She went on to explain, "I'm

continually amazed by the poor quality of student presentations and the low standards of

instructors". In a similar vein, DeJaunte mentioned that "there should be more check-ins on

student's satisfaction with the program from staff". Ericka also suggested that staff sit in on

classes to better understand AB programs and help when complaint issues arise.

Despite mixed experiences, all but one participant said that she would recommend her

AB program to future African American women. Jasmine said, "Do it, it is for your own benefit.

It will help you improve yourself". Chanita offered advice to current and future African American women, stating, "Don't give up. Find a good support system and utilize them as much as you can. Get involved and gain as much experience as you can. Make sure you're pursuing your passion and never stop".

Discussion

Several of the findings of the present study warrant further consideration. These findings were of particular importance as they presented themselves in both the first and second phases of the study. Interview data both informed and enhanced survey data to reveal commonalities in experiences of African American women in AB programs. The following discusses these commonalities in more detail.

First, a majority of survey and interview participants noted at least some level of concern about their ability to pay for their college education. Given the unique student population that CTCs generally serve, this finding was not surprising. In addition, while personal drive for better career opportunities and life circumstances was the most frequent reason for AB program enrollment, access to financial assistance was of almost equal importance. This finding was consistent with other research, in which financial literacy, aversion to loan debt, and affordability perceptions were found to limit the choices that minoritized students make about college enrollment (Choy, 2002; Engle & Tinto, 2008; Institute for Higher Education Policy, 2010). At the same time, access to financial assistance and other types of student support services has been found to be a significant factor in degree attainment (Lumina Foundation, 2014).

CRT literature supports these findings on the importance of accessibility. As expressed through CRT, the education system perpetuates systems of oppression (Delgado & Stefancic, 2012; Freire, 2014). One way the education system does so is through limited access to student

support services and programs, which has been found to disproportionally affect low-income and

minoritized students (May & Chubin, 2003). In this study, participants frequently cited a lack of

access to student support services and programs. Indeed, survey data revealed that 43% of

participants took classes when most student support services and programs were closed.

Interview data further revealed that participants not only had a strong desire for more accessible

services and programs, but they also believed that expanded accessibility would support future

AB students. Despite the importance of financial assistance on their decision to enroll in an AB

program, access to financial aid and other student support services and programs after initial

enrollment was a challenge, thus limiting participants' full engagement in their AB program.

Limited access to student support services and programs also affected participants' sense

of belonging at their CTC. While findings from survey and interview data revealed an overall

drive to improve their life circumstances, many participants noted that the limited availability of

student support services and programs created a feeling of disconnect from others on campus.

Admittedly, in some cases, CTCs may not have the infrastructure or resources to provide such

services. For example, a majority of CTCs in Washington do not offer childcare services on

campus. The low utilization of this type of student support service found in this study is therefore

not surprising. However, essential student support services, such as financial aid and academic

advising, are a necessity for retention and completion of minoritzed women (Yosso, Smith, Ceja,

& Solórzano, 2009). Additionally, opportunities to engage in programs such as tutoring and

mentoring also help to create a sense of belonging when other services and programs may not be

available (Strayhorn, 2012). Indeed, because access to services and programs was limited,

participants expressed a desire for AB-program specific support services and programs as a way

to feel more connected to each other and to others on campus.

While not overwhelmingly reported, interview data confirmed that some participants felt that negative experiences of intersectionality impacted their sense of belonging. Experiences of racialized discrimination most often took the form of feeling excluded, going unrecognized, and feeling left out of campus services and programs. Participants reported going unrecognized both in terms of having to work harder than their classmates to be considered a good student, as well as complaints about their AB program not being taken seriously. Complaints were generally focused on challenges with faculty and program operations. Overall, participants appreciated their faculty's connection to and knowledge of industry. However, industry knowledge and experience did not outweigh faculty's limited instructional training. For this reason, many participants called for more support and resources for faculty professional development. In addition, participants also expressed the need for more resources for program operations. For example, participants were generally able to find the classes they needed and complete program requirements. Yet they faced barriers in terms of work/life balance, finding time for schoolwork, and adjusting to the rigor of their AB program.

Overall, discrimination and bias was not highly reported by participants. This may, in part, be due to faculty's connection to industry, where they are generally adept at working with many diverse populations. However, despite working well with most, participants did express a desire for faculty to have more open conversations and dialogues regarding race, power, privilege, and oppression. CRT literature supports these findings, which indicate that faculty could increase interpersonal collaboration among students by encouraging them to question the role of power in the classroom (Malone & Barabino, 2009; Ro & Loya, 2015; Sax et al., 2015). Moreover, faculty could create more inclusive learning spaces by sharing their own experiences and providing opportunities for minoritized women to serve the community (Fuller & Meiners,

2005). In general, this study found that faculty-student relationships were both a support mechanism for and a hindrance to participant degree completion.

Finally, limited student support services coupled with varying faculty-student relationships resulted in many participants seeking informal networks of peers and student organizations to bolster their sense of belonging. These relationships served to fill gaps in instructional quality as well as assisted participants in navigating structural barriers. As seen in previous research, mentors did not have to be from the same cultural identity as participants in order to be considered effective (Shain, 2012; Tsui, 2007). Mentors often took the form of classmates, industry professionals, and AB program graduates. While these informal relationships were helpful, participants expressed a strong desire for formal mentoring.

Strengths and Limitations

This study used mixed methods to capture the enrollment considerations, challenges faced, and student support services used and desired by African American women in AB programs in Washington State. Experiences were told by participants in their own words in support of a CRT framework. While the strength of this study lies in its being the first of its kind, it also had several limitations.

First, the small number of survey participants and even smaller number of interview participants limit the findings of this research. Although over one hundred potential participants were contacted to determine interest in participating in the interviews, only seven responded. Moreover, lags in SBCTC enrollment data may have impacted the number of institutions contacted to locate participants in the target population. This means that there could have been participants that may have been unintentionally missed during recruitment.

Next, reports of participant experiences with discrimination, exclusion, and sexual harassment were low. While this may in fact be accurate, it may also be due to the sensitive nature of the questions on the survey and interview instruments. Although recruitment information and the informed consent form explained participant anonymity, some participants may have felt uncomfortable answering these questions, leading to response bias. Response bias occurs when participants answer questions in a way that they deem to be socially acceptable rather than answering them truthfully. Response bias is prevalent in research involving participant self-reporting, such as through surveys and structured interviews (Furnham, 1986). Additionally, it is also possible that despite my attempts to develop trust between myself and participants, my status as a White woman with different experiences from that of the study population may have impacted participant responses to sensitive questions. Despite this limitation, qualitative interview data gave voice to participant survey responses. Future research may employ additional qualitative research methods, such as focus groups or ethnographies, to provide deeper insight into the specific experiences of this unique population.

Finally, limited demographic data was collected for the purposes of this study. While descriptive statistics provided the necessary information to address the study's research questions, additional demographic data could have been captured in order to perform more robust statistical analyses. Additional research is therefore needed to cross compare experiences of African American women in AB programs based on additional demographic variables, such as veteran's status, parental status, and socioeconomic status.

Implications

Despite the research limitations to this study, findings indicated similar experiences of African American women in AB programs across CTCs in Washington. AB programs offered an

accessible and affordable option for students who may not have been able to pursue a baccalaureate degree otherwise. AB programs also provided an opportunity for students to further their career goals and bolster their life circumstances. However, AB programs did not provide easy access to or navigation of existing student support services and programs. This implies that CTCs are providing services and programs that are not readily available to AB students. Future African American women are thus able to begin their baccalaureate education at a CTC, but once on campus feel disconnected when trying to find support.

AB program faculty played a vital role in providing academic support to students but were also the source of negative sense of belonging. One of the benefits of relying on faculty from industry is their connection to real-world skills and knowledge as subject matter experts in their fields. However, this also means that the majority of faculty in AB programs are part-time; working during the day and teaching in the evenings and online. This created a dichotomy where instructors were knowledgeable but lacked formal instructional training. Moreover, despite being experienced professionals in their fields, faculty also lacked training in how to create culturally responsive, inclusive classrooms. This implies that faculty are not always providing a welcoming atmosphere for future African American women in AB programs. This also implies that while CTCs are succeeding in hiring skilled and knowledgeable faculty, they are not providing sufficient instructional and cultural responsiveness training to promote positive faculty-student relationships.

Limited access to student support services and programs led students to seek out informal networks of support. This implies that CTCs are not adequately providing formal networking and mentoring opportunities for future African American women in AB programs. CTCs provided

students with some essential supports, such as financial and academic assistance, but did not

intentionally align such services with those that address cultural and societal needs.

<div align="center">**Recommendations**</div>

Recommendations to address these implications would increase the role CTCs play in

supporting the educational attainment of future African American women in AB programs.

Specific recommendations to address systemic barriers involve changes to 1) support

professional development of faculty, 2) align current student support services and programs with

AB program schedules, 3) develop new services and programs as needed, and 4) identify systems

and resources needed for AB program improvement. The following section discusses these

recommendations more fully.

Strengthen Instructional Quality

It is recommended that CTCs provide AB program faculty with professional development

opportunities to increase their knowledge of instructional development and design. Instructional

design is defined as "the design, development, implementation, evaluation and management of

instructional and non-instructional processes and resources intended to improve learning and

performance in a variety of settings" (Reiser & Dempsey, 2018, pg. 5). It may also be thought of

as a framework for developing a variety of instructional materials that use media and other forms

of activities to model the students' field or workplace (Reiser & Dempsey, 2018).

In addition to training in general instructional design, it is recommended that training also

include andragogical instruction techniques. Developed by Malcolm Knowles (1984), the theory

of andragogy emphasizes that adults are self-directed learners who expect to take responsibility

for their learning decisions and experiences. Thus, adult learning programs focus more on the

process of learning and less on the content being taught. Given the unique student population that

AB programs serve, it is recommended that CTCs support faculty in understanding how to work with and engage adult learners.

Strengthen Culturally Responsive and Inclusive Teaching

It is recommended that CTCs provide AB program faculty with professional development opportunities to increase their knowledge of culturally responsive and inclusive teaching practices. Faculty have frequent contact with students and are often considered a key support person for students. Indeed, McArthur (2005) confirms the importance of the faculty-student relationship for students' development and completion. However, faculty are often not properly trained in how to advise and support diverse students, which could result in more harm done than good (McArthur, 2005; Murray, 2002). It is therefore recommended that cultural responsiveness and inclusivity training include information on how faculty can engage with diverse student populations as well as how they can lead meaningful discussions about power and oppression.

Align Student Support Services and Programs with AB Program Schedules

It is recommended that student support services and programs currently offered at CTCs be expanded or modified to be aligned with AB program schedules. Services and programs offered in the evenings and focused on days/nights when hybrid program students are on campus would provide AB students with more opportunities to engage in the larger campus community. Moreover, expanded services and programs would also likely benefit other students who may not be AB students but who are enrolled in similarly designed programs.

Develop AB Program-Specific Student Support Services and Programs

In addition to expanding and aligning current student support services and programs with AB program schedules, it is also recommended that CTCs develop AB program-specific services and programs. In consideration of participants' heavy reliance on financial assistance, one

potential service could be the development of AB program scholarships and grants. Many CTCs

have partnerships with nonprofit foundations to manage operations for providing these types of

funding options for AAS students. Another option could be for CTCs to work with the SBCTC

to identify additional work force grants for AB students, such as through the Worker Retraining

and Basic Food Employment and Training (BFET) programs. Most CTCs offer these grant

programs to AAS students with dedicated advisors; a similar approach could be used for AB

students.

Other potential options could include the development of honors programs, student clubs,

and formal networking opportunities specifically for AB students. Networking could include AB

tutoring services as well as mentoring programs. Networking opportunities such as these have

been found to help minoritized students by easing the adjustment to college life as well as

positively impacting their sense of belonging (Strayhorn, 2012). Mentoring programs in

particular have been found to increase degree completion for minoritized women (Tsui, 2007).

Programs such as the one at Cornell University, called the Building Ourselves through

Sisterhood and Service (BOSS) Peer Mentoring Program, provides African American women in

baccalaureate programs with focused, one-on-one pairing with a mentor. In addition to

mentoring, BOSS provides diversity workshops and resources to assist faculty in understanding

the unique challenges faced by African American women in higher education. At the local level,

many CTCs already have similar mentoring programs for AAS students and CTC faculty that

could be used as the foundation for AB program mentoring programs (e.g., TriO, Center for

Academic Support and Achievement (CASA), Multicultural Student Services (MSS), Faculty of

Color Cross Institutional Mentorship Program, Administrators of Color Mentorship Program).

Assess Institutional Capacity to Identify Resource Needs and Funding Gaps

Finally, this study explored the enrollment considerations and challenges faced by a small population within AB programs. While findings may be unique to this population, some may also apply to the larger AB population. For example, because the majority of faculty in AB programs are part-time, it is possible that challenges related to faculty's lack of instructional training could go beyond African American women. To better understand the factors that facilitate and hinder AB student success, it is recommended that the present study be replicated across the entire AB population. A broader study could assist CTCs in identifying systems and resources that are needed to fully support all AB students. Moreover, an assessment of institutional capacity for such programs could allow CTCs to better develop, implement, and fund the necessary services needed to support them.

Conclusions

The purpose of this research was to understand what attracts African American women to applied baccalaureate programs at community and technical colleges in Washington State. Challenges faced after AB program enrollment were explored to identify systemic barriers to degree completion. Institutional student support services and programs were identified to understand current utilization and additional services and programs that could be provided to overcome barriers. Critical Race Theory provided the framework for connecting intersectionality and storytelling for the study. The voices and stories of African American women in applied baccalaureate programs revealed possible solutions through program changes and additional services.

Findings included areas in which community and technical colleges attracted, supported, and challenged the participants in their applied baccalaureate programs. Community and technical colleges attracted African American women in applied baccalaureate programs by

providing future career opportunities and opportunities to change their life circumstances for the better. Financial assistance and academic advising were the most sought-after and utilized student support services. Tutoring, student clubs, and orientation were the most utilized programs. Despite the utilization of these services and programs, the overall availability of such services and programs was limited. As such, participants' sense of belonging was negatively affected. In addition, while participants were supported through skilled and knowledgeable faculty from industry, they were equally challenged by faculty's deficiencies in instructional design and cultural responsiveness. As understood through the framework of CRT, oppression was noted through varied racialized and gendered experiences, specifically with regards to classroom experiences and insufficient training for faculty. To overcome these challenges participants sought informal peer networks and mentors.

The role that community and technical colleges could play in supporting future African American women in applied baccalaureate programs includes professional development for faculty and the alignment of student support services and programs with applied baccalaureate program schedules. The implications of this study led to the development of specific recommendations for applied baccalaureate program improvement. Recommendations are to 1) strengthen the already robust industry skills and knowledge of applied baccalaureate faculty by providing instructional design training, 2) improve the faculty-student relationship by providing applied baccalaureate faculty with cultural responsiveness and inclusivity training, 3) align currently offered student support services and programs with applied baccalaureate program schedules to ensure access to such programs, 4) develop new student support services and programs, such as formal mentoring programs, that are tailored and specific for applied baccalaureate students, and 5) replicate the present study on a broader level to further explore

and assess institutional capacity and support for AB programs. The next step will be for

community and technical colleges to apply these recommendations towards best practices that

support future students in applied baccalaureate programs.

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Appendix A

Survey Instrument

SURVEY CONSENT STATEMENT - PLEASE READ

You are invited to participate in a web-based online survey about your experiences as a student in your Bachelor of Applied Science (BAS) program. This is a research project is being conducted by Stefanie McIrvin, a doctoral student at the University of Washington, Tacoma. The survey should take approximately 10-15 minutes to complete.

PURPOSE OF THIS STUDY
The purpose of this study is to provide an avenue for African American women to share their experiences, find out why they enroll in BAS programs, and identify challenges they face while in their programs. A secondary purpose of this study is to find out what kinds of college supports African American women currently use, and what kinds of supports they might use if colleges were to offer them. Results from this study will be shared with BAS staff and faculty in order to address challenges and develop best practices towards diversity, equity, and inclusion.

PARTICIPATION
Your participation in this survey is voluntary. You may refuse to take part in the research or exit the survey at any time without penalty. You are free to decline to answer any particular question you do not wish to answer for any reason.

STUDY PROCEDURES
The web-based online survey consists of 17 questions. There are several demographic questions at the beginning of the survey. The majority of the rest of the questions will ask you about your experiences as a student at your college and in your BAS program. Some questions will require you to pick only one answer, while others you may pick multiple answers.

Your survey answers will be sent to UW's Google Drive where data will be stored in a password-protected electronic format. The survey requests the following identifying information from you: your college email address, the name of your college, and the name of your BAS program. This means that your responses will not be anonymous. However, your responses will be kept private and confidential.

RISKS, STRESS, OR DISCOMFORT
There is the risk that you may find some of the questions in this survey to be sensitive. These include questions pertaining to your experiences in regards to potential harassment, discrimination, and bias on campus. There are also questions in regards to your interactions with and perceptions of the faculty, administration, and counselors and advisers at your college. Due to the sensitive nature of these questions, you may feel discomfort in answering them. Individual responses from the survey will not be shared with any faculty, staff, or administration from your college. Breach of confidentiality may be a risk if persons outside the study team access your identifiable responses. All answers will be kept private and confidential to prevent a breach of confidentiality. The researcher will be available to you throughout the study to respond

to questions and concerns. Results from this study will be shared in aggregate. Personally identifiable information will not be included in the results.

BENEFITS OF THE STUDY
If you provide a college email address, you will receive a $5.00 Amazon gift card for participating in this research study. In addition, your responses may help influence college policy and procedures so that future BAS students of color have better educational experiences.

CONFIDENTIALITY OF RESEARCH INFORMATION
Data collected from the survey will be confidential. Links to identifiers will be kept separate from data collected on a secure, password-protected site. Data will be retained and destroyed as required by the UW records retention period.

SUBJECT'S STATEMENT
This study has been explained to me. I volunteer to take part in this research. I have had a chance to ask questions. If I have questions later about the research, or if I have been harmed by participating in this study, I can contact the researcher and/or the faculty advisor listed on the first page of this consent form. If I have questions about my rights as a research subject, I can call the Human Subjects Division at (206) 543-0098 or call collect at (206) 221-5940.

Part 1 – Demographic Information

1. Name (optional)

2. College Email Address (required for $5.00 Amazon gift card)

3. Name of College

4. Name of BAS Program

5. What is your age?
- 17 years or younger
- 18-20 years
- 21-24 years
- 25-29 years
- 30-39 years
- 40-54 years
- 55 years or older

6. Do you have any concern about your ability to finance your college education?
- None (I am confident that I will have sufficient funds)
- Some (but I probably will have enough funds)
- Major (not sure I will have enough funds to complete college)

7. Did you consider the following factors when deciding to enroll in your BAS program?
   Response options: Yes, No

- Ability to transfer credits
- Tuition reimbursement
- Availability of financial assistance
- Requirement for current or future job
- Reputation of institution
- Convenient time and place for classes
- Availability of online courses
- Distance from campus
- Courses held at employment site
- Employer support/endorsement
- Availability of child care
- Availability of program I wanted
- High rate of job placement
- Time required to complete program
- Future career opportunities
- Personal recommendations
- Information on the college/program web site
- Campus visits

Part 2 – Support Services Information

8. Since entering this college, have you utilized the following services?
   Response options: Yes, No
   - Writing center
   - Tutoring or other academic assistance
   - Disability resource center
   - Veteran's services
   - Career counseling
   - Academic advising
   - Financial aid advising
   - Student health services
   - Student psychological services
   - Campus safety services (Public Safety/Police Department, etc.)
   - Childcare services on campus

9. Have you participated in any of the following programs at this college?
   Response options: Yes, No
   - Transfer orientation/New student orientation
   - Honors program
   - Mentoring program
   - Academic support services for low-income/first-generation students
   - Study abroad program
   - English as a Second Language (ESL) instruction
   - Joined a student club or organization

10. Please indicate the extent to which you agree or disagree with the following statements.
    Response options: Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
    - This college encourages students to have a public voice and share their ideas openly
    - This college accurately reflects the diversity of its student body (e.g., brochures, website)
    - This college promotes a sense of community for its students
    - This college promotes the appreciation of cultural differences
    - This college has a lot of racial tension
    - Faculty at this college are racially/ethnically diverse
    - Staff at this college are racially/ethnically diverse
    - Faculty are gender diverse at this college (e.g., women in technology, men in nursing)
    - I feel a sense of belonging at this college
    - I feel unsafe at this college

11. Since entering your BAS program, how has it been to:
    Response options: Very Difficult, Difficult, Not Applicable, Somewhat Easy, Very Easy
    - Find help and information when you need it
    - Find the classes you need
    - Adjust to the academic demands of classes
    - Find student services when you need them
    - Figure out which courses count towards your degree
    - Schedule classes for the next quarter
    - Complete BAS program requirements
    - Improve English reading, writing, or speaking skills
    - Have time to do schoolwork

Part 3 – Campus Climate/Campus Experience Information

12. Since entering this college, how often have you been discriminated against or excluded from activities because of your:
    Response options: Never, Seldom, Sometimes, Often, Very Often
    - Ability/disability status
    - Age
    - Citizenship status
    - Gender/Gender identity
    - Military/Veteran status
    - Political beliefs
    - Race/ethnicity
    - Religious/spiritual beliefs
    - Sexual orientation
    - Socioeconomic status
    - Status as parent/guardian

13. At this college, how often have you:
    Response options: Never, Seldom, Sometimes, Often, Very Often

- Witnessed discrimination
- Reported an incident of discrimination to a campus authority
- Been sexually harassed
- Reported an incident of sexual harassment to a campus authority

14. Please indicate how often you have personally experienced the following forms of bias/harassment/discrimination at this college:
   Response options: Never, Seldom, Sometimes, Often, Very Often
   - Verbal comments
   - Written comments (e.g., emails, texts, social media)
   - Exclusion (e.g., from gatherings, events)
   - Offensive visual images or items
   - Threats of physical violence
   - Physical assaults or injuries
   - Anonymous phone calls
   - Damage to personal property

15. Please indicate the extent to which you agree or disagree with each of the following
   Response options: Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree
   - I feel comfortable sharing my own perspectives and experiences in class
   - I have been singled out in class because of my identity (such as race/ethnicity, gender, sexual orientation, disability status, religious affiliation, etc.)
   - I feel I have to work harder than other students to be perceived as a good student

16. Please indicate how many of your BAS instructors at this institution:
   Response options: Very Few, Less than Half, Most but not, All
   - Value individual differences in the classroom
   - Are sensitive to the ability levels of all students
   - Encourage students to contribute different perspectives in class
   - Share their own experiences and background in class
   - Have open discussions about privilege, power, and oppression
   - Motivate students to work harder than they thought they could
   - Teach students tolerance and respect for different beliefs
   - Provide opportunities to study and serve communities in need (e.g., service learning)
   - Provide opportunities for dialogue between students with different backgrounds and beliefs
   - Provided feedback that helps me assess my progress
   - Made me feel like my contributions were valued

17. Since entering this college, how often have you:
   Response options: Frequently, Occasionally, Not at all
   - Missed class due to personal/family responsibilities
   - Missed class due to employment
   - Contributed money to help support your family
   - Not been able to get into the classes you need

- Had difficulty in commuting/getting to campus
- Taken classes when most campus services were closed
- Attended professors' office hours
- Participated in study groups

Appendix B

Interview Instrument

Hello. My name is Stefanie McIrvin. I am hoping to learn about the applied baccalaureate program that you are enrolled in, and I am very pleased you are willing to meet with me. We will talk together for no more than 30 minutes. Before we begin, I would like to remind you that I will respect your privacy and keep your comments anonymous in my reports. I can stop recording or taking notes at any time, so please do not hesitate to ask me to do so if you feel uncomfortable. Do you have any questions before I begin?

If you have any questions during the interview, please ask.

Enrollment and Goals:

1. How did you hear about this degree program? What were the primary factors in your decision to enroll?

2. When you started the program, what was your goal? (A baccalaureate degree? A master's degree? Get a job/better job? Take a class and see how it goes?)

3. What is your current goal for the program? (A baccalaureate degree? A master's degree? Get a job/better job? Take a class and see how it goes?)

Experiences and Persistence:

4. What resources or features of this program are most helpful to you?

5. In what ways have faculty helped or hindered your experience in the program? How about program administrators? Advisors/counselors?

6. What are the most challenging aspects of pursuing your intended degree?

7. How do you address those challenges?

Institutional Supports:

8. What kinds of institutional supports have you used on campus? (Student clubs/leadership? Tutoring? Disability services? Veteran's services?)

9. What kinds of institutional supports are not offered that might help you overcome challenges faced in your program?

10. What recommendations do you have for other prospective students who are considering this degree program / pathway?

Appendix C

Interview Informed Consent Form

Researchers' Statement
I am asking you to be in a research study. The purpose of this consent form is to give you the information you will need to help you decide whether to be in the study or not. Please read the form carefully. You may ask questions about the purpose of the research, what I would ask you to do, the possible risks and benefits, your rights as a volunteer, and anything else about the research or this form that is not clear. When I have answered all of your questions, you can decide if you want to be in the study or not. This process is called "informed consent." I will give you a copy of this form for your records.

PURPOSE OF THE STUDY
Data from the Washington State Board for Community and Technical Colleges (SBCTC) shows a steady decline over the last five years in the enrollment and completion of African American women in Washington's Bachelor of Applied Science (BAS) programs. The purpose of this study is to provide an avenue for African American women to share their experiences, find out why they enroll in BAS programs, and identify challenges they face while in their programs. A secondary purpose of this study is to find out what kinds of college supports African American women currently use, and what kinds of supports they might use if colleges were to offer them. Results from this study will be shared with BAS staff and faculty in order to address challenges and develop best practices towards diversity, equity, and inclusion.

STUDY PROCEDURES
One-on-one interviews will be conducted either in-person or via telephone. For in-person interviews, the location of the interview will take place at a location near to, but offsite from, the interviewee's college campus. The time commitment for the interview will be no more than 30 minutes.

The total amount of time involved should be no more than 1 hour, which includes time to review this informed consent document and set up the interview date/time. The study will last no more than 6 months.

Interview questions will be determined ahead of time. Follow-up questions may be asked if the researcher needs additional information to fully answer the question(s).

Audio will be recorded during the interview. This audio will assist the researcher in recalling data after the interview has concluded. Data will be retained and destroyed as required by the UW records retention period.

RISKS, STRESS, OR DISCOMFORT
While the interview questions are not sensitive in nature, you may feel discomfort in answering questions pertaining to your experience in your BAS program. Individual responses from the interview will not be shared with any faculty, staff, or administration from your college. Breach of confidentiality may be a risk if persons outside the study team access your identifiable

responses. All answers will be kept private and confidential to prevent a breach of confidentiality. Should you feel distress or any type of discomfort at any time during the interview, you may refuse to answer and/or leave the interview at any time. Results from this study will be shared in aggregate. Personally identifiable information will not be included in the results.

BENEFITS OF THE STUDY
You will receive no direct benefits from participating in this research study. However, your responses may help influence college policy and procedures so that future BAS students of color have better educational experiences.

CONFIDENTIALITY OF RESEARCH INFORMATION
Data collected from interviews will be confidential. Links to identifiers will be kept separate from data collected on a secure, password-protected site.

OTHER INFORMATION
You may refuse to participate and you are free to withdraw from this study at any time without penalty or loss of benefits to which you are otherwise entitled.

Subject's statement
This study has been explained to me. I volunteer to take part in this research. I have had a chance to ask questions. If I have questions later about the research, or if I have been harmed by participating in this study, I can contact the researcher and/or the faculty advisor listed on the first page of this consent form. If I have questions about my rights as a research subject, I can call the Human Subjects Division at (206) 543-0098 or call collect at (206) 221-5940. I will receive a copy of this consent form.

Appendix D

Codebook

Category 1: Enrollment Considerations

Subcategory 1: Personal Recommendations
Code: Friend
Code: Family Member
Code: Co-Worker
Code: Current/Former Faculty

Subcategory 2: Life Circumstances
Code: Better/Successful Life
Code: Career Change
Code: Learn New Skill/Knowledge
Code: Current Job/Field

Subcategory 3: Program
Code: Type of Degree
Code: Working Adult
Code: Location
Code: Industry Content
Code: Knowledgeable Faculty
Code: Reputation
Code: Hands-on Experience
Code: Pathway to Master Degree
Code: Length
Code: Help Change Lives

Category 2: Challenges

Subcategory 1: Finances

Code: Struggle Paying Bills
Code: Time Management

Subcategory 2: Program
Code: Lack of Services
Code: Feels Unfinished
Code: Adjustment

Subcategory 3: Faculty
Code: Lack of Teaching Experience
Code: Unsupportive of Work/Life Balance
Code: Lack of Faculty
Code: Lack of Cross Training

Subcategory 4: Staff

>   Code: Lack of Staff
>   Code: Unknowledgeable

Subcategory 5: Discrimination

>   Code: Woman of Color
>   Code: Woman in Non-Traditional Program

Subcategory 6: Personal Challenges
>   Code: Transportation
>   Code: Family Obligations

Category 3: Addressing Challenges

Subcategory 1: Finances

>   Code: Save Money
>   Code: Additional Job
>   Code: Scholarships

Subcategory 2: Faculty

>   Code: Formal Complaints
>   Code: Unresolved

Subcategory 3: Discrimination

>   Code: Found Mentor
>   Code: Networking

Category 4: Current Institutional Supports

Subcategory 1: Services

>   Code: AB Faculty
>   Code: AB Staff
>   Code: Tutoring
>   Code: Library
>   Code: Financial Aid
>   Code: Labs

Subcategory 2: Programs

>   Code: Student Leadership
>   Code: Student Clubs
>   Code: Honors Program

Code: Work Study

Category 5: Institutional Supports Desired

Subcategory 1: Services
Code: Job Placement
Code: AB Tutoring Food Services
Code: Personal Finance Support
Code: Childcare
Code: Food Services
Code: Work/Life Balance Support
Code: Help Adjust to New Program

Subcategory 2: Programs
Code: Mentoring
Code: AB Scholarships
Code: Guest Speakers
Code: Industry Tours

Subcategory 2: Recommendations
Code: Availability of Services/Programs
Code: Instructional Design Training
Code: Cross Train Faculty

Appendix E

Coding Manual

Subcategory >Code	Definition	Category
Personal Recommendations	Student took a personal recommendation about her AB program into consideration when deciding whether or not to enroll in that program.	Enrollment Considerations
Personal Recommendations >Friend	A friend gave a personal recommendation about her AB program.	Enrollment Considerations
Personal Recommendations >Family Member	A family member gave a personal recommendation about her AB program.	Enrollment Considerations
Personal Recommendations >Co-Worker	A co-worker gave a personal recommendation about her AB program.	Enrollment Considerations
Personal Recommendations >Current/Former Faculty	A current or former associate program faculty gave a personal recommendation about her AB program.	Enrollment Considerations

Life Circumstances	The outside life factors that influenced her decision to enroll in her AB program.	(See codes)
Life Circumstances >Career Change	The desire for a change in her career or wanting a better/new job.	Enrollment Considerations
Life Circumstances >Better/Successful Life	A general desire to better her current life situation, whether monetarily or otherwise.	Enrollment Considerations
Life Circumstances >Current Job/Field	She currently works in the industry or needs the degree for her job.	Enrollment Considerations
Life Circumstances >Learn New Skill/Knowledge	She enrolled in her AB program to gain new skills and/or knowledge.	Enrollment Considerations
Program	Items specific to her AB program that drew her to enroll in the program.	(See codes)
Program >Length	The length of time the program takes to complete.	Enrollment Considerations

Program	The specific type of	Enrollment Considerations
>Type of Degree	applied, inverted structure of the program.	
Program	The program schedule is	Enrollment Considerations
>Working Adult	good for working adults.	
Program	The program is based on	Enrollment Considerations
>Industry Content	content directly from the industry.	
Program	The program is near home,	Enrollment Considerations
>Location	or near work, or is located at the same place as her associate degree program.	
Program	The program has a good	Enrollment Considerations
>Reputation	reputation.	
Program	The program allows for	Enrollment Considerations
>Hands-on Experience	hand-on experience.	
Program	Program faculty are	Enrollment Considerations
>Knowledgeable Faculty	knowledgeable and understand the industry.	
Program	The program offers a	Enrollment Considerations
>Pathway to Master Degree	pathway to a master's degree.	

Program >Help Change Lives	The program offers her an opportunity to help others in the community and industry.	
Finances	Challenges related to her ability to pay for her college education.	Challenges
Finances >Struggle Paying Bills	She has struggled paying her bills while in her AB program.	Challenges
Finances >Time Management	She has struggled with time management because of challenges related to finances and balancing demands of work and school.	Challenges
Program	Challenges related to specific aspects of her AB program.	(See codes)
Program >Adjustment	Adjustment to rigor of program is difficult. Associate program	Challenges

	schedule different from AB program schedule.	
Program >Feels Unfinished	Program feels unstable. Schedules are unclear or undefined. Communication from faculty/staff is unclear.	Challenges
Program >Lack of Services	Student support services are not available during her class times.	Challenges
Faculty	Challenges related to AB program faculty.	(See codes)
Faculty >Unsupportive of Work/Life Balance	Faculty are not sensitive to working adults and the demands they face between work and school.	Challenges
Faculty >Lack of Faculty	There is a general lack of faculty for the program.	Challenges
Faculty >Lack of Cross Training	Faculty are not cross trained within the program which means only one faculty member can teach each course.	Challenges

Faculty >Lack of Teaching Experience	Faculty have industry skills and knowledge but lack training in instructional design.	Challenges
Staff	Challenges related to college staff.	(See codes)
Staff >Lack of Staff	There is a general lack of staff for the program.	Challenges
Staff >Unknowledgeable	Staff at the college do not understand the program, resulting in confusion and frustration for students.	Challenges
Discrimination	Challenges related to feeling discriminated against or excluded.	(See codes)
Discrimination >Woman of Color	She feels that she has been discriminated against or excluded from classroom and college activities because of her race and/or gender.	Challenges
Discrimination	She feels that she has been discriminated against or	Challenges

>Woman in Non-Traditional Program	excluded from classroom and college activities because she is a women in a non-traditional program.	
Personal Challenges	Challenges outside of school that impact her ability to attend class.	(See codes)
Personal Challenges >Transportation	She has missed class and/or had a difficult time getting to class due to issues related to transportation.	Challenges
Personal Challenges >Family Obligations	She has missed class and/or had a difficult time getting to class due to issues related to family obligations.	Challenges
Finances	Ways in which she has tried to overcome concerns about her ability to finance her college education.	(See codes)
Finances >Save Money	She has saved financial aid overpayments in order to	Addressing Challenges

	pay bills and meet other needs.	
Finances >Additional Job	She has taken on another job in order to pay bills and meet other needs.	Addressing Challenges
Finances >Scholarships	She has applied for scholarships to supplement financial aid and other financial assistance.	Addressing Challenges
Faculty	Ways in which she has tried to overcome concerns about AB program faculty.	(See codes)
Faculty >Formal Complaints	She has gone through the college's formal complaint process to address challenges with faculty.	Addressing Challenges
Faculty >Unresolved	She feels as though her challenges related to AB program faculty are unresolved at this time.	Addressing Challenges
Discrimination	Ways in which she has tried to overcome concerns	(See codes)

	related to discrimination and exclusion.	
Discrimination >Found Mentor	She found a mentor outside of her AB program to support her through her program.	Addressing Challenges
Discrimination >Networking	She sought informal peer groups and student organizations for support through her program.	Addressing Challenges
Services	The institutional student support services that she has utilized.	(See codes)
Services >AB Faculty	She has reached out to AB program faculty for assistance.	Current Institutional Supports
Services >AB Staff	She has reached out to AB program staff for assistance.	Current Institutional Supports
Services >Tutoring	She has used college tutoring services.	Current Institutional Supports
Services >Library	She has used college Library services.	Current Institutional Supports

Services >Labs	She has used college computer lab services.	Current Institutional Supports
Services >Financial Aid	She has used college financial aid services.	Current Institutional Supports
Programs	The institutional student programs that she has utilized.	(See codes)
Programs >Honors Program	She has been involved in a college honors program.	Current Institutional Supports
Programs >Student Leadership	She has been involved in student leadership on campus.	Current Institutional Supports
Programs >Student Clubs	She has been involved in at least one student club on campus.	Current Institutional Supports
Programs >Work Study	She has been a work study student on campus.	Current Institutional Supports
Services	Services that she would utilize or utilize more often if they were offered and available when she is on campus.	(See codes)

Services	Tutoring services specifically for AB program students.	Institutional Supports Desired
>AB Tutoring		
Services	Food services available before and during class times.	Institutional Supports Desired
>Food Services		
Services	Assistance with balancing the demands of working and going to school.	Institutional Supports Desired
>Work/Life Balance Support		
Services	Assistance with adjusting from associate program to AB program (e.g., rigor, schedule, etc.).	Institutional Supports Desired
>Help Adjust to New Program		
Services	Assistance with understanding personal finances and how that impacts paying for college.	Institutional Supports Desired
>Personal Finance Support		
Services	Assistance with finding an internship or job upon program completion (e.g., resume writing, mock interviews, etc.).	Institutional Supports Desired
>Job Placement		

Services >Childcare	Assistance with finding childcare during class times.	Institutional Supports Desired
Programs	Programs that she would utilize or utilize more often if they were offered and available when she is on campus.	(See codes)
Programs >Mentoring	Assistance with finding a mentor who can support her through her program.	Institutional Supports Desired
Programs >AB Scholarships	Scholarships that are specifically designed and offered to AB program students.	Institutional Supports Desired
Programs >Guest Speakers	Speakers from industry that share their experiences and real-world knowledge.	Institutional Supports Desired
Programs >Industry Tours	Class field trips and workshops with local AB program industry partners.	Institutional Supports Desired
Recommendations	Recommendations to improve AB programs for	(See codes)

	future African American women	
Recommendations >Cross Train Faculty	Cross train AB program faculty so that they can teach more than one course.	Institutional Supports Desired
Recommendations >Instructional Design Training	Provide professional development for faculty from industry to better understand instructional design and varying classroom modalities for diverse student populations.	Institutional Supports Desired
Recommendations >Availability of Services/Programs	Expand current and create new student support services and programs to ensure equal access to such services, especially for minoritized students.	Institutional Supports Desired

Appendix F

Category Descriptions

Category	Description
Enrollment Considerations	Enrollment considerations included all factors that participants considered before enrolling in their applied baccalaureate program. These broadly included personal recommendations from others, the desire to change their life circumstances, and program-specific factors such as location and reputation.
Challenges	Challenges emerged as an important topic of consideration after AB program enrollment. Challenges ranged from concerns about ability to finance their education, to perceptions of applied baccalaureate faculty, and issues around limited access to student support services and programs.
Addressing Challenges	Addressing Challenges were related to the challenges identified in the Challenges category. This broad category included both positive and negative subcategories in the areas of finances, faculty perceptions, and unresolved issues related to discrimination and exclusion.
Current Institutional Supports	This category included the student support services and programs that participants identified as having used or helpful on their path to degree completion. Supports and programs were separated into subcategories to better define future needs and recommendations.

Institutional Supports Desired	Institutional Supports Desired included new or enhanced student support services and programs that participants felt were needed at their institution. Participants felt that these additional services and programs were important to supporting future African American women in applied baccalaureate programs.

Appendix G

Code Occurrence

Category/Subcategory/Code	#
Enrollment Considerations	
Personal Recommendations	
Friend	2
Family Member	2
Co-worker	2
Current/Former Faculty	2
Life Circumstances	
Better/Successful Life	8
Career Change	6
Learn New Skill/Knowledge	5
Current Job/Field	3
Program	
Type of Degree	6
Working Adult	5
Location	4
Industry Content	3
Knowledgeable Faculty	3
Reputation	2
Hands-on Experience	2
Pathway to Master Degree	2
Length	1
Help Change Lives	1
Challenges	
Finances	
Struggle Paying Bills	3
Time Management	2
Program	
Lack of Services	12
Feels Unfinished	11
Adjustment	7

Faculty	
Lack of Teaching Experience	6
Unsupportive of Work/Life Balance	4
Lack of Faculty	2
Lack of Cross Training	1
Staff	
Unknowledgeable	3
Lack of Staff	2
Discrimination	
Woman of Color	3
Woman in Non-Trad Program	3
Personal Challenges	
Transportation	3
Family Obligations	3
Addressing Challenges	
Finances	
Save Money	1
Additional Job	1
Scholarships	1
Faculty	
Formal Complaints	3
Unresolved	3
Discrimination	
Found Mentor	5
Networking	3
Current Institutional Supports	
Services	
AB Faculty	6
AB Staff	5
Tutoring	3
Library	2
Financial Aid	2

Labs	1
Programs	
Student Leadership	3
Student Clubs	2
Honors Programs	1
Work Study	1
Institutional Supports Desired	
Services	
Job Placement	5
AB Tutoring	4
Personal Finance Support	4
Childcare	3
Food Services	2
Work/Life Balance Support	2
Help Adjust to New Schedule	1
Programs	
Mentoring	6
AB Scholarships	3
Guest Speakers	1
Industry Tours	1
Recommendations	
Availability of Services/Programs	12
Instructional Design Training	6
Cross Train Faculty	1

Appendix H

Table 13

Interview Participant Data

Institution	Pseudonym	Emphasis	Age	Race/Ethnicity
College 1	Chanita	Management	30-39 years	African American
College 1	Jasmine	Health	25-29 years	African American
College 2	Ericka	Education	21-24 years	African American
College 2	DeJaunte	Business	30-39 years	African American/African
College 2	Aisha	Education	30-39 years	African American
College 3	Simone	Science	40-54 years	Multiracial Black
College 4	Keeshana	Technology	21-24 years	African American/African

Appendix I

Table 14

Percent Response: Factors of Consideration for AB Program Enrollment

Item	Response	%
Future career opportunities	No	2.4%
	Yes	97.6%
Availability of financial assistance	No	4.1%
	Yes	95.9%
Requirement for job	No	7.3%
	Yes	92.7%
Availability of program	No	8.1%
	Yes	91.9%
Time and place for classes	No	7.3%
	Yes	92.7%
Time required to complete program	No	8.1%
	Yes	91.9%
Info on college/program website	No	18.7%
	Yes	81.3%
Ability to transfer credits	No	19.5%
	Yes	80.5%
Distance from campus	No	19.5%
	Yes	80.5%
Reputation of institution	No	24.4%
	Yes	75.6%
Availability of online courses	No	26.8%
	Yes	73.2%
High rate of job placement	No	27.6%
	Yes	72.4%
Personal recommendation	No	42.3%
	Yes	57.7%
Tuition reimbursement	No	45.5%
	Yes	54.5%
Campus visits	No	49.6%
	Yes	50.4%
Employer support/endorsement	No	58.5%
	Yes	41.5%
Courses held at employment site	No	82.9%
	Yes	17.1%

Availability of child care	No	90.2%
	Yes	9.8%

Appendix J

Table 15

Percent Response: Perceptions of College Climate

Item	Response	%
College promotes cultural differences	Strongly Disagree	6.5%
	Disagree	3.3%
	Neutral	13.0%
	Agree	39.8%
	Strongly Agree	37.4%
College reflects diversity of students	Strongly Disagree	5.7%
	Disagree	6.5%
	Neutral	13.8%
	Agree	35.8%
	Strongly Agree	38.2%
College promotes sense of community	Strongly Disagree	4.9%
	Disagree	4.9%
	Neutral	17.9%
	Agree	38.2%
	Strongly Agree	34.1%
College encourages public voice/sharing ideas	Strongly Disagree	6.5%
	Disagree	3.2%
	Neutral	21.1%
	Agree	33.3%
	Strongly Agree	35.8%
Sense of belonging on campus	Strongly Disagree	4.1%
	Disagree	3.3%
	Neutral	26.0%
	Agree	31.7%
	Strongly Agree	35.0%
Staff are racially diverse	Strongly Disagree	5.7%
	Disagree	8.9%
	Neutral	30.1%
	Agree	36.6%
	Strongly Agree	18.7%
Faculty are gender diverse	Strongly Disagree	4.1%
	Disagree	8.9%
	Neutral	35.0%

	Agree	34.1%
	Strongly Agree	17.9%
Faculty are racially diverse	Strongly Disagree	9.8%
	Disagree	11.4%
	Neutral	31.7%
	Agree	30.1%
	Strongly Agree	17.1%
College has racial tension	Strongly Disagree	34.1%
	Disagree	32.5%
	Neutral	26.0%
	Agree	4.9%
	Strongly Agree	2.4%
College feels unsafe	Strongly Disagree	55.7%
	Disagree	27.9%
	Neutral	11.5%
	Agree	3.3%
	Strongly Agree	1.6%

Appendix K

Table 16

Percent Response: Discrimination and Exclusion from Activities based on Demographics

Item	Response	%
Age	Never	83.7%
	Seldom	8.1%
	Sometimes	4.1%
	Often	1.6%
	Very Often	1.6%
Race/ethnicity	Never	87.8%
	Seldom	5.7%
	Sometimes	4.1%
	Often	0.8%
	Very Often	1.6%
Gender	Never	89.4%
	Seldom	6.5%
	Sometimes	0.8%
	Often	1.6%
	Very Often	1.6%
Political beliefs	Never	89.4%
	Seldom	5.7%
	Sometimes	2.4%
	Often	0.8%
	Very Often	1.6%
Religious/spiritual beliefs	Never	87.8%
	Seldom	8.1%
	Sometimes	3.3%
	Often	0.0%
	Very Often	0.8%
Socioeconomic status	Never	91.9%
	Seldom	3.3%
	Sometimes	1.6%
	Often	1.6%
	Very Often	1.6%
Ability/disability status	Never	92.7%
	Seldom	2.4%
	Sometimes	3.3%
	Often	0.0%

	Very Often	1.6%
Sexual orientation	Never	95.1%
	Seldom	0.8%
	Sometimes	0.8%
	Often	0.8%
	Very Often	2.4%
Parent/guardian	Never	97.6%
	Seldom	1.6%
	Sometimes	0.0%
	Often	0.0%
	Very Often	0.8%
Citizenship	Never	99.2%
	Seldom	0.0%
	Sometimes	0.0%
	Often	0.0%
	Very Often	0.8%
Military/Vet	Never	99.2%
	Seldom	0.0%
	Sometimes	0.0%
	Often	0.0%
	Very Often	0.8%

Appendix L

Table 17

Percent Response: Forms of Discrimination Experienced at Institution

Item	Response	%
Verbal	Never	78.0%
	Seldom	10.6%
	Sometimes	8.1%
	Often	0.0%
	Very Often	3.2%
Written	Never	91.1%
	Seldom	1.6%
	Sometimes	3.3%
	Often	1.6%
	Very Often	2.4%
Exclusion	Never	86.2%
	Seldom	9.8%
	Sometimes	1.6%
	Often	0.8%
	Very Often	1.6%
Offensive visuals	Never	92.7%
	Seldom	4.1%
	Sometimes	0.8%
	Often	0.8%
	Very Often	1.6%
Physical assault	Never	97.6%
	Seldom	0.0%
	Sometimes	1.6%
	Often	0.0%
	Very Often	0.8%
Phone calls	Never	94.3%
	Seldom	1.6%
	Sometimes	0.8%
	Often	0.0%
	Very Often	3.2%
Property damage	Never	96.7%
	Seldom	0.0%
	Sometimes	1.6%
	Often	0.0%

	Very Often	1.6%
Threat of physical assault	Never	95.9%
	Seldom	3.3%
	Sometimes	0.0%
	Often	0.0%
	Very Often	0.8%

Appendix M

Table 18

Percent Response: Witnessing and Reporting of Discrimination and Sexual Harassment

Item	Response	%
Witnessed discrimination	Never	74.0%
	Seldom	17.1%
	Sometimes	6.5%
	Often	0.8%
	Very Often	1.6%
Reported discrimination	Never	91.9%
	Seldom	4.9%
	Sometimes	0.0%
	Often	1.6%
	Very Often	1.6%
Been sexually harassed	Never	94.3%
	Seldom	2.4%
	Sometimes	1.6%
	Often	0.0%
	Very Often	1.6%
Reported sexual harassment	Never	95.9%
	Seldom	2.4%
	Sometimes	0.0%
	Often	0.0%
	Very Often	1.6%

Appendix N

Table 19

Percent Response: Perceptions of AB Program Faculty

Item	Response	%
Faculty discussions oppression	All	55.3%
	Most but not All	15.4%
	Less than Half	13.8%
	Very Few	15.4%
Faculty provide opportunities serve to community	All	51.2%
	Most but not All	26.8%
	Less than Half	11.4%
	Very Few	10.6%
Faculty teach tolerance	All	63.4%
	Most but not All	22.0%
	Less than Half	8.1%
	Very Few	6.5%
Faculty provide opportunities for dialogue	All	63.4%
	Most but not All	22.8%
	Less than Half	6.5%
	Very Few	7.3%
Faculty provide feedback	All	64.2%
	Most but not All	21.1%
	Less than Half	8.9%
	Very Few	5.7%
Faculty sensitive ability levels	All	59.3%
	Most but not All	30.9%
	Less than Half	5.7%
	Very Few	4.1%
Faculty motivate students	All	65.9%
	Most but not All	21.1%
	Less than Half	6.5%
	Very Few	6.5%
Faculty made me feel valued	All	65.0%
	Most but not All	26.0%
	Less than Half	4.1%
	Very Few	4.9%
Faculty value individual differences	All	69.9%
	Most but not All	24.4%

	Less than Half	3.3%
	Very Few	2.4%
Faculty encourage different perspectives	All	73.2%
	Most but not All	21.1%
	Less than Half	2.4%
	Very Few	3.2%
Faculty share own experiences	All	74.8%
	Most but not All	22.0%
	Less than Half	0.8%
	Very Few	2.4%

Appendix O

Table 20

Percent Response: Experiences in the Classroom

Item	Response	%
Comfort sharing perspectives in class	Strongly Disagree	1.6%
	Disagree	7.3%
	Neutral	13.0%
	Agree	39.8%
	Strongly Agree	38.2%
Work harder than others	Strongly Disagree	42.3%
	Disagree	22.8%
	Neutral	11.4%
	Agree	21.1%
	Strongly Agree	2.4%
Singled out in class	Strongly Disagree	63.4%
	Disagree	18.7%
	Neutral	6.5%
	Agree	8.1%
	Strongly Agree	3.3%

Appendix P

Table 21

Percent Response: Challenges Related to Program Adjustment

Item	Response	%
Have time for schoolwork	Very Easy	14.6%
	Somewhat Easy	38.2%
	Not Applicable	5.7%
	Difficult	36.6%
	Very Difficult	4.9%
Adjust to academic demands	Very Easy	30.1%
	Somewhat Easy	39.0%
	Not Applicable	5.7%
	Difficult	22.8%
	Very Difficult	2.4%
Find help and info when needed	Very Easy	39.0%
	Somewhat Easy	42.3%
	Not Applicable	4.9%
	Difficult	13.0%
	Very Difficult	0.8%
Complete program requirements	Very Easy	46.3%
	Somewhat Easy	33.3%
	Not Applicable	8.9%
	Difficult	9.8%
	Very Difficult	1.6%
Find student services when needed	Very Easy	31.7%
	Somewhat Easy	29.3%
	Not Applicable	26.0%
	Difficult	12.2%
	Very Difficult	0.8%
Find which courses count to degree	Very Easy	60.2%
	Somewhat Easy	21.1%
	Not Applicable	8.9%
	Difficult	8.9%
	Very Difficult	0.8%
Find classes when needed	Very Easy	61.0%
	Somewhat Easy	28.5%
	Not Applicable	5.7%

	Difficult	4.1%
	Very Difficult	0.8%
Schedule classes for next quarter	Very Easy	63.4%
	Somewhat Easy	22.0%
	Not Applicable	8.1%
	Difficult	4.9%
	Very Difficult	1.6%
Improve English skills	Very Easy	32.5%
	Somewhat Easy	15.4%
	Not Applicable	46.3%
	Difficult	4.9%
	Very Difficult	0.8%

Appendix Q

Table 22

Percent Response: Challenges Related to Personal and Family Responsibilities

Item	Response	%
Money to help support family	Not at All	26.8%
	Occasionally	24.4%
	Frequently	48.8%
Participated in study groups	Not at All	25.2%
	Occasionally	49.6%
	Frequently	25.2%
Attended office hours	Not at All	41.5%
	Occasionally	46.3%
	Frequently	12.2%
Most campus services were closed	Not at All	56.9%
	Occasionally	17.0%
	Frequently	26.0%
Missed class due to personal/family	Not at All	52.0%
	Occasionally	43.9%
	Frequently	4.1%
Trouble commuting	Not at All	70.7%
	Occasionally	24.4%
	Frequently	4.9%
Not able to get into the classes	Not at All	75.6%
	Occasionally	21.1%
	Frequently	3.2%
Missed class due to employment	Not at All	82.9%
	Occasionally	17.1%
	Frequently	0.0%

Appendix R

Table 23

Percent Response: Utilization of Student Support Services

Item	Response	%
Financial aid advising	No	24.4%
	Yes	75.6%
Academic advising	No	29.3%
	Yes	70.7%
Tutoring	No	56.9%
	Yes	43.1%
Writing center	No	68.3%
	Yes	31.7%
Campus safety services	No	77.2%
	Yes	22.8%
Career counseling	No	80.5%
	Yes	19.5%
Student health services	No	86.2%
	Yes	13.8%
Disability resource center	No	90.2%
	Yes	9.8%
Veterans services	No	95.1%
	Yes	4.9%
Student psychological services	No	96.7%
	Yes	3.3%
Childcare services on campus	No	97.6%
	Yes	2.4%

Appendix S

Table 24

Percent Response: Utilization of Student Programs

Item	Response	%
Orientation	No	48.0%
	Yes	52.0%
Student club	No	72.4%
	Yes	27.6%
Honors program	No	78.0%
	Yes	22.0%
Support low-income/first-generation students	No	86.2%
	Yes	13.8%
Mentoring program	No	95.9%
	Yes	4.1%
ESL instruction	No	96.7%
	Yes	3.3%
Study abroad program	No	98.4%
	Yes	1.6%